



State of Ohio Environmental Protection Agency

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RE: FINAL PERMIT TO INSTALL MODIFICATION

CERTIFIED MAIL

PICKAWAY COUNTY

Application No: 01-08718

Fac ID: 0165000132

DATE: 3/20/2007

Darby Electric Generating Station
Frank Brayton
1065 Woodman Drive
Dayton, OH 45401

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
Y	CEMS
	MACT
Subpart GG	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

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

Sincerely,

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

CC: USEPA

CDO



FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 01-08718

Application Number: 01-08718
Facility ID: 0165000132
Permit Fee: **\$30000**
Name of Facility: Darby Electric Generating Station
Person to Contact: Frank Brayton
Address: 1065 Woodman Drive
Dayton, OH 45401

Location of proposed air contaminant source(s) [emissions unit(s)]:

**Adkins Rd
Mt. Sterling, Ohio**

Description of proposed emissions unit(s):

Combustine turbines.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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Darby Electric Generating Station

PTI Application: 01-08718

Modification Issued: 3/20/2007

Facility ID: 016500013

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

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

5. Construction of New Sources(s)

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install.

The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	15.8
SO2	11.7
OC	30.4
NOX	245.0
CO	199.4

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

2. Nitrogen Oxides (NO_x) Budget Trading Program OAC Chapter 3745-14

a. Facility Code - 0165000132

b. The following regulated emissions units are subject to the applicable requirements specified in OAC Chapter 3745-14 listed below:

Emissions Units

P001 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

P002 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

P003 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

P004 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

P005 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

P006 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr;

c. The emissions units identified in Section A.2.b above are NO_x budget units under OAC rule 3745-14-01(C)(1)(b).

d. NO_x allowances for units commencing operation on the dates specified in OAC rule 3745-14-05(C)(4) shall be allocated from the new source set-aside in accordance with the provisions of OAC rule 3745-14-05(C)(4)(d).

e. The NO_x authorized account representative shall submit a complete NO_x budget permit application in accordance with the deadlines specified in paragraphs

(B)(2) and (B)(3) of OAC rule 3745-14-03. The NO_x authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NO_x budget permit application and issue or deny a NO_x budget permit.

- f. Beginning May 31, 2004, the owners and operators of each NO_x budget source and each NO_x budget unit at the source shall hold NO_x allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x 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.
- g. NO_x allowances shall be held in, deducted from, or transferred among NO_x allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09.
- h. A NO_x 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 NO_x allowance was allocated.
- i. Each ton of NO_x emitted in excess of the NO_x 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 NO_x budget unit that has excess emissions in any control period shall surrender the NO_x 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.
- j. When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x 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 NO_x budget permit of the NO_x budget unit by operation of law without any further review.
- k. Except as provided below, the Director shall revise the NO_x budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NO_x 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 NO_x allowance to or from the

compliance accounts of the NO_x budget units covered by the permit or the overdraft account of the NO_x budget source covered by the permit.

- I. The owner or operator of a NO_x budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).

- m. The owners and operators of the NO_x 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 NO_x authorized account representative for the NO_x 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 NO_x 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 NO_x budget trading program; and
 - iv. copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x budget trading program.

- n. The permittee, and to the extent applicable, the NO_x authorized account representative of the NO_x budget unit, shall comply with the monitoring and reporting requirements as provided in OAC rule 3745-14-08 and in 40 CFR Part 75, Subpart H. For purposes of complying with such requirements the definitions in OAC rule 3745-14-01(B) and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be replaced by the terms "NO_x budget unit," "NO_x authorized account representative," and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in OAC rule 3745-14-01(B).

- o. The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan is only required to include information required by 40 CFR Part 75, Subpart H.

- p. The NO_x authorized account representative of the NO_x budget unit shall submit the reports and compliance certifications required under the NO_x budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.

- q. Each submission under the NO_x budget trading program shall be submitted, signed, and certified by the NO_x authorized account representative for each NO_x

budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NO_x authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NO_x budget sources or NO_x 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 NO_x authorized account representative for a NO_x 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.

- r. The NO_x authorized account representative shall submit quarterly reports covering the period May 1 through September 30 of each year and including the data described in 40 CFR 75.74(c)(6). The NO_x authorized account representative shall submit such quarterly reports, beginning with the calendar quarter covering May 1 through June 30, 2003. The NO_x authorized account representative shall submit each quarterly report to the Administrator within thirty days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR Part 75, Subpart H.
- s. The NO_x 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:
 - i. 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
 - ii. for a unit with add-on NO_x 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 NO_x emissions.

- t. The NO_x authorized account representative for a NO_x 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 NO_x 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.
- u. For each control period in which one or more NO_x budget units at a source are subject to the NO_x budget emission limitation, the NO_x 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 NO_x 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 NO_x budget emission limitation for the control period covered by the report:

- i. identification of each NO_x budget unit;
 - ii. at the NO_x authorized account representative's option, the serial numbers of the NO_x 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;
 - iii. at the NO_x authorized account representative's option, for units sharing a common stack and having NO_x 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
 - iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.
- v. In the compliance certification report under Section A.1.u.iv above, the NO_x authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NO_x budget units at the source in compliance with the NO_x budget trading program, whether each NO_x 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 NO_x budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NO_x 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 NO_x emissions to the unit, in accordance with OAC rule 3745-14-08;
- iii. whether all the NO_x 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.

If a change is required to be reported under Section A.1.v.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.

- w. The NO_x authorized account representative shall submit a complete NO_x budget permit renewal application for the NO_x budget source covering the NO_x budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.
- x. 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 NO_x budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.
- y. The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x 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 NO_x monitoring system must be kept on-site and available for inspection during regular office hours.

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT1 - Combustion Turbine No.1; *Modification	OAC rule 3745-31-05(C)	<p>245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.</p>
	40 CFR Part 75	6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	

0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

OAC rule 3745-17-07(A)
OAC rule 3745-18-06(F)
40 CFR Part 60, Subpart GG

OAC rule 3745-23-06(B)
OAC rule 3745-21-08(B)

61.0 lbs/hour of SO₂ emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

5.5 lbs/hour of VOC* emissions when firing number two fuel oil.

10.0 lbs/hour of OC emissions when firing natural gas.

11.0 lbs/hour of OC emissions when firing number two fuel oil.

30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

5.0 lbs/hour of particulate emissions when firing natural gas.

10.0 lbs/hour of particulate emissions when firing number two fuel oil.

15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).

The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).

* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.

See Sections A.I.2.j and k.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NOx combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NOx allowable.
- 2.b** In accordance with OAC rules 3745-31-02(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NOx continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.

- 2.h "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NOx continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NOx) to meet these requirements. The relative accuracy requirements of Performance Specification 6 shall apply to the NOx and CO continuous emissions monitoring systems.
- 2.j The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

- 1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

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2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO₂ emissions, upon issuance of this permit. The emissions of SO₂ from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.

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- f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

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

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x *emissions* from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable

standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of

daily zero/span calibration checks, and magnitude of manual calibration adjustments.

- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.
 - f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
 7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
 8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.
 - d. The rolling, 12-month operating hours limitation.

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

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons).
 - b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
 - c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
 - d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

4. Continuous NO_x Emissions Monitoring

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- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of

emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Continuous CO Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.

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Emissions Unit ID: P001

6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

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Emissions Unit ID: P001

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NOx emissions shall be added to the total NOx emissions from the previous eleven months to determine the rolling, 12-month summation of NOx emissions.

- b. Emission Limitation-
199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

- c. Emission Limitation-
11.7 TPY SO₂ as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO₂ emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.
- ii. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO₂ per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.
- iii. The monthly SO₂ emissions shall be added to the total SO₂ emissions from the previous eleven months to determine the rolling, 12-month summation of SO₂ emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

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Facility ID: 016500013

Emissions Unit ID: P001

- d. Emission Limitation-
6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- e. Emission Limitation-
Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-

Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

- f. Emission Limitation-
0.040 lb particulate emissions/MMBtu actual heat input

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Applicable Compliance Method -

Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

g. Emission Limitation-

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average. Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation-

301 lbs CO/hour, when firing natural gas
1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation-

0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

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When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur

content in accordance with the appropriate ASTM methods or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

- j. Emission Limitation-
2.0 lb/hour SO₂, when firing natural gas.
61.0 lbs/hour SO₂, when firing number two fuel oil.

Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- k. Emission Limitation-
2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- l. Emission Limitation-
10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through

emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

- m. Emission Limitation-
30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

- n. Emission Limitation-
5.0 lbs/hour particulate emissions, when firing natural gas.
10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- o. Emission Limitation-
15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

- p. Emission Limitation-
10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days following startup of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

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***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to

install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT1 - Combustion Turbine No. 1; *Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT2 - Combustion Turbine No. 2; *Modification	OAC rule 3745-31-05(C)	245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	40 CFR Part 75	6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

61.0 lbs/hour of SO2 emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

OAC rule 3745-17-07(A)
OAC rule 3745-18-06(F)
40 CFR Part 60, Subpart GG

OAC rule 3745-23-06(B)
OAC rule 3745-21-08(B)

5.5 lbs/hour of VOC* emissions when firing number two fuel oil.

10.0 lbs/hour of OC emissions when firing natural gas.

11.0 lbs/hour of OC emissions when firing number two fuel oil.

30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

5.0 lbs/hour of particulate emissions when firing natural gas.

10.0 lbs/hour of particulate emissions when firing number two fuel oil.

15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).

The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).

* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.

See Sections A.I.2.j and k.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NO_x combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NO_x allowable.
- 2.b** In accordance with OAC rules 3745-31-02(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NO_x continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NO_x from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.
- 2.h** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i** In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NO_x continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NO_x) to meet these requirements. The relative accuracy requirements of Performance Specification 6 shall apply to the NO_x and CO continuous emissions monitoring systems.

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- 2.j** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO2 emissions, upon issuance of this permit. The emissions of SO2 from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

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4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC

emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.
 - f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.

- h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, 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.
 - b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and

representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s).

The plan shall follow the applicable requirements fo 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in

accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.
2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.

- d. The rolling, 12-month operating hours limitation.

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

- 3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

- a. The total quantity of oil received in each shipment (gallons).
- b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
- c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
- d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

- 4. Continuous NO_x Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x 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

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period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Continuous CO Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.

6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);

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- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. Actual start-up date (within 15 days after such date); and,
- d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

- 7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- 8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
- 9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

- 1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-
Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NOx emissions shall be added to the total NOx emissions from the previous eleven months to determine the rolling, 12-month summation of NOx emissions.

- b. Emission Limitation-
199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

- c. Emission Limitation-
11.7 TPY SO2 as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO2 emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The monthly SO2 emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO2/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.
- ii. The monthly SO2 emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO2 per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.
- iii. The monthly SO2 emissions shall be added to the total SO2 emissions from the previous eleven months to determine the rolling, 12-month summation of SO2 emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO2/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

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- d. Emission Limitation-
 - 6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

e. Emission Limitation-

Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-

Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

f. Emission Limitation-

0.040 lb particulate emissions/MMBtu actual heat input

Applicable Compliance Method -

Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

g. Emission Limitation-

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average. Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation-

301 lbs CO/hour, when firing natural gas
1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation-

0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content in accordance with the appropriate ASTM methods or an equivalent method

as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

- j. Emission Limitation-
2.0 lb/hour SO₂, when firing natural gas.
61.0 lbs/hour SO₂, when firing number two fuel oil.

Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- k. Emission Limitation-
2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- l. Emission Limitation-
10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

- m. Emission Limitation-
30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

- n. Emission Limitation-
5.0 lbs/hour particulate emissions, when firing natural gas.
10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- o. Emission Limitation-
15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

- p. Emission Limitation-
10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days following startup of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to

install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT2 - Combustion Turbine No. 2; *Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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Facility ID: 016500013

Emissions Unit ID: P002

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT3 - Combustion Turbine No. 3; *Modification	OAC rule 3745-31-05(C)	245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	40 CFR Part 75	6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

61.0 lbs/hour of SO2 emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

OAC rule 3745-17-07(A)
OAC rule 3745-18-06(F)
40 CFR Part 60, Subpart GG

OAC rule 3745-23-06(B)
OAC rule 3745-21-08(B)

5.5 lbs/hour of VOC* emissions when firing number two fuel oil.

10.0 lbs/hour of OC emissions when firing natural gas.

11.0 lbs/hour of OC emissions when firing number two fuel oil.

30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

5.0 lbs/hour of particulate emissions when firing natural gas.

10.0 lbs/hour of particulate emissions when firing number two fuel oil.

15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).

The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).

* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.

| See Sections A.1.2.j and k.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NOx combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NOx allowable.
- 2.b** In accordance with OAC rules 3745-31-05(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NOx continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.
- 2.h** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i** In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NOx continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NOx) to meet these requirements. The relative accuracy requirements of

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Performance Specification 6 shall apply to the NOx and CO continuous emissions monitoring systems.

- 2.j** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO2 emissions, upon issuance of this permit. The emissions of SO2 from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.
 - f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.

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- h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, 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.
 - b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and

representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s).

The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.
 - d. The rolling, 12-month operating hours limitation.

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

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons).
 - b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
 - c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
 - d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

4. Continuous NO_x Emissions Monitoring
 - a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this

permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Continuous CO Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.

6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. Construction date (no later than 30 days after such date);

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- b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. Actual start-up date (within 15 days after such date); and,
- d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-
Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NOx emissions shall be added to the total NOx emissions from the previous eleven months to determine the rolling, 12-month summation of NOx emissions.

b. Emission Limitation-

199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

c. Emission Limitation-

11.7 TPY SO2 as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO2 emissions from the burning of natural gas and number 2 fuel oil as follows:

i. The monthly SO2 emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO2/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.

ii. The monthly SO2 emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO2 per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.

iii. The monthly SO2 emissions shall be added to the total SO2 emissions from the previous eleven months to determine the rolling, 12-month summation of SO2 emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO2/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

d. Emission Limitation-

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6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

e. Emission Limitation-

Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-

Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

f. Emission Limitation-

0.040 lb particulate emissions/MMBtu actual heat input

Applicable Compliance Method -

Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

g. Emission Limitation-

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average. Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation-

301 lbs CO/hour, when firing natural gas
1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation-

0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content in accordance with the appropriate ASTM methods or an equivalent method

as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

- j. Emission Limitation-
2.0 lb/hour SO₂, when firing natural gas.
61.0 lbs/hour SO₂, when firing number two fuel oil.

Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- k. Emission Limitation-
2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- l. Emission Limitation-
10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

- m. Emission Limitation-
30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

- n. Emission Limitation-
5.0 lbs/hour particulate emissions, when firing natural gas.
10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- o. Emission Limitation-
15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

- p. Emission Limitation-
10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days following startup of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to

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install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT3 - Combustion Turbine No. 3; *Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT4 - Combustion Turbine No. 4; *Modification	OAC rule 3745-31-05(C)	245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	40 CFR Part 75	6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

61.0 lbs/hour of SO2 emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

	<p>5.5 lbs/hour of VOC* emissions when firing number two fuel oil.</p> <p>10.0 lbs/hour of OC emissions when firing natural gas.</p> <p>11.0 lbs/hour of OC emissions when firing number two fuel oil.</p> <p>30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>5.0 lbs/hour of particulate emissions when firing natural gas.</p> <p>10.0 lbs/hour of particulate emissions when firing number two fuel oil.</p> <p>15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).</p> <p>The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).</p> <p>* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.</p> <p>See Sections A.I.2.j and k.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-18-06(F) 40 CFR Part 60, Subpart GG</p>	
<p>OAC rule 3745-23-06(B) OAC rule 3745-21-08(B)</p>	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NO_x combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NO_x allowable.
- 2.b** In accordance with OAC rules 3745-31-05(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NO_x continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NO_x from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.
- 2.h** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i** In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NO_x continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NO_x) to meet these requirements. The relative accuracy requirements of Performance Specification 6 shall apply to the NO_x and CO continuous emissions monitoring systems.

- 2.j** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, that rule revision was submitted to the USEPA as a revision to Ohio's State Implementation Plan(SIP); however, that rule revision has not yet been approved by the U.S. EPA. Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO2 emissions, upon issuance of this permit. The emissions of SO2 from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

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4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC

emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.
 - f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.

- h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, 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.
 - b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and

representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s).

The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.
 - d. The rolling, 12-month operating hours limitation.

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

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons).
 - b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
 - c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
 - d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

4. Continuous NO_x Emissions Monitoring
 - a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this

permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

5. Continuous CO Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.
6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

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

a. Emission Limitation-

245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NO_x emissions shall be added to the total NO_x emissions from the previous eleven months to determine the rolling, 12-month summation of NO_x emissions.

b. Emission Limitation-

199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

c. Emission Limitation-

11.7 TPY SO₂ as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO₂ emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.
- ii. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO₂ per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.
- iii. The monthly SO₂ emissions shall be added to the total SO₂ emissions from the previous eleven months to determine the rolling, 12-month summation of SO₂ emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

d. Emission Limitation-

6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

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Emissions Unit ID: P004

- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- e. Emission Limitation-
Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-
Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

- f. Emission Limitation-
0.040 lb particulate emissions/MMBtu actual heat input

Applicable Compliance Method -
Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation-

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NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average.

Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation-

301 lbs CO/hour, when firing natural gas

1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation-

0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content in accordance with the appropriate ASTM methods or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

j. Emission Limitation-

2.0 lb/hour SO₂, when firing natural gas.

61.0 lbs/hour SO₂, when firing number two fuel oil.

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Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- k. Emission Limitation-
2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- l. Emission Limitation-
10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

- m. Emission Limitation-
30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

- n. Emission Limitation-
5.0 lbs/hour particulate emissions, when firing natural gas.
10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- o. Emission Limitation-
15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

- p. Emission Limitation-
10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 90 days following startup of the emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

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- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT4 - Combustion Turbine No. 4; *Modification.	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT5 - Combustion Turbine No. 5; *Modification	OAC rule 3745-31-05(C)	245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	40 CFR Part 75	6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

61.0 lbs/hour of SO2 emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

	<p>5.5 lbs/hour of VOC* emissions when firing number two fuel oil.</p> <p>10.0 lbs/hour of OC emissions when firing natural gas.</p> <p>11.0 lbs/hour of OC emissions when firing number two fuel oil.</p> <p>30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>5.0 lbs/hour of particulate emissions when firing natural gas.</p> <p>10.0 lbs/hour of particulate emissions when firing number two fuel oil.</p> <p>15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-18-06(F) 40 CFR Part 60, Subpart GG</p>	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).</p> <p>The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).</p>
<p>OAC rule 3745-23-06(B) OAC rule 3745-21-08(B)</p>	<p>* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.</p>

| See Sections A.1.2.j and k.

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NOx combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NOx allowable.
- 2.b** In accordance with OAC rules 3745-31-05(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NOx continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.
- 2.h** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i** In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NOx continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NOx) to meet these requirements. The relative accuracy requirements of

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Performance Specification 6 shall apply to the NOx and CO continuous emissions monitoring systems.

- 2.j** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO2 emissions, upon issuance of this permit. The emissions of SO2 from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.
 - f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.

- k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, 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.
 - b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The

sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in

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accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.
2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.
 - d. The rolling, 12-month operating hours limitation.

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

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons).
 - b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
 - c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
 - d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

4. Continuous NO_x Emissions Monitoring

- a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Continuous CO Emissions Monitoring
 - a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.
6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-
Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NO_x emissions shall be added to the total NO_x emissions from the previous eleven months to determine the rolling, 12-month summation of NO_x emissions.
 - b. Emission Limitation-
199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

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Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

c. Emission Limitation-

11.7 TPY SO₂ as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO₂ emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.
- ii. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO₂ per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.
- iii. The monthly SO₂ emissions shall be added to the total SO₂ emissions from the previous eleven months to determine the rolling, 12-month summation of SO₂ emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

d. Emission Limitation-

6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

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- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- e. Emission Limitation-
Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-

Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

- f. Emission Limitation-
0.040 lb particulate emissions/MMBtu actual heat input

Applicable Compliance Method -

Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation-

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NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average.

Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

h. Emission Limitation-

301 lbs CO/hour, when firing natural gas

1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

i. Emission Limitation-

0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content in accordance with the appropriate ASTM methods or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

j. Emission Limitation-

2.0 lb/hour SO₂, when firing natural gas.

61.0 lbs/hour SO₂, when firing number two fuel oil.

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Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

- k. Emission Limitation-
2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- l. Emission Limitation-
10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

- m. Emission Limitation-
30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

- n. Emission Limitation-
5.0 lbs/hour particulate emissions, when firing natural gas.
10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

- o. Emission Limitation-
15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

- p. Emission Limitation-
10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

- 2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 90 days following startup of the emissions unit.
- b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT5 - Combustion Turbine No. 5; *Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P006 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT6 - Combustion Turbine No. 6; *Modification	OAC rule 3745-31-05(C)	245 tons per year (TPY) nitrogen oxides (NOx) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 199.4 TPY carbon monoxide (CO) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	40 CFR Part 75	11.7 TPY sulfur dioxide (SO2) emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006. 6.1 TPY volatile organic compounds (VOC)* emissions as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.
	OAC rule 3745-17-11(B)(4)	See Sections A.I.2.a, A.II.6, A.III.2, A.III.3, A.III.7, and A.IV.3 for the specific operational restrictions, monitoring and/or record keeping requirements and reporting requirements, respectively.
	OAC rule 3745-31-05(A)(3)	0.040 lb of particulate emissions/mmBtu actual heat input.

NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when firing natural gas, based on a one-hour average as determined through data from the NOx continuous emission monitoring system (CEMs). Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when firing number two fuel oil, based on a one-hour average as determined through data from the NOx CEMs. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

245 TPY of NOx emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

CO emissions shall not exceed 301.0 lbs/hour when firing natural gas.

CO emissions shall not exceed 1093 lbs/hour when firing number two fuel oil.

0.06 lb of SO2 emissions/mmBtu actual heat input

The permittee shall combust number two fuel oil that contains equal to or less than 0.05 percent, by weight, sulfur.

2.0 lb/hour of SO2 emissions when firing natural gas.

61.0 lbs/hour of SO2 emissions when firing number two fuel oil.

2.0 lbs/hour of VOC* emissions when firing natural gas.

	<p>5.5 lbs/hour of VOC* emissions when firing number two fuel oil.</p> <p>10.0 lbs/hour of OC emissions when firing natural gas.</p> <p>11.0 lbs/hour of OC emissions when firing number two fuel oil.</p> <p>30.4 TPY OC emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>5.0 lbs/hour of particulate emissions when firing natural gas.</p> <p>10.0 lbs/hour of particulate emissions when firing number two fuel oil.</p> <p>15.8 TPY of particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.</p> <p>Visible particulate emissions shall not exceed 10% opacity, as a 6-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(4), 3745-23-06(B), and 3745-21-08(B).</p> <p>The emission limitations from these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and 3745-31-05(C).</p> <p>* the permittee has submitted emissions data that supports, for purposes of avoiding both federal 112(g) and state of Ohio OAC rule 3745-31-28 regulations that all Hazardous Air Pollutants (HAPs) are less than VOC emissions.</p> <p>See Sections A.I.2.j and k.</p>
<p>OAC rule 3745-17-07(A) OAC rule 3745-18-06(F) 40 CFR Part 60, Subpart GG</p>	
<p>OAC rule 3745-23-06(B) OAC rule 3745-21-08(B)</p>	

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated through the use of dry low NO_x combustor to reduce nitrogen oxides emissions to 15 ppmvd (at full load) when burning natural gas and use of water injection to reduce nitrogen oxides emissions to 42 ppmvd (at full load) when burning number two fuel oil, and the 245 TPY NO_x allowable.
- 2.b** In accordance with OAC rules 3745-31-05(A)(3), the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- 2.c** In lieu of the requirements of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, the permittee shall install and operate NO_x continuous emissions monitoring system for this emissions unit.
- 2.d** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 Subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NO_x from this emissions unit.
- 2.e** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports from this emissions unit in accordance with this permit.
- 2.f** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for this emissions unit in accordance with this permit.
- 2.g** Start-up shall be defined as the time necessary to bring a turbine on line from a no load condition to synchronization and shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.
- 2.h** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72MW.
- 2.i** In lieu of monitoring the exhaust stack gas flowrate as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NO_x continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NO_x) to meet these requirements. The relative accuracy requirements of Performance Specification 6 shall apply to the NO_x and CO continuous emissions monitoring systems.

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- 2.j** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC paragraph 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC paragraph 3745-31-05(A)(3) in this permit-to-install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves Ohio's requested revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

II. Operational Restrictions

1. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the NOx emissions, upon issuance of this permit. The emissions of NOx from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 245 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
2. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the CO emissions, upon issuance of this permit. The emissions of CO from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 199.4 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
3. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the SO2 emissions, upon issuance of this permit. The emissions of SO2 from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 11.7 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
4. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the VOC emissions, upon issuance of this permit. The emissions of VOC from emissions units P001, P002, P003, P004, P005, and P006 shall not exceed 6.1 tons per year, based upon a rolling, 12 month summation of the monthly emissions.
5. The maximum annual operating hours for emissions units P001, P002, P003, P004, P005 and P006 shall not exceed 5084 while burning natural gas and 300 while burning fuel oil no. 2., based upon a rolling, 12-month summation of the operating hours.

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The permittee may combust 3.34 additional hours of natural gas for every hour of fuel oil not combusted, up to 6086 hours annually of natural gas combustion.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12 month summation of the hours of operation, upon issuance of this permit.

6. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit.
7. The permittee shall burn only pipeline quality natural gas, and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The amount of natural gas burned, in cubic feet.
 - c. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning natural gas.
 - d. The summation of the operating hours from emissions units P001, P002, P003, P004, P005, and P006 combined when burning number two fuel oil.
 - e. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning natural gas.
 - f. The rolling, 12-month summation of the operating hours for emissions units P001, P002, P003, P004, P005, and P006, combined when burning number two fuel oil.
 - g. The summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - h. The rolling, 12-month summation of the NO_x emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - i. The summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - j. The rolling, 12-month summation of the CO emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.

- k. The summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - l. The rolling, 12-month summation of the SO₂ emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - m. The summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - n. The rolling, 12-month summation of the VOC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - o. The summation of the OC emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
 - p. The summation of the particulate emissions for emissions units P001, P002, P003, P004, P005, and P006 combined, in tons.
2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.
- a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, 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.
 - b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The

sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

3. Continuous NO_x Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. Each continuous monitoring system consists of all of the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous NO_x monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s) in

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accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

- g. 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.

4. Continuous CO Monitoring

- a. The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. Each continuous monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

5. For each day during which the permittee burns a fuel other than pipeline quality natural gas, and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
6. The permittee shall install, operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.
7. The permittee shall install, operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
8. The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F, Section 5.2.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 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. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and shall cover the previous calendar quarter.
2. The permittee shall submit quarterly deviation reports to the Ohio EPA Central District Office that identify any exceedances of the following:
 - a. The cumulative NO_x, CO, SO₂, and VOC emission rates from emissions units P001, P002, P003, P004, P005, and P006 combined.
 - b. The rolling, 12-month summation of the NO_x, CO, SO₂, and VOC emission limitations for emissions units P001, P002, P003, P004, P005, and P006 combined.
 - c. All exceedances of the maximum allowable cumulative operating hours levels.
 - d. The rolling, 12-month operating hours limitation.

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

3. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of number two fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons).
 - b. The weighted* average sulfur content (percent by weight) for the oil received during each calendar month.
 - c. The weighted* average heat content (Btu/gallon) of the oil received during each calendar month.
 - d. The weighted* average SO₂ emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F)).

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

4. Continuous NO_x Emissions Monitoring
 - a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load when burning natural gas and 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load when burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

5. Continuous CO Emissions Monitoring
 - a. Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 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 Ohio EPA Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limits specified in the terms and conditions of this permit (301 lbs/hour when burning natural gas, and 1093 lbs/hour when burning number two fuel oil). These reports shall also contain the total CO emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA Central District Office documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also 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.
6. Pursuant to NSPS, the permittee is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA Central District Office
3232 Alum Creek Drive
Columbus, OH 43207

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than pipeline quality natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
8. The permittee shall submit annual reports which specify the total NO_x, CO, particulate, SO₂, OC, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
9. The permittee shall also submit annual reports that specify the total particulate, NO_x and OC emissions for emissions units P001, P002, P003, P004, P005 and P006 combined for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation-
245 TPY NO_x as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-
Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.3.

The monthly NO_x emissions shall be added to the total NO_x emissions from the previous eleven months to determine the rolling, 12-month summation of NO_x emissions.
 - b. Emission Limitation-
199.4 TPY CO as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

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Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through the use of CEMs as specified in Section A.III.4.

The monthly CO emissions shall be added to the total CO emissions from the previous eleven months to determine the rolling, 12-month summation of CO emissions.

c. Emission Limitation-

11.7 TPY SO₂ as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the SO₂ emissions from the burning of natural gas and number 2 fuel oil as follows:

- i. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/mmBtu) by the combined actual heat input for these emissions units (mmBtu/month) and then dividing by 2,000 lbs/ton.
- ii. The monthly SO₂ emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month in these emissions units by the average percent sulfur of the fuel oil used during the month (or 0.05% sulfur) by the factor of 2 lbs of SO₂ per lb of sulfur, divided by the average heat content of the fuel burned during the period, by the combined actual heat input while burning number two fuel oil in these emissions units (mmBtu/hr), and then dividing by 2,000 lbs/ton.
- iii. The monthly SO₂ emissions shall be added to the total SO₂ emissions from the previous eleven months to determine the rolling, 12-month summation of SO₂ emissions, using the USEPA default value for pipeline quality natural gas (0.0006 lb SO₂/MMBtu) and fuel sampling analysis for fuel oil as determined in Section A.III.2.

d. Emission Limitation-

6. 1TPY VOC*** as a rolling, 12-month summation combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1. and shall be determined through a summation of the VOC emissions from the burning of natural gas and number 2 fuel oil as follows:

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- i. The VOC emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of natural gas shall be determined by multiplying the operating hours while burning natural gas for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- ii. The VOC*** emissions for emissions units P001, P002, P003, P004, P005 and P006 from the burning of number two fuel oil shall be determined by multiplying the operating hours while burning number two fuel oil for the month, by the average emission rate (lbs VOC/hour) derived from the emission tests conducted in accordance with Section A.V.2., and dividing by 2,000 lbs/ton.
- iii. The monthly VOC*** emissions shall be added to the total VOC emissions from the previous 11 months to determine the rolling, 12-month summation of VOC emissions, using the operating hour data from Section A.III.1 and the average emission rates derived from the emission tests conducted in accordance with Section A.V.2.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

- e. Emission Limitation-
Sulfur content of the number two fuel oil shall be equal to or less than 0.05 percent by weight sulfur.

Applicable Compliance Method-

Compliance shall be based upon the fuel oil analysis requirement specified in A.II.6 and the record keeping requirements specified in A.III.2.

- f. Emission Limitation-
0.040 lb particulate emissions/MMBtu actual heat input

Applicable Compliance Method -

Compliance shall be demonstrated by the manufacturer's guaranteed emissions data. 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 and the procedures specified in OAC rule 3745-17-03(B)(10).

- g. Emission Limitation-
NOx emissions shall not exceed 178.5 lbs/hour at all operating loads and 15 ppmvd at 15% oxygen at full load, when firing natural gas, based on a one-hour average. Compliance with the 15 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

NOx emissions shall not exceed 269.0 lbs/hour at all operating loads and 42 ppmvd at 15% oxygen at full load, when firing number two fuel oil, based on a one-hour average. Compliance with the 42 ppmvd limit is required only when the unit operates at full load for the entire clock-hour of the averaging period.

Applicable Compliance Method-

Compliance with the NOx emission and concentration limitations may be based upon the data from the NOx continuous emission monitoring system, the fuel flow monitoring equipment and the oxygen monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

- h. Emission Limitation-
301 lbs CO/hour, when firing natural gas
1093 lbs CO/hour, when firing number two fuel oil

Applicable Compliance Method-

Compliance with the CO emission limitation may be based upon the data from the CO continuous emission monitoring system, and the fuel flow monitoring equipment required by this permit. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- i. Emission Limitation-
0.06 lb SO₂/MMBtu actual heat input

Applicable Compliance Method-

When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and the use of the equations specified in OAC rule 3745-18-04(F).

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content in accordance with the appropriate ASTM methods or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-1 (4/00).

- j. Emission Limitation-

2.0 lb/hour SO₂, when firing natural gas.
61.0 lbs/hour SO₂, when firing number two fuel oil.

Applicable Compliance Method-

These limits were based on the worse case sulfur content for pipeline quality natural gas and number two fuel oil and AP-42 emission factors.

When firing natural gas, compliance shall be based upon multiplying the USEPA default value for pipeline quality natural gas by the maximum heat input capacity of this emissions unit. When firing number two fuel oil, compliance shall be based upon the fuel analysis and record keeping requirements specified in A.II.6. and A.III.2. and shall be determined by multiplying the sulfur dioxide emissions in lb(s) SO₂/MMBtu by the maximum heat input capacity of this emissions unit. If required, the permittee shall demonstrate compliance with the hourly emission limitation when burning number two fuel oil through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

k. Emission Limitation-

2.0 lbs/hour VOC, when firing natural gas.
5.5 lbs/hour VOC**, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be determined through emission tests performed in accordance with the requirements specified in Section A.V.2.

**the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

l. Emission Limitation-

10.0 lbs/hour OC, when firing natural gas.
11.0 lbs/hour OC, when firing number two fuel oil.

Applicable Compliance Method-

Compliance shall be based upon the record keeping requirements specified in Section A.III.1. and by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 and 25A, as appropriate.

m. Emission Limitation-

30.4 TPY organic emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data or Ohio EPA approved emission factors obtained from approved emissions testing.

n. Emission Limitation-

5.0 lbs/hour particulate emissions, when firing natural gas.

10.0 lbs/hour particulate emissions, when firing number 2 fuel oil.

Applicable Compliance Method-

Compliance shall be demonstrated by manufacturer's guaranteed emissions data. If required, the permittee shall demonstrate compliance with these emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

o. Emission Limitation-

15.8 TPY particulate emissions combined from emissions units P001, P002, P003, P004, P005, and P006.

Applicable Compliance Method-

Compliance shall be based upon record keeping as specified in Section A.III.1 and the manufacturer's guaranteed emissions data.

p. Emission Limitation-

10% opacity visible emissions, as a 6-minute average

Applicable Compliance Method-

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 90 days following startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the VOC emission*** limitation.

***the permittee has requested that if the average emissions rate (lbs/hour) derived from the emission test conducted in accordance with this term is less than the permit VOC allowable listed in term Section A.I.1, it may apply for an air permit to install modification to increase the hours of operation. The permittee realizes that this modification might trigger the requirement to secure either an administrative or a new air permit to install.

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- c. The following test method(s) shall be employed to demonstrate compliance with the allowable VOC emission limitations:

40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 and/or Method 25 or 25A, as appropriate.

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

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Central District Office 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 Ohio EPA Central District Office.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides monitoring system, required pursuant to 40 CFR Part 75, Appendix B, must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
2. This is an administrative modification to PTI 01-08718 and represents no change in emissions.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P006 - Natural gas or number two fuel oil-fired, simple cycle, combustion turbine having a nominal capacity of 1,115.2 MMBTU/hr (80 MW, nominal), controlled with a dry low NOx combustor; CT6 - Combustion Turbine No. 6; *Modification	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

None