



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL
MONTGOMERY COUNTY
Application No: 08-04888
Fac ID: 0857042072**

CERTIFIED MAIL

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

DATE: 4/22/2008

Dayton Power and Light Company
JoAnne Rau
1065 Woodman Drive
Dayton, OH 45342-4103

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

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

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

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

Sincerely,

Michael W. Ahern

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

CC: USEPA

RAPCA



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 4/22/2008
Effective Date: 4/22/2008**

FINAL PERMIT TO INSTALL 08-04888

Application Number: 08-04888

Facility ID: 0857042072

Permit Fee: **\$1500**

Name of Facility: Dayton Power and Light Company

Person to Contact: JoAnne Rau

Address: 1065 Woodman Drive
Dayton, OH 453424103

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2101 Arbor Blvd
Dayton, Ohio**

Description of proposed emissions unit(s):
Chapter 31 modifacaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Kralak

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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Dayton Power and Light Company

PTI Application: 08-04888

Issued: 4/22/2008

Facility ID:

0857042072

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 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>
Particulate	46.5
SO ₂	92.58
CO	160.8
NOx	374
VOC	45
Formaldehyde	4.20

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

1. Nitrogen Oxides (NOx) Budget Trading Program

OAC Chapter 3745-14

a. Office of Regulatory Information System Facility Code - 2847

b. The following regulated electrical generating units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

Emissions Unit	Annual Allowance for Calendar Years 2004 and 2005	Annual Allowance for Calendar Years 2006 and 2007
P005 - Boiler CT-1	23	23
P006 - Boiler CT-2	25	24

Emissions unit P007 (Boiler CT-3) is a new regulated electrical generating unit. Annual NOx allowance allocations were not established for this new unit when OAC Chapter 3745-14 was promulgated. The annual NOx allowance allocations for emissions unit P007 for calendar years 2005 through 2007 will be established in accordance with OAC rule 3745-14-05(C)(4). Pursuant to OAC rule 3745-14-05(B)(2), the annual NOx allowance allocations for emissions units P005 through P007 for calendar years 2008 through 2012 will be established in accordance with OAC rules 3745-14-05(C)(1) and 3745-14-05(C)(2).

- c. The emissions units identified in Section A.1.b above are NOx budget units under OAC rule 3745-14-01(C)(1).
- d. The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.
- e. Beginning May 31, 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the

source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period.

- f. NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09.
- g. A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated.
- h. Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06.
- i. When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.
- j. Except as provided below, the Director shall revise the NOx budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.

- k. The owner or operator of a NOx budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).
- l. The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date

the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)

- i. the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;
 - ii. all emission monitoring information, in accordance with OAC rule 3745-14-08;
 - iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and
 - iv. copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.
- m. The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from these emissions units in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in Part III, Section A.III.2 and 40 CFR Part 75.
- n. The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan shall also include all of the information required by Subpart H of 40 CFR Part 75.
- o. The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.
- p. Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR Part 75 and which includes data and information required under OAC rule 3745-14-08 or Subpart H of 40 CFR Part 75 is not the same person as the designated representative or the alternate designated representative for the unit under 40 CFR Part 72, then the submission shall also be signed by the designated representative or the alternate designated representative.

- q. The NOx authorized account representative shall submit quarterly reports that include all of the data and information required in Subpart H of 40 CFR Part 75 for each NOx budget unit (or group of units using a common stack) and the data and information in Subpart G of 40 CFR Part 75. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR Part 75.64.
- r. The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:
 - 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 NOx emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NOx emissions.

- s. The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.
- t. For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emission limitation for the control period covered by the report:

- i. identification of each NOx budget unit;
 - ii. at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;
 - iii. at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and
 - iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.
- u. In the compliance certification report under Section A.1.t.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NOx budget emission limitation;
- ii. whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;
- iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made; and
- iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.

If a change is required to be reported under Section A.1.u.iv above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

- v. The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.
- w. The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.
- x. The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.

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.

Operations, Property, and/or Equipment - (P005) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-31-05(A)(3)</p>	<p>Sulfur dioxide (SO₂) emissions from this emissions unit shall not exceed 0.0006 lb/mmBtu during natural gas combustion, 0.055 lb/mmBtu during number two fuel oil combustion, and 30.86 tons per year (TPY).</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.0 lbs/hr and 15.0 TPY.</p> <p>Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion; 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion; and 15.5 TPY.</p> <p>Nitrogen oxides (NO_x) emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion; and 132 tons per rolling, 12-month period.</p> <p>The maximum one-hour carbon monoxide (CO) emissions from this emissions unit shall not exceed 2000 lbs/hr (1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average).</p> <p>CO emissions from this emissions unit shall not exceed 160.8 tons per rolling 12-month period, including periods of start-up and shutdown, with the total combined CO emissions from emissions units P005, P006 and P007 not to exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.</p> <p>See A.I.2.d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, 3745-21-08(B), 3745-31-05(C) and 40 CFR Part 52, Section 52.21.</p>
40 CFR Part 75	See Part I, Term A.4.
OAC rules 3745-31-10 through 3745-31-20	The SO ₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.
OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) 40 CFR Part 60 Subpart GG OAC rule 3745-16-02	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Section 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.
OAC rule 3745-14	See Part II, Term A.1.
OAC rule 3745-31-05(C) (Synthetic minor to avoid MACT rule requirements)	The total combined formaldehyde emissions from this emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.
OAC rule 3745-21-08(B)	See Section A.I.2.g.

2. Additional Terms and Conditions

- 2.a** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use water injection to reduce NO_x emissions to 25 ppmvd at 15% oxygen, at full load, when burning natural gas, and 42 ppmvd at 15% oxygen, at full load, when burning number two fuel oil.
- 2.b** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, 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** "Start-up" shall be defined as the time necessary to bring a turbine on line from a no load condition to fully activated water injection, not to exceed thirty (30) minutes. Shutdown periods shall not exceed thirty (30) minutes.

- 2.d** The minimum stack height for this emissions unit shall be at least 88 feet above the ground.
- 2.e** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72 MW.
- 2.f** If exhaust stack gas flowrate is not monitored 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, except as provided in 40 CFR 75.12(e). If used, the relative accuracy requirements of Performance Specifications 6 shall apply to the NOx and CO continuous emissions monitoring systems.
- 2.g** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by committing to comply with the best available technology requirements established pursuant to OAC rule 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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.h** If this emissions unit meets the requirements of 40 CFR 75.19(a)(1), (a)(2) and (b), the low mass emissions (LME) excepted methodology in 40 CFR 75.19(c) may be used in lieu of continuous emission monitoring systems or, if applicable, in lieu of methods under Appendices D, E, and G to 40 CFR Part 75, for the purpose of determining the unit heat input, NOx, SO₂, and CO₂ mass emissions, and the NOx emission rate under 40 CFR Part 75. If the permittee of a qualifying emissions unit elects to use the LME methodology, it must be used for all parameters that are required to be monitored by the applicable program(s). For example, for an Acid Rain Program LME unit, the methodology must be used to estimate SO₂, NOx, and CO₂ mass emissions, NOx emission rate, and unit heat input.

II. Operational Restrictions

- 1. The sulfur content of the number two fuel oil fired in this emissions unit shall not exceed 0.05%, by weight.

2. The permittee shall be prohibited from combusting fuel oil in this emissions unit from April 1 through September 30 of each year, except for one-half hour of each month or under emergency conditions when natural gas supplies are not available. This exclusion is permitted contingent upon the submittal to the Regional Air Pollution Control Agency of adequate documentation from the permittee that natural gas was not available.
3. The number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 12-month period.
4. The natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 12-month period.
5. In lieu of complying with the natural gas usage restriction specified above, the permittee may combust an additional 150 cubic feet of natural gas in this emissions unit for each gallon of number two fuel oil which is not combusted by this emissions unit. Under no circumstance shall the natural gas consumption exceed 3,870,000,000 cubic feet, per rolling, 12-month period.
6. The permittee shall burn only pipeline quality natural gas or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Continuous SO₂ Emissions Monitoring:
 - a. The permittee shall either operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit (SO₂ pollutant concentration and flow monitor), in units of the applicable standard(s) or meet the requirements of 40 CFR Part 75 Appendix D or 40 CFR Part 75.19(c). Such continuous monitoring and recording equipment (SO₂ pollutant concentration and flow monitor) shall comply with the requirements specified in 40 CFR part 60 and 40 CFR Part 75.
 - b. If used, each continuous monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain records of the following data obtained by the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor): emissions of SO₂ in parts per million, emissions of SO₂ in lb/MMBTU in the appropriate averaging period (e.g., hourly), results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
 - e. The permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) or excepted system designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous SO₂ 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 SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
2. Continuous NO_x Emissions Monitoring:
- a. The permittee shall either operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s) or an excepted monitoring system that meets the requirements of 40 CFR 75.19 (water-to-fuel ratio for water injection controls, as specified in the quality assurance plan specified in 40 CFR 75.19(e)(5)). Such continuous NO_x monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
 - b. If used, each continuous NO_x 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. If used, 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. If used, the permittee shall maintain records of the following data obtained by the continuous NOx monitoring system: emissions of NOx in ppmvd at 15% oxygen at full load, emissions of NOx in lbs/hr, and results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
 - e. The permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx 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 NOx 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 nitrogen oxides 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
 - h. For each low mass emissions unit for which fuel-and-unit-specific NOx emission rates are determined in accordance with 40 CFR 75.19(c)(1)(iv) and which has add-on NOx emission controls of any kind or uses dry low-NOx technology, the permittee shall develop and keep on-site a quality assurance plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameters monitored (e.g., water-to-fuel ratio) and the acceptable ranges for each parameter used to determine proper operation of the unit's NOx controls.
3. Continuous CO Emissions Monitoring:
- a. The permittee shall either operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the

applicable standard(s) or, if the emissions unit meets the requirements of 40 CFR 75.19 for SO₂, NO_x and CO₂, establish fuel-and-unit-specific CO emissions rates using the same methodology as specified for NO_x in 40 CFR 75.19(c)(1)(iv)(G). Note that the requirements of 40 CFR 75 do not apply to CO emissions. Such continuous CO monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

- b. If used, each continuous CO 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. If used, 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 the applicable requirements specified in 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
 - d. If used, the permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, or relative accuracy test audits, 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.
4. 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.
 5. The permittee shall maintain monthly records of the following information for this emissions unit:

- a. The amount of number two fuel oil burned, in gallons.
 - b. The rolling, 12-month summation of number two fuel oil usage, in gallons.
 - c. The amount of natural gas burned, in million cubic feet (MMCF).
 - d. The rolling, 12-month summation of natural gas usage, in MMCF.
 - e. The rolling, 12-month summation of NO_x emissions, in tons.
 - f. The rolling, 12-month summation of CO emissions, in tons.
 - g. The rolling, 12-month summation of SO₂ emissions, in tons.
 - h. The number of hours the emissions unit is in operation when combusting natural gas.
 - i. The number of hours the emissions unit is in operation when combusting number two fuel oil.
 - j. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - k. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting natural gas.
 - l. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting number two fuel oil.
 - m. The date, time and duration, in minutes, of each start-up and shutdown. (The terms start-up and shutdown are defined in Section A.I.2.c.).
6. The permittee shall monitor and record all periods of time when the unit is operated at "full load" conditions, based upon the definition of full load in Section A.I.2.e.
 7. In accordance with 40 CFR Part 60, Subpart GG, Section 60.334(h)(1), the permittee shall monitor the sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The frequency of determination of this value shall be in accordance with 40 CFR 60.334(i).
 8. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated SO₂ emission rate (in lb/MMBtu).
 9. Pursuant to 40 CFR 60.334(i)(1) or (3), the permittee shall determine fuel sulfur content in accordance with the requirements of 40 CFR 60.335(b)(10)(i) and 60.335(b)(10)(ii).

10. For each day during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
11. If the permittee uses 40 CFR Part 75 Appendix D to comply with the SO₂ emissions limit, the permittee shall 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.
12. If using a continuous diluent monitor, the permittee shall 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. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. 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.
13. The permittee shall maintain monthly records of the following information for emissions units P005, P006, and P007, combined:
 - a. The formaldehyde emissions, in tons (sum the formaldehyde emissions for emissions units P005, P006, and P007).
 - b. The CO emissions, in tons (sum the CO emissions for emissions units P005, P006, and P007).
 - c. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - d. The rolling, 12-month summation of CO emissions, in tons.
14. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain hourly records of the following information:
 - a. Date and hour;
 - b. Unit operating time (units using the long term fuel flow methodology report operating time to be 1);
 - c. Fuel type (pipeline natural gas, natural gas, other gaseous fuel, residual oil, or diesel fuel). If more than one type of fuel is combusted in the hour, either:
 - i. Indicate the fuel type which results in the highest emission factors for NO_x (this option is in effect through December 31, 2008); or

- ii. Indicate the fuel type resulting in the highest emission factor for each parameter (SO₂, NO_x emission rate, and CO₂) separately (this option is required on and after January 1, 2009);
 - d. Average hourly NO_x emission rate (lb/mmBtu, rounded to the nearest thousandth);
 - e. Hourly NO_x mass emissions (lbs, rounded to the nearest tenth);
 - f. Hourly SO₂ mass emissions (lbs, rounded to the nearest tenth);
 - g. Hourly CO₂ mass emissions (tons, rounded to the nearest tenth);
 - h. Hourly CO mass emissions (tons, rounded to the nearest tenth);
 - i. Hourly calculated unit heat input in mmBtu;
 - j. Hourly unit output in gross load or steam load;
 - k. The method of determining hourly heat input: unit maximum rated heat input, unit long term fuel flow or group long term fuel flow;
 - l. The method of determining NO_x emission rate used for the hour: default based on fuel combusted, unit specific default based on testing or historical data, group default based on representative testing of identical units, unit specific based on testing of a unit with NO_x controls operating, or missing data value;
 - m. Control status of the unit;
 - n. Base, peak or full load indicator (as applicable); and
 - o. Multiple fuel flag.
15. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain quarterly records of the following information:
- a. Type of fuel;
 - b. Beginning date and hour of long term fuel flow measurement period;
 - c. End date and hour of long term fuel flow period;
 - d. Quantity of fuel measured;
 - e. Units of measure;

- f. Fuel gross calorific value (GCV) value used to calculate heat input;
- g. Units of GCV;
- h. Method of determining fuel GCV used;
- i. Method of determining fuel flow over period;
- j. Component-system identification code;
- k. Quarter and year;
- l. Total heat input (mmBtu); and
- m. Operating hours in period.

IV. Reporting Requirements

- 1. Continuous SO₂ Emissions Reporting:
 - a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total SO₂ 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 Regional Air Pollution Control Agency documenting any continuous SO₂ monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess SO₂ emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of

each year and shall address the data obtained during the previous calendar quarter.

2. Continuous NO_x Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency 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 emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

For emissions units using water to fuel ratio monitoring, an excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the excepted monitoring system, falls below the water to fuel ratio defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Any unit operating hour in which no water or steam is injected into the emissions unit shall also be considered an excess emission. Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

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

For emissions units using water or steam to fuel ratio monitoring, a period of monitor downtime shall be any unit operating hour in which water or steam is injected into the emissions unit, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

- c. If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall

be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. Continuous CO Emissions Reporting:
 - a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of CO values in excess of the applicable emission limitations specified in the terms and conditions of this permit. 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 Regional Air Pollution Control Agency documenting any continuous CO monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess CO emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) 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.
4. The permittee shall submit quarterly deviation (excursion) reports to the Regional Air Pollution Control Agency that identify any exceedances of the following information:
 - a. The rolling, 12-month usage limitation for number two fuel oil of 8,580,000 gallons (for this emissions unit).
 - b. The rolling, 12-month usage limitation for natural gas of 2,580 MMCF (for this emissions unit).
 - c. The rolling, 12-month NO_x emission limitation of 132 tons (for this emissions unit).

- d. The 30-day average, hourly CO emission limitation, when the emissions unit was combusting natural gas, of 1700 lbs/hr (for this emissions unit).
- e. The 30-day average, hourly CO emission limitation when the emissions unit was combusting number two fuel oil, of 350 lbs/hr (for this emissions unit).
- f. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for this emissions unit.
- g. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for emissions units P005, P006, and P007, combined.
- h. The rolling, 12-month SO₂ emission limitation of 30.86 tons, for this emissions unit.
- i. All time periods during which the duration for all start-up and/or shutdown periods did not comply with the requirements established in Section A.I.2.c of this permit.
- j. For the number two fuel oil, any exceedances of the 0.05%, by weight, sulfur content and the calculated SO₂ emissions rate, in lb/MMBtu.
- k. Any time during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil.
- l. The rolling, 12-month formaldehyde emission limitation of 4.20 tons, for emissions units P005, P006, and P007, combined.

These reports shall be submitted in accordance with the General Terms and Conditions of this permit.

- 5. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The reports 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 January 30, April 30, July 30, and October 30 and each report shall cover the previous calendar quarter.

V. Testing Requirements

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

Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion and 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion.

Applicable Compliance Method

When combusting natural gas, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu. Compliance with the allowable lb/hr particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu multiplied by the maximum rated heat input capacity of the emissions unit (1115 MMBtu/hr).

When combusting number two fuel oil, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation specified above shall be based upon an emission factor of 0.0062 lb/MMBtu.* Compliance with the hourly allowable particulate/PM10 emission limitation specified above may be based upon the emission factor of 0.0062 lb/MMBtu multiplied by the emissions unit's maximum rated heat input capacity (1115 MMBtu/hr).

If required, the permittee shall demonstrate compliance with the allowable particulate/PM10 emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

*This emissions factor was established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

b. Emission Limitation

Particulate/PM10 emissions from this emissions unit shall not exceed 15.5 TPY.

Applicable Compliance Method

Compliance with the annual allowable particulate/PM10 emissions limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the hourly particulate/PM10 emissions, from Section A.V.1.a. above, by the annual number of hours of operation when combusting number two fuel oil (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.
 - ii. When combusting natural gas, multiply the manufacturer-supplied emission factor of 0.0072 lb/mmBtu by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr), and then multiply the result by the annual number of hours of operation when combusting natural gas (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.
 - iii. Add i + ii.
- c. Emission Limitations
NOx emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; and 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion

Applicable Compliance Method

If a continuous NOx monitoring system is used to determine compliance with these allowable NOx emissions limitations above, compliance shall be based on the use of the continuous NOx monitoring system specified in A.III.2 and the applicable 40 CFR Part 60 and 75 requirements. Emissions calculated using the 40 CFR Part 75 bias adjustment factor or using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.09 lb/mmBtu, which is the NOx emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, compliance with the allowable NOx emission limitations above, shall be determined based on the results of emission testing conducted in accordance

with 40 CFR Part 60, Appendix A, Reference Methods 1 - 4 and Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitation

NOx emissions from this emissions unit shall not exceed 132 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable NOx emission limitation above shall be based upon the record keeping requirements established in Sections A.III.2 and A.III.5 of this permit if using a continuous NOx monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using water or steam to fuel ratio monitoring.

e. Emission Limitation

The maximum one-hour CO emissions from this emissions unit shall not exceed 2000 lbs/hr.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with the allowable CO emissions limitation above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in Section A.III.3 of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.35 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

f. Emission Limitations

CO emissions from this emissions unit shall not exceed 1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with these allowable CO emissions limitations above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in Sections A.III.3 and A.III.5 of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.35 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

- g. Emission Limitation
CO emissions from this emissions unit shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3 and A.III.5 of this permit if using a continuous CO monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

- h. Emission Limitation
Total combined CO emissions from emissions units P005, P006 and P007 shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3, A.III.5 and A.III.13 of this permit if using a continuous CO monitoring system, or Sections A.III.5, A.III.13, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

i. Emission Limitation

VOC emissions from this emissions unit shall not exceed 10.0 lbs/hr.

Applicable Compliance Method

When combusting natural gas, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.004 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

When combusting number two fuel oil, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.003 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

* established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

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

j. Emission Limitation

VOC emissions from this emissions unit shall not exceed 15.0 TPY.

Applicable Compliance Method

Compliance with the annual allowable VOC emission limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the 0.003 lb VOC/mmBtu emission factor by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the 0.004 lb VOC/mmBtu emission factor by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- iii. Add i + ii.

k. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 0.0006 lb/MMBtu during natural gas combustion and 0.055 lb/MMBtu during number two fuel oil combustion.

Applicable Compliance Method

When firing natural gas, compliance with the allowable SO₂ emission limitation above 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 method, 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 3.1-2a (4/00).

When firing number two fuel oil, compliance with the allowable SO₂ emission limitation above shall be based upon the fuel analysis and the record keeping requirements specified in Sections A.III.1, A.III.7 and A.III.8, and the use of the equations specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate with the allowable SO₂ emission limitations above through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

I. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable SO₂ emission limitation above shall be based upon the record keeping requirements established in Sections A.III.1., A.III.4 and A.III.5 of this permit.

m. Emission Limitation

Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable formaldehyde emission limitation may be determined as follows:

- i. When combusting natural gas, multiply the emission factor of 0.00071 lb formaldehyde/MMBtu (AP-42, Table 3.1-3, revised 4/00) by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- ii. When combusting number two fuel oil, multiply the emission factor of 0.00028 lb formaldehyde/MMBtu (AP-42, Table 3.1-4, revised 4/00) by the annual amount of number two fuel oil burned, in gallons (summation of

the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.

iii. Add i + ii.

n. Emission Limitation

Visible PE shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. If continuous SO₂ and NO_x monitoring system is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan for the continuous NO_x and SO₂ monitoring systems 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. If a continuous monitoring system in compliance with 40 CFR 75.19 is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan required pursuant to 40 CFR Part 75.19(e)(5) must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
3. The requirements of this permit supercede the requirements of PTI 08-04380 issued March 7, 2006 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.

Operations, Property, and/or Equipment - (P005) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

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.

Operations, Property, and/or Equipment - (P006) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-31-05(A)(3)</p>	<p>Sulfur dioxide (SO₂) emissions from this emissions unit shall not exceed 0.0006 lb/mmBtu during natural gas combustion, 0.055 lb/mmBtu during number two fuel oil combustion, and 30.86 tons per year (TPY).</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.0 lbs/hr and 15.0 TPY.</p> <p>Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion; 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion; and 15.5 TPY.</p> <p>Nitrogen oxides (NOx) emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion; and 132 tons per rolling, 12-month period.</p> <p>The maximum one-hour carbon monoxide (CO) emissions from this emissions unit shall not exceed 2000 lbs/hr (1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average).</p> <p>CO emissions from this emissions unit shall not exceed 160.8 tons per rolling 12-month period, including periods of start-up and shutdown, with the total combined CO emissions from emissions units P005, P006 and P007 not to exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.</p> <p>See A.I.2.d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, 3745-21-08(B) and 3745-31-05(C) and 40 CFR Part 52, Section 52.21.</p>
40 CFR Part 75	See Part I, Term A.4.
OAC rules 3745-31-10 through 3745-31-20	The SO ₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.
OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) 40 CFR Part 60 Subpart GG OAC rule 3745-16-02	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Section 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.
OAC rule 3745-14	See Part II, Term A.1.
OAC rule 3745-31-05(C) (Synthetic minor to avoid MACT rule requirements)	Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.
OAC rule 3745-21-08(B)	See Section A.I.2.g.

2. Additional Terms and Conditions

- 2.a** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use water injection to reduce NO_x emissions to 25 ppmvd at 15% oxygen, at full load, when burning natural gas, and 42 ppmvd at 15% oxygen, at full load, when burning number two fuel oil.
- 2.b** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, 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** "Start-up" shall be defined as the time necessary to bring a turbine on line from a no load condition to fully activated water injection, not to exceed thirty (30) minutes. Shutdown periods shall not exceed thirty (30) minutes.

- 2.d** The minimum stack height for this emissions unit shall be at least 88 feet above the ground.
- 2.e** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72 MW.
- 2.f** If exhaust stack gas flowrate is not monitored 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, except as provided in 40 CFR 75.12(e). If used, the relative accuracy requirements of Performance Specifications 6 shall apply to the NOx and CO continuous emissions monitoring systems.
- 2.g** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by committing to comply with the best available technology requirements established pursuant to OAC rule 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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.h** If this emissions unit meets the requirements of 40 CFR 75.19(a)(1), (a)(2) and (b), the low mass emissions (LME) excepted methodology in 40 CFR 75.19(c) may be used in lieu of continuous emission monitoring systems or, if applicable, in lieu of methods under Appendices D, E, and G to 40 CFR Part 75, for the purpose of determining the unit heat input, NOx, SO₂, and CO₂ mass emissions, and the NOx emission rate under 40 CFR Part 75. If the permittee of a qualifying emissions unit elects to use the LME methodology, it must be used for all parameters that are required to be monitored by the applicable program(s). For example, for an Acid Rain Program LME unit, the methodology must be used to estimate SO₂, NOx, and CO₂ mass emissions, NOx emission rate, and unit heat input.

II. Operational Restrictions

- 1.** The sulfur content of the number two fuel oil fired in this emissions unit shall not exceed 0.05%, by weight.

2. The permittee shall be prohibited from combusting fuel oil in this emissions unit from April 1 through September 30 of each year, except for one-half hour of each month or under emergency conditions when natural gas supplies are not available. This exclusion is permitted contingent upon the submittal to the Regional Air Pollution Control Agency of adequate documentation from the permittee that natural gas was not available.
3. The number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 12-month period.
4. The natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 12-month period.
5. In lieu of complying with the natural gas usage restriction specified above, the permittee may combust an additional 150 cubic feet of natural gas in this emissions unit for each gallon of number two fuel oil which is not combusted by this emissions unit. Under no circumstance shall the natural gas consumption exceed 3,870,000,000 cubic feet, per rolling, 12-month period.
6. The permittee shall burn only pipeline quality natural gas or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Continuous SO₂ Emissions Monitoring:
 - a. The permittee shall either operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit (SO₂ pollutant concentration and flow monitor), in units of the applicable standard(s) or meet the requirements of 40 CFR Part 75 Appendix D or 40 CFR Part 75.19(c). Such continuous monitoring and recording equipment (SO₂ pollutant concentration and flow monitor) shall comply with the requirements specified in 40 CFR part 60 and 40 CFR Part 75.
 - b. If used, each continuous monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain records of the following data obtained by the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor): emissions of SO₂ in parts per million, emissions of SO₂ in lb/MMBTU in the appropriate averaging period (e.g., hourly), results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
 - e. The permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) or excepted system designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous SO₂ 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 SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
2. Continuous NO_x Emissions Monitoring:
- a. The permittee shall either operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s) or an excepted monitoring system that meets the requirements of 40 CFR 75.19 (water-to-fuel ratio for water injection controls, as specified in the quality assurance plan specified in 40 CFR 75.19(e)(5)). Such continuous NO_x monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
 - b. If used, each continuous NO_x 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. If used, 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. If used, the permittee shall maintain records of the following data obtained by the continuous NOx monitoring system: emissions of NOx in ppmvd at 15% oxygen at full load, emissions of NOx in lbs/hr, and results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
 - e. The permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx 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 NOx 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 nitrogen oxides 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
 - h. For each low mass emissions unit for which fuel-and-unit-specific NOx emission rates are determined in accordance with 40 CFR 75.19(c)(1)(iv) and which has add-on NOx emission controls of any kind or uses dry low-NOx technology, the permittee shall develop and keep on-site a quality assurance plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameters monitored (e.g., water-to-fuel ratio) and the acceptable ranges for each parameter used to determine proper operation of the unit's NOx controls.
3. Continuous CO Emissions Monitoring:
- a. The permittee shall either operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the

applicable standard(s) or, if the emissions unit meets the requirements of 40 CFR 75.19 for SO₂, NO_x and CO₂, establish fuel-and-unit-specific CO emissions rates using the same methodology as specified for NO_x in 40 CFR 75.19(c)(1)(iv)(G). Note that the requirements of 40 CFR 75 do not apply to CO emissions. Such continuous CO monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

- b. If used, each continuous CO 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. If used, 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 the applicable requirements specified in 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
 - d. If used, the permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, or relative accuracy test audits, 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.
4. 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.
 5. The permittee shall maintain monthly records of the following information for this emissions unit:

- a. The amount of number two fuel oil burned, in gallons.
 - b. The rolling, 12-month summation of number two fuel oil usage, in gallons.
 - c. The amount of natural gas burned, in million cubic feet (MMCF).
 - d. The rolling, 12-month summation of natural gas usage, in MMCF.
 - e. The rolling, 12-month summation of NO_x emissions, in tons.
 - f. The rolling, 12-month summation of CO emissions, in tons.
 - g. The rolling, 12-month summation of SO₂ emissions, in tons.
 - h. The number of hours the emissions unit is in operation when combusting natural gas.
 - i. The number of hours the emissions unit is in operation when combusting number two fuel oil.
 - j. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - k. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting natural gas.
 - l. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting number two fuel oil.
 - m. The date, time and duration, in minutes, of each start-up and shutdown. (The terms start-up and shutdown are defined in Section A.I.2.c.).
6. The permittee shall monitor and record all periods of time when the unit is operated at "full load" conditions, based upon the definition of full load in Section A.I.2.e.
 7. In accordance with 40 CFR Part 60, Subpart GG, Section 60.334(h)(1), the permittee shall monitor the sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The frequency of determination of this value shall be in accordance with 40 CFR 60.334(i).
 8. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated SO₂ emission rate (in lb/MMBtu).
 9. Pursuant to 40 CFR 60.334(i)(1) or (3), the permittee shall determine fuel sulfur content in accordance with the requirements of 40 CFR 60.335(b)(10)(i) and 60.335(b)(10)(ii).

10. For each day during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
11. If the permittee uses 40 CFR Part 75 Appendix D to comply with the SO₂ emissions limit, the permittee shall 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.
12. If using a continuous diluent monitor, the permittee shall 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. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. 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.
13. The permittee shall maintain monthly records of the following information for emissions units P005, P006, and P007, combined:
 - a. The formaldehyde emissions, in tons (sum the formaldehyde emissions for emissions units P005, P006, and P007).
 - b. The CO emissions, in tons (sum the CO emissions for emissions units P005, P006, and P007).
 - c. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - d. The rolling, 12-month summation of CO emissions, in tons.
14. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain hourly records of the following information:
 - a. Date and hour;
 - b. Unit operating time (units using the long term fuel flow methodology report operating time to be 1);
 - c. Fuel type (pipeline natural gas, natural gas, other gaseous fuel, residual oil, or diesel fuel). If more than one type of fuel is combusted in the hour, either:
 - i. Indicate the fuel type which results in the highest emission factors for NO_x (this option is in effect through December 31, 2008); or

- ii. Indicate the fuel type resulting in the highest emission factor for each parameter (SO₂, NO_x emission rate, and CO₂) separately (this option is required on and after January 1, 2009);
 - d. Average hourly NO_x emission rate (lb/mmBtu, rounded to the nearest thousandth);
 - e. Hourly NO_x mass emissions (lbs, rounded to the nearest tenth);
 - f. Hourly SO₂ mass emissions (lbs, rounded to the nearest tenth);
 - g. Hourly CO₂ mass emissions (tons, rounded to the nearest tenth);
 - h. Hourly CO mass emissions (tons, rounded to the nearest tenth);
 - i. Hourly calculated unit heat input in mmBtu;
 - j. Hourly unit output in gross load or steam load;
 - k. The method of determining hourly heat input: unit maximum rated heat input, unit long term fuel flow or group long term fuel flow;
 - l. The method of determining NO_x emission rate used for the hour: default based on fuel combusted, unit specific default based on testing or historical data, group default based on representative testing of identical units, unit specific based on testing of a unit with NO_x controls operating, or missing data value;
 - m. Control status of the unit;
 - n. Base, peak or full load indicator (as applicable); and
 - o. Multiple fuel flag.
15. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain quarterly records of the following information:
- a. Type of fuel;
 - b. Beginning date and hour of long term fuel flow measurement period;
 - c. End date and hour of long term fuel flow period;
 - d. Quantity of fuel measured;
 - e. Units of measure;

- f. Fuel gross calorific value (GCV) value used to calculate heat input;
- g. Units of GCV;
- h. Method of determining fuel GCV used;
- i. Method of determining fuel flow over period;
- j. Component-system identification code;
- k. Quarter and year;
- l. Total heat input (mmBtu); and
- m. Operating hours in period.

IV. Reporting Requirements

1. Continuous SO₂ Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total SO₂ 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 Regional Air Pollution Control Agency documenting any continuous SO₂ monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess SO₂ emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line 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.

2. Continuous NO_x Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency 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 emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

For emissions units using water to fuel ratio monitoring, an excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the excepted monitoring system, falls below the water to fuel ratio

defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Any unit operating hour in which no water or steam is injected into the emissions unit shall also be considered an excess emission. Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

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

For emissions units using water or steam to fuel ratio monitoring, a period of monitor downtime shall be any unit operating hour in which water or steam is injected into the emissions unit, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

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

3. Continuous CO Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of CO values in excess of the applicable emission limitations specified in the terms and conditions of this permit. 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 Regional Air Pollution Control Agency documenting any continuous CO monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s)

taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.

- c. If there are no excess CO emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) 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.
4. The permittee shall submit quarterly deviation (excursion) reports to the Regional Air Pollution Control Agency that identify any exceedances of the following information:
 - a. The rolling, 12-month usage limitation for number two fuel oil of 8,580,000 gallons (for this emissions unit).
 - b. The rolling, 12-month usage limitation for natural gas of 2,580 MMCF (for this emissions unit).
 - c. The rolling, 12-month NO_x emission limitation of 132 tons (for this emissions unit).
 - d. The 30-day average, hourly CO emission limitation, when the emissions unit was combusting natural gas, of 1700 lbs/hr (for this emissions unit).
 - e. The 30-day average, hourly CO emission limitation when the emissions unit was combusting number two fuel oil, of 350 lbs/hr (for this emissions unit).
 - f. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for this emissions unit.
 - g. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for emissions units P005, P006, and P007, combined.
 - h. The rolling, 12-month SO₂ emission limitation of 30.86 tons, for this emissions unit.

- i. All time periods during which the duration for all start-up and/or shutdown periods did not comply with the requirements established in Section A.I.2.c of this permit.
- j. For the number two fuel oil, any exceedances of the 0.05%, by weight, sulfur content and the calculated SO₂ emissions rate, in lb/MMBtu.
- k. Any time during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil.
- l. The rolling, 12-month formaldehyde emission limitation of 4.20 tons, for emissions units P005, P006, and P007, combined.

These reports shall be submitted in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The reports 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 each report shall cover the previous calendar quarter.

V. Testing Requirements

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

- a. Emission Limitations

Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion and 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion.

Applicable Compliance Method

When combusting natural gas, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu. Compliance with the allowable lb/hr particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu multiplied by the maximum rated heat input capacity of the emissions unit (1115 MMBtu/hr).

When combusting number two fuel oil, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation specified above shall be based upon an emission factor of 0.0062 lb/MMBtu.* Compliance with the hourly allowable

particulate/PM10 emission limitation specified above may be based upon the emission factor of 0.0062 lb/MMBtu multiplied by the emissions unit's maximum rated heat input capacity (1115 MMBtu/hr).

If required, the permittee shall demonstrate compliance with the allowable particulate/PM10 emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

*This emissions factor was established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

b. Emission Limitation

Particulate/PM10 emissions from this emissions unit shall not exceed 15.5 TPY.

Applicable Compliance Method

Compliance with the annual allowable particulate/PM10 emissions limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the hourly particulate/PM10 emissions, from Section A.V.1.a. above, by the annual number of hours of operation when combusting number two fuel oil (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the manufacturer-supplied emission factor of 0.0072 lb/mmBtu by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr), and then multiply the result by the annual number of hours of operation when combusting natural gas (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.
- iii. Add i + ii.

c. Emission Limitations

NOx emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; and 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion

Applicable Compliance Method

If a continuous NOx monitoring system is used to determine compliance with these allowable NOx emissions limitations above, compliance shall be based on the use of the continuous NOx monitoring system specified in A.III.2 and the applicable 40 CFR Part 60 and 75 requirements. Emissions calculated using the 40 CFR Part 75 bias adjustment factor or using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.09 lb/mmBtu, which is the NO_x emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, compliance with the allowable NO_x emission limitations above, shall be determined based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Reference Methods 1 - 4 and Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitation

NO_x emissions from this emissions unit shall not exceed 132 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable NO_x emission limitation above shall be based upon the record keeping requirements established in Sections A.III.2 and A.III.5 of this permit if using a continuous NO_x monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using water or steam to fuel ratio monitoring.

e. Emission Limitation

The maximum one-hour CO emissions from this emissions unit shall not exceed 2000 lbs/hr

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with the allowable CO emissions limitation above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in Section A.III.3 of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.31 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting

an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

f. Emission Limitations

CO emissions from this emissions unit shall not exceed 1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with these allowable CO emissions limitations above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in Sections A.III.3 and A.III.5 of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.31 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitation

CO emissions from this emissions unit shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3 and A.III.5 of this permit if using a continuous CO monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

h. Emission Limitation

Total combined CO emissions from emissions units P005, P006 and P007 shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3, A.III.5 and A.III.13 of this permit if using a continuous CO monitoring system, or Sections A.III.5, A.III.13, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

i. Emission Limitation

VOC emissions from this emissions unit shall not exceed 10.0 lbs/hr.

Applicable Compliance Method

When combusting natural gas, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.004 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

When combusting number two fuel oil, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.003 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

* established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

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

j. Emission Limitation

VOC emissions from this emissions unit shall not exceed 15.0 TPY.

Applicable Compliance Method

Compliance with the annual allowable VOC emission limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the 0.003 lb VOC/mmBtu emission factor by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the 0.004 lb VOC/mmBtu emission factor by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.

iii. Add i + ii.

k. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 0.0006 lb/MMBtu during natural gas combustion and 0.055 lb/MMBtu during number two fuel oil combustion.

Applicable Compliance Method

When firing natural gas, compliance with the allowable SO₂ emission limitation above 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 method, 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 3.1-2a (4/00).

When firing number two fuel oil, compliance with the allowable SO₂ emission limitation above shall be based upon the fuel analysis and the record keeping requirements specified in Sections A.III.1, A.III.7 and A.III.8, and the use of the equations specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate with the allowable SO₂ emission limitations above through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

l. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable SO₂ emission limitation above shall be based upon the record keeping requirements established in Sections A.III.1., A.III.4 and A.III.5 of this permit.

m. Emission Limitation

Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable formaldehyde emission limitation may be determined as follows:

- i. When combusting natural gas, multiply the emission factor of 0.00071 lb formaldehyde/MMBtu (AP-42, Table 3.1-3, revised 4/00) by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat

content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.

- ii. When combusting number two fuel oil, multiply the emission factor of 0.00028 lb formaldehyde/MMBtu (AP-42, Table 3.1-4, revised 4/00) by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- iii. Add i + ii.
- n. Emission Limitation
Visible PE shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. If continuous SO₂ and NO_x monitoring system is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan for the continuous NO_x and SO₂ monitoring systems 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. If a continuous monitoring system in compliance with 40 CFR 75.19 is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan required pursuant to 40 CFR Part 75.19(e)(5) must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
3. The requirements of this permit supercede the requirements of PTI 08-04380 issued March 7, 2006 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.

Operations, Property, and/or Equipment - (P006) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

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.

Operations, Property, and/or Equipment - (P007) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NOx (DLN) combustor controls, CT-3

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<p>OAC rule 3745-31-05(A)(3)</p>	<p>Sulfur dioxide (SO₂) emissions from this emissions unit shall not exceed 0.0006 lb/mmBtu during natural gas combustion, 0.055 lb/mmBtu during number two fuel oil combustion, and 30.86 tons per year (TPY).</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.0 lbs/hr and 15.0 TPY.</p> <p>Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion; 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion; and 15.5 TPY.</p> <p>Nitrogen oxides (NOx) emissions from this emissions unit shall not exceed 15 ppmvd at 15% oxygen at full load and 62 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion; and 110 tons per rolling, 12-month period.</p> <p>Carbon monoxide (CO) emissions from this emissions unit shall not exceed 301 lbs/hr at all operating loads, excluding start-up and shutdown periods when firing natural gas; 413 lbs/hr during start-up and shutdown periods when firing natural gas; and 800 lbs/hr when firing number two fuel oil.</p> <p>CO emissions from this emissions unit shall not exceed 160.8 tons per rolling 12-month period, including periods of start-up and shutdown, with the total combined CO emissions from emissions units P005, P006 and P007 not to exceed 160.8 tons per rolling,</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	12-month period, including periods of start-up and shutdown.
OAC rule 3745-31-05(A)(3)	Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods. See A.I.2.d. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, 3745-21-08(B) and 3745-31-05(C) and 40 CFR Part 52, Section 52.21.
40 CFR Part 75	See Part I, Term A.4.
OAC rules 3745-31-10 through 3745-31-20	The SO ₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.
OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) 40 CFR Part 60 Subpart GG OAC rule 3745-16-02	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Section 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.
OAC rule 3745-14	See Part II, Term A.1.
OAC rule 3745-31-05(C) (Synthetic minor to avoid MACT rule requirements)	Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.
OAC rule 3745-21-08(B)	See Section A.I.2.g.

2. Additional Terms and Conditions

- 2.a** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use dry low NO_x (DLN) combustion technology to reduce NO_x emissions to 15 ppmvd at 15% oxygen, at full load, when burning natural gas, and shall use water injection to reduce NO_x emissions to 42 ppmvd at 15% oxygen, at full load, when burning number two fuel oil.
- 2.b** In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, 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** "Start-up" shall be defined as the time necessary to bring a turbine on line from a no load condition to dry low NO_x combustion mode during natural gas combustion or fully activated water injection during fuel oil combustion, not to

exceed thirty (30) minutes. Shutdown periods shall not exceed thirty (30) minutes.

- 2.d** The minimum stack height for this emissions unit shall be at least 88 feet above the ground.
- 2.e** "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72 MW.
- 2.f** If exhaust stack gas flowrate is not monitored 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, except as provided in 40 CFR 75.12(e). If used, the relative accuracy requirements of Performance Specifications 6 shall apply to the NO_x and CO continuous emissions monitoring systems.
- 2.g** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by committing to comply with the best available technology requirements established pursuant to OAC rule 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. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.h** If this emissions unit meets the requirements of 40 CFR 75.19(a)(1), (a)(2) and (b), the low mass emissions (LME) excepted methodology in 40 CFR 75.19(c) may be used in lieu of continuous emission monitoring systems or, if applicable, in lieu of methods under Appendices D, E, and G to 40 CFR Part 75, for the purpose of determining the unit heat input, NO_x, SO₂, and CO₂ mass emissions, and the NO_x emission rate under 40 CFR Part 75. If the permittee of a qualifying emissions unit elects to use the LME methodology, it must be used for all parameters that are required to be monitored by the applicable program(s). For example, for an Acid Rain Program LME unit, the methodology must be used to estimate SO₂, NO_x, and CO₂ mass emissions, NO_x emission rate, and unit heat input.

II. Operational Restrictions

1. The sulfur content of the number two fuel oil fired in this emissions unit shall not exceed 0.05%, by weight.
2. The permittee shall be prohibited from combusting fuel oil in this emissions unit from April 1 through September 30 of each year, except for one-half hour of each month or under emergency conditions when natural gas supplies are not available. This exclusion is permitted contingent upon the submittal to the Regional Air Pollution Control Agency of adequate documentation from the permittee that natural gas was not available.
3. The number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 12-month period.
4. The natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 12-month period.
5. In lieu of complying with the natural gas usage restriction specified above, the permittee may combust an additional 150 cubic feet of natural gas in this emissions unit for each gallon of number two fuel oil which is not combusted by this emissions unit. Under no circumstance shall the natural gas consumption exceed 3,870,000,000 cubic feet, per rolling, 12-month period.
6. The permittee shall burn only pipeline quality natural gas or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Continuous SO₂ Emissions Monitoring:
 - a. The permittee shall either operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit (SO₂ pollutant concentration and flow monitor), in units of the applicable standard(s) or meet the requirements of 40 CFR Part 75 Appendix D or 40 CFR Part 75.19(c). Such continuous monitoring and recording equipment (SO₂ pollutant concentration and flow monitor) shall comply with the requirements specified in 40 CFR part 60 and 40 CFR Part 75.
 - b. If used, each continuous monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. If used, the permittee shall maintain records of the following data obtained by the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor): emissions of SO₂ in parts per million, emissions of SO₂ in lb/MMBTU in the appropriate averaging period (e.g., hourly), results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) or excepted system designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous SO₂ 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 SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) 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. 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

2. Continuous NO_x Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s) or an excepted monitoring system that meets the requirements of 40 CFR 75.19 (water-to-fuel ratio for water injection controls and operating mode and combustion reference temperature for dry low NO_x systems, as specified in the quality assurance plan specified in 40 CFR 75.19(e)(5)). Such continuous NO_x monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. If used, each continuous NO_x 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. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NOx 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. If used, the permittee shall maintain records of the following data obtained by the continuous NOx monitoring system: emissions of NOx in ppmvd at 15% oxygen at full load, emissions of NOx in lbs/hr, and results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx 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 NOx 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 nitrogen oxides 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. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
- h. For each low mass emissions unit for which fuel-and-unit-specific NOx emission rates are determined in accordance with 40 CFR 75.19(c)(1)(iv) and which has add-on NOx emission controls of any kind or uses dry low-NOx technology, the permittee shall develop and keep on-site a quality assurance plan which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameters monitored (e.g., water-to-fuel ratio) and the acceptable ranges for each parameter used to determine proper operation of the unit's NOx controls.

3. Continuous CO Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s) or, if the emissions unit meets the requirements of 40 CFR 75.19 for SO₂, NO_x and CO₂, establish fuel-and-unit-specific CO emissions rates using the same methodology as specified for NO_x in 40 CFR 75.19(c)(1)(iv)(G). Note that the requirements of 40 CFR 75 do not apply to CO emissions. Such continuous CO monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. If used, each continuous CO 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. If used, 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 the applicable requirements specified in 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, or relative accuracy test audits, 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.

4. 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.
5. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The amount of number two fuel oil burned, in gallons.
 - b. The rolling, 12-month summation of number two fuel oil usage, in gallons.
 - c. The amount of natural gas burned, in million cubic feet (MMCF).
 - d. The rolling, 12-month summation of natural gas usage, in MMCF.
 - e. The rolling, 12-month summation of NO_x emissions, in tons.
 - f. The rolling, 12-month summation of CO emissions, in tons.
 - g. The rolling, 12-month summation of SO₂ emissions, in tons.
 - h. The number of hours the emissions unit is in operation when combusting natural gas.
 - i. The number of hours the emissions unit is in operation when combusting number two fuel oil.
 - j. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - k. The date, time and duration, in minutes, of each start-up and shutdown. (The terms start-up and shutdown are defined in Section A.I.2.c.).
6. The permittee shall monitor and record all periods of time when the unit is operated at "full load" conditions, based upon the definition of full load in Section A.I.2.e.
7. In accordance with 40 CFR Part 60, Subpart GG, Section 60.334(h)(1), the permittee shall monitor the sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The frequency of determination of this value shall be in accordance with 40 CFR 60.334(i).
8. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated SO₂ emission rate (in lb/MMBtu).

9. Pursuant to 40 CFR 60.334(i)(1) or (3), the permittee shall determine fuel sulfur content in accordance with the requirements of 40 CFR 60.335(b)(10)(i) and 60.335(b)(10)(ii).
10. For each day during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
11. If the permittee uses 40 CFR Part 75 Appendix D to comply with the SO₂ emissions limit, the permittee shall 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.
12. If using a continuous diluent monitor, the permittee shall 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. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. 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.
13. The permittee shall maintain monthly records of the following information for emissions units P005, P006, and P007, combined:
 - a. The formaldehyde emissions, in tons (sum the formaldehyde emissions for emissions units P005, P006, and P007).
 - b. The CO emissions, in tons (sum the CO emissions for emissions units P005, P006, and P007).
 - c. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - d. The rolling, 12-month summation of CO emissions, in tons.
14. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain hourly records of the following information:
 - a. Date and hour;
 - b. Unit operating time (units using the long term fuel flow methodology report operating time to be 1);
 - c. Fuel type (pipeline natural gas, natural gas, other gaseous fuel, residual oil, or diesel fuel). If more than one type of fuel is combusted in the hour, either:

- i. Indicate the fuel type which results in the highest emission factors for NOx (this option is in effect through December 31, 2008); or
 - ii. Indicate the fuel type resulting in the highest emission factor for each parameter (SO₂, NOx emission rate, and CO₂) separately (this option is required on and after January 1, 2009);
 - d. Average hourly NOx emission rate (lb/mmBtu, rounded to the nearest thousandth);
 - e. Hourly NOx mass emissions (lbs, rounded to the nearest tenth);
 - f. Hourly SO₂ mass emissions (lbs, rounded to the nearest tenth);
 - g. Hourly CO₂ mass emissions (tons, rounded to the nearest tenth);
 - h. Hourly CO mass emissions (tons, rounded to the nearest tenth);
 - i. Hourly calculated unit heat input in mmBtu;
 - j. Hourly unit output in gross load or steam load;
 - k. The method of determining hourly heat input: unit maximum rated heat input, unit long term fuel flow or group long term fuel flow;
 - l. The method of determining NOx emission rate used for the hour: default based on fuel combusted, unit specific default based on testing or historical data, group default based on representative testing of identical units, unit specific based on testing of a unit with NOx controls operating, or missing data value;
 - m. Control status of the unit;
 - n. Base, peak or full load indicator (as applicable); and
 - o. Multiple fuel flag.
15. If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NOx emissions limits, the permittee shall maintain quarterly records of the following information:
- a. Type of fuel;
 - b. Beginning date and hour of long term fuel flow measurement period;
 - c. End date and hour of long term fuel flow period;
 - d. Quantity of fuel measured;

- e. Units of measure;
- f. Fuel gross calorific value (GCV) value used to calculate heat input;
- g. Units of GCV;
- h. Method of determining fuel GCV used;
- i. Method of determining fuel flow over period;
- j. Component-system identification code;
- k. Quarter and year;
- l. Total heat input (mmBtu); and
- m. Operating hours in period.

IV. Reporting Requirements

1. Continuous SO₂ Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total SO₂ 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 Regional Air Pollution Control Agency documenting any continuous SO₂ monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess SO₂ emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line 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.

2. Continuous NO_x Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency 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 emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

For emissions units using water to fuel ratio monitoring, an excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the excepted monitoring system, falls below the water to fuel ratio

defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Any unit operating hour in which no water or steam is injected into the emissions unit shall also be considered an excess emission. Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

For emissions units using combustion reference temperature monitoring, an excess emission shall be any unit operating hour for which the average combustion reference temperature, as measured by the excepted monitoring system, falls below the minimum combustion reference temperature defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Each report shall include the average combustion reference temperature, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

For emissions units using operating mode monitoring, an excess emission shall be any unit operating hour which the emissions unit was not operating in the pre-mix steady state mode, as measured by the excepted monitoring system. Each report shall include the operating mode, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

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

For emissions units using water or steam to fuel ratio monitoring, a period of monitor downtime shall be any unit operating hour in which water or steam is injected into the emissions unit, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

For emissions units using combustion reference temperature monitoring, a period of monitor downtime shall be any unit operating hour in which the essential parametric data needed to determine the combustion reference temperature is unavailable or invalid.

For emissions units using operating mode monitoring, a period of monitor downtime shall be any unit operating hour in which the essential parametric data needed to determine the operating mode is unavailable or invalid.

- c. If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
3. Continuous CO Emissions Reporting:
 - a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of CO values in excess of the applicable emission limitations specified in the terms and conditions of this permit. 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 Regional Air Pollution Control Agency documenting any continuous CO monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess CO emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) 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.
4. The permittee shall submit quarterly deviation (excursion) reports to the Regional Air Pollution Control Agency that identify any exceedances of the following information:
 - a. The rolling, 12-month usage limitation for number two fuel oil of 8,580,000 gallons (for this emissions unit).

- b. The rolling, 12-month usage limitation for natural gas of 2,580 MMCF (for this emissions unit).
- c. The rolling, 12-month NO_x emission limitation of 110 tons (for this emissions unit).
- d. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for this emissions unit.
- e. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for emissions units P005, P006, and P007, combined.
- f. The rolling, 12-month SO₂ emission limitation of 30.86 tons, for this emissions unit.
- g. All time periods during which the duration for all start-up and/or shutdown periods did not comply with the requirements established in Section A.I.2.c of this permit.
- h. For the number two fuel oil, any exceedances of the 0.05%, by weight, sulfur content and the calculated SO₂ emissions rate, in lb/MMBtu.
- i. Any time during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil.
- j. The rolling, 12-month formaldehyde emission limitation of 4.20 tons, for emissions units P005, P006, and P007, combined.

These reports shall be submitted in accordance with the General Terms and Conditions of this permit.

- 5. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The reports 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 each report shall cover the previous calendar quarter.

V. Testing Requirements

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

Particulate/PM10 emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion and 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion.

Applicable Compliance Method

When combusting natural gas, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu. Compliance with the allowable lb/hr particulate/PM10 emission limitation above may be based on the AP-42, Table 3.1-2a (revised 4/00) emission factor of 0.0019 lb/MMBtu multiplied by the maximum rated heat input capacity of the emissions unit (1115 MMBtu/hr).

When combusting number two fuel oil, compliance with the allowable lb/MMBtu particulate/PM10 emission limitation specified above shall be based upon an emission factor of 0.0062 lb/MMBtu.* Compliance with the hourly allowable particulate/PM10 emission limitation specified above may be based upon the emission factor of 0.0062 lb/MMBtu multiplied by the emissions unit's maximum rated heat input capacity (1115 MMBtu/hr).

If required, the permittee shall demonstrate compliance with the allowable particulate/PM10 emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

*This emissions factor was established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

b. Emission Limitation

Particulate/PM10 emissions from this emissions unit shall not exceed 15.5 TPY.

Applicable Compliance Method

Compliance with the annual allowable particulate/PM10 emissions limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the hourly particulate/PM10 emissions, from Section A.V.1.a. above, by the annual number of hours of operation when combusting number two fuel oil (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the manufacturer-supplied emission factor of 0.0072 lb/mmBtu by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr), and then multiply the result by the annual number of hours of operation when combusting natural gas (summation of the monthly values from Section A.III.5 for the calendar year), and then divide by 2000 lbs/ton.

iii. Add i + ii.

c. Emission Limitations

NOx emissions from this emissions unit shall not exceed 15 ppmvd at 15% oxygen at full load and 62 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion.

Applicable Compliance Method

If a continuous NOx monitoring system is used to determine compliance with these allowable NOx emissions limitations above, compliance shall be based on the use of the continuous NOx monitoring system specified in A.III.2 and the applicable 40 CFR Part 60 and 75 requirements. Emissions calculated using the 40 CFR Part 75 bias adjustment factor or using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.05 lb/mmBtu, which is the NOx emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, compliance with the allowable NOx emission limitations above, shall be determined based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Reference Methods 1 - 4 and Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitation

NOx emissions from this emissions unit shall not exceed 110 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable NOx emission limitation above shall be based upon the record keeping requirements established in Sections A.III.2 and A.III.5 of this permit if using a continuous NOx monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using water or steam to fuel ratio monitoring.

e. Emission Limitation

CO emissions from this emissions unit shall not exceed 301 lbs/hr at all operating loads, excluding start-up and shutdown periods when firing natural

gas; 413 lbs/hr during start-up and shutdown periods when firing natural gas; and 800 lbs/hr when firing number two fuel oil.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with the allowable CO emissions limitation above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in Section A.III.3 of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.03 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

f. Emission Limitation

CO emissions from this emissions unit shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3 and A.III.5 of this permit if using a continuous CO monitoring system, or Sections A.III.5, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

g. Emission Limitation

Total combined CO emissions from emissions units P005, P006 and P007 shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in Sections A.III.3, A.III.5 and A.III.13 of this permit if using a continuous CO monitoring system, or

Sections A.III.5, A.III.13, A.III.14 and A.III.15 if using a monitoring system in compliance with 40 CFR 75.19.

h. Emission Limitation

VOC emissions from this emissions unit shall not exceed 10.0 lbs/hr.

Applicable Compliance Method

When combusting natural gas, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.004 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

When combusting number two fuel oil, compliance with the hourly allowable VOC emission limitation shall be based on multiplying the emission factor of 0.003 lb VOC/mmBtu* by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr).

* established based upon emission data from the initial compliance demonstration conducted for emissions unit P005 on May 10, 1995.

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

i. Emission Limitation

VOC emissions from this emissions unit shall not exceed 15.0 TPY.

Applicable Compliance Method

Compliance with the annual allowable VOC emission limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the 0.003 lb VOC/mmBtu emission factor by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the 0.004 lb VOC/mmBtu emission factor by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- iii. Add i + ii.

j. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 0.0006 lb/MMBtu during natural gas combustion and 0.055 lb/MMBtu during number two fuel oil combustion.

Applicable Compliance Method

When firing natural gas, compliance with the allowable SO₂ emission limitation above 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 method, 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 3.1-2a (4/00).

When firing number two fuel oil, compliance with the allowable SO₂ emission limitation above shall be based upon the fuel analysis and the record keeping requirements specified in Sections A.III.1, A.III.7 and A.III.8, and the use of the equations specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate with the allowable SO₂ emission limitations above through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

k. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable SO₂ emission limitation above shall be based upon the record keeping requirements established in Sections A.III.1., A.III.4 and A.III.5 of this permit.

l. Emission Limitation

Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable formaldehyde emission limitation may be determined as follows:

- i. When combusting natural gas, multiply the emission factor of 0.00071 lb formaldehyde/MMBtu (AP-42, Table 3.1-3, revised 4/00) by the annual amount of natural gas burned, in mmcf (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.

- ii. When combusting number two fuel oil, multiply the emission factor of 0.00028 lb formaldehyde/MMBtu (AP-42, Table 3.1-4, revised 4/00) by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from Section A.III.5 for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- iii. Add i + ii.
- m. Emission Limitation
Visible PE shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

1. If continuous SO₂ and NO_x monitoring system is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan for the continuous NO_x and SO₂ monitoring systems 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. If a continuous monitoring system in compliance with 40 CFR 75.19 is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan required pursuant to 40 CFR Part 75.19(e)(5) must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.
3. The requirements of this permit supercede the requirements of PTI 08-04380 issued March 7, 2006 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.

Operations, Property, and/or Equipment - (P007) - 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NOx (DLN) combustor controls, CT-3

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 08-04888

Facility ID: 0857042072

FACILITY NAME Dayton Power and Light Company

FACILITY DESCRIPTION Chapter 31 modificaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option. CITY/TWP Dayton

SIC CODE 4911 SCC CODE 2-01-002-01 EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1

DATE INSTALLED 6/95

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
PM ₁₀	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
Sulfur Dioxide	Attainment			NG: 0.0006 lb/mmBtu; Oil: 0.055 lb/mmBtu	30.86
Organic Compounds	Attainment			10 lbs/hr	15.0
Nitrogen Oxides	Attainment			NG: 113 lbs/hr, 25 ppmvd at 15% O ₂ and full load; Oil: 195 lbs/hr, 42 ppmvd at 15% O ₂ & full load	132
Carbon Monoxide	Attainment			2000 lbs/hr; NG: 1700 lbs/hr; Oil: 350 lbs/hr	160.8
Lead					
Other: Air Toxics	Formaldehyde				4.20

APPLICABLE FEDERAL RULES:

NSPS? **Subpart GG**

NESHAP? N/A

PSD? N/A

OFFSET POLICY? N/A

NEW SOURCE REVIEW FORM B

PTI Number: 08-04888

Facility ID: 0857042072

FACILITY NAME Dayton Power and Light Company

FACILITY DESCRIPTION Chapter 31 modificaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option. CITY/TWP Dayton

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the applicable regulations and specified allowable emission limitations thru the use of natural gas as the primary fuel with fuel oil as backup; water injection on P005-P007; dry low NOx burner on P007; m/rk/rp

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS: N/A

NEW SOURCE REVIEW FORM B

PTI Number: 08-04888

Facility ID: 0857042072

FACILITY NAME Dayton Power and Light Company

FACILITY DESCRIPTION Chapter 31 modificaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option. CITY/TWP Dayton

SIC CODE 4911 SCC CODE 2-01-002-01 EMISSIONS UNIT ID P006

EMISSIONS UNIT DESCRIPTION 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2

DATE INSTALLED 6/97

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
PM ₁₀	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
Sulfur Dioxide	Attainment			NG: 0.0006 lb/mmBtu; Oil: 0.055 lb/mmBtu	30.86
Organic Compounds	Attainment			10 lbs/hr	15.0
Nitrogen Oxides	Attainment			NG: 113 lbs/hr, 25 ppmvd at 15% O ₂ and full load; Oil: 195 lbs/hr, 42 ppmvd at 15% O ₂ & full load	132
Carbon Monoxide	Attainment			2000 lbs/hr; NG: 1700 lbs/hr; Oil: 350 lbs/hr	160.8
Lead					
Other: Air Toxics	Formaldehyde				4.20

APPLICABLE FEDERAL RULES:

NSPS? Subpart GG

NESHAP? N/A

PSD? N/A

OFFSET POLICY? N/A

NEW SOURCE REVIEW FORM B

PTI Number: 08-04888

Facility ID: 0857042072

FACILITY NAME Dayton Power and Light Company

FACILITY DESCRIPTION Chapter 31 modificaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option. CITY/TWP Dayton

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Compliance with the applicable regulations and specified allowable emission limitations thru the use of natural gas as the primary fuel with fuel oil as backup; water injection on P005-P007; dry low NOx burner on P007; m/rk/rp

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X NO

IDENTIFY THE AIR CONTAMINANTS: N/A

NEW SOURCE REVIEW FORM B

PTI Number: 08-04888

Facility ID: 0857042072

FACILITY NAME Dayton Power and Light Company

FACILITY DESCRIPTION Chapter 31 modificaton replacing PTI 08-04380 issued 3/7/06 to add low mass emitter methodology as a compliance option. CITY/TWP Dayton

SIC CODE 4911 SCC CODE 2-01-002-01 EMISSIONS UNIT ID P007

EMISSIONS UNIT DESCRIPTION 80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NOx (DLN) combustor controls, CT-3

DATE INSTALLED 11/98

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
PM ₁₀	Non-attainment			NG: 8 lbs/hr, 0.0072 lb/mmBtu; Oil: 15.0 lbs/hr, 0.013 lb/mmBtu	15.5
Sulfur Dioxide	Attainment			NG: 0.0006 lb/mmBtu; Oil: 0.055 lb/mmBtu	30.86
Organic Compounds	Attainment			10 lbs/hr	15.0
Nitrogen Oxides	Attainment			NG: 62 lbs/hr, 15 ppmvd at 15% O ₂ and full load; Oil: 195 lbs/hr, 42 ppmvd at 15% O ₂ & full load	110
Carbon Monoxide	Attainment			NG: 301 lbs/hr at all loads excl SU/SD, 413 lbs/hr at SU/SD; Oil: 800 lbs/hr	160.8
Lead					
Other: Air Toxics	Formaldehyde				4.20

APPLICABLE FEDERAL RULES:

NSPS? **Subpart GG**

NESHAP? N/A

PSD? N/A

OFFSET POLICY? N/A

