State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
MONTGOMERY COUNTY

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

Application No: 08-04380

DATE: 10/1/2002

Dayton Power and Light Company
Robert Keller
9200 Chautauqua Rd
Miamisburg, OH 453424103

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 by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,
Michael W. Ahern
Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **RAPCA**

FINAL PERMIT TO INSTALL 08-04380

Application Number:	08-04380
APS Premise Number:	0857042072
Permit Fee:	**$1000**
Name of Facility:	Dayton Power and Light Company
Person to Contact:	Robert Keller
Address:	9200 Chautauqua Rd Miamisburg, OH 453424103

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

Description of proposed emissions unit(s):
Modification of B001,B002,B003,power generating turbines; chapter 31 replacing 08-02507 issued 7-15-94; adm mod issued 12-20-95; adm mod issued in draft 3-15-01.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Record keeping 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 record keeping 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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping 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 quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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. 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.

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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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 this Permit To Install.

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 of 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, the State, and citizens 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 To Install 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 thirty (30) 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.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Record keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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. Termination of Permit To Install

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

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

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

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
Particulate	46.5
Sulfur Dioxide	92.58
Carbon Monoxide	160.8
Nitrogen Oxide	374
Organic Compounds	45

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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	Applicable Rules/Requirements
B001 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1; *Modification	OAC rule 3745-31-05 (A)(3)
	40 CFR Part 75
	OAC rule rules 3745-31-10 through 3745-31-20
	OAC rule 3745-17-07 (A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) OAC rule 3745-23-06 40 CFR Part 60 Subpart GG OAC rule 3745-16-02

Applicable Emissions Limitations/Control Measures	
SO_2: 0.00057 lb/mmBtu during natural gas combustion, 0.055 lb/MMBTU during fuel oil combustion; 30.86 TPY	365-day limitation
VOC: 10.0 lbs/hr, 15.0 TPY	Visible particulate emissions shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.
PM/PM_{10}: 8 lbs/hr, 0.0072 lb/MMBTU during natural gas combustion; 15.0 lbs/hr, 0.013 lb/MMBTU during fuel oil combustion; 15.5 TPY	See A.I.2.d.
NO_X: 113 lbs/hr, 25 ppmvd at 15% oxygen during natural gas combustion, 195 lbs/hr and 42 ppmvd at 15% oxygen during fuel oil combustion; 132 TPY, as a rolling, 365-day limitation	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52, Sections 52.21.
CO: 2000 lbs/hr maximum 1 hour limit (1700 lbs/hr during natural gas combustion or 350 lbs/hr during fuel oil combustion, based on a 30 day average); 160.8 TPY maximum, as a rolling 365-day limit, with the total combined CO emissions for B001, B002, and B003 not to exceed 160.8 TPY, as a rolling	See Part I, term A.4. SO_2 emissions shall not exceed 30.86 tons per rolling, 12-month period The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Sections 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 52.21, the permittee shall use water injection to reduce nitrogen oxide emissions to 25 ppmvd at 15% oxygen, at peak load, when burning natural gas, and 42 ppmvd at 15% oxygen, at peak load, when burning number two fuel oil.

2.b In accordance with OAC rule rules 3745-31-10 through 3745-31-20, the permittee shall use natural gas as the primary fuel and No.2 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 synchronization.

2.d The minimum stack height for this emissions unit shall be at least 88 feet above the ground.

II. Operational Restrictions

1. The sulfur content of the No. 2 fuel oil fired in this emissions unit shall not exceed 0.05% sulfur, 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 maximum number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 365-day period.

4. The maximum natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 365-day 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, 365-day period.

6. Start-up shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.

7. The permittee shall combust only natural gas and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Sulfur Dioxide:

The permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit, in units of the applicable standard(s), when combusting number two fuel oil. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: emissions of sulfur dioxide in lb/mmBtu actual heat input on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. Nitrogen Oxides:

The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in ppmvd at 15% oxygen, lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Carbon Monoxide:

The permittee shall operate and maintain equipment to continuously monitor and record carbon monoxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous carbon monoxide monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous carbon monoxide monitoring system: emissions of carbon monoxide in lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4. The permittee shall maintain daily records of the total actual heat input values, in lb(s)/mmBtu

corrected to ISO standard day conditions. The total actual heat input values shall be determined through the appropriate F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19. The emissions unit load shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer of the emissions unit.

5. The permittee shall maintain daily records of the following information:

a. The amount of number two fuel oil burned, in gallons;

b. The rolling, 365-day summation of the number two fuel oil usage, in gallons;

c. The amount of natural gas burned, in cubic feet;

d. The rolling, 365-day summation of the natural gas usage, in cubic feet;

e. The rolling, 365-day summation of the nitrogen oxides emissions, in tons;

f. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for this emissions unit;

g. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for emissions units B001, B002, and B003;

h. The rolling, 365-day summation of sulfur dioxide emissions, in tons;

i. The number of hours the emissions unit is in operation when combusting natural gas; and

j. The number of hours the emissions unit is in operation when combusting number two fuel oil.

6. The permittee shall maintain monthly records of the following information:

a. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting natural gas;

b. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting number two fuel oil; and

c. The duration of all start-up and shutdown periods.

7. When the emissions unit is combusting natural gas or number two fuel oil and the nitrogen oxides continuous monitoring system is not operational, the permittee shall continuously monitor and record the fuel consumption and the ratio of water to fuel being combusted.

8. In accordance with Subpart GG, Section 60.334(b), the permittee shall monitor the sulfur content of the fuel being fired in the turbine. The frequency of determination of this value shall be as follows:

a. If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

b. If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. The permittee may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used to comply with paragraph (b) of Section 60.334.

9. 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.

10. The permittee shall determine fuel sulfur content in accordance with the requirements of Subpart GG, Section 60.335(d) and (e).

If a waiver of the fuel sulfur monitoring requirement for the pipeline natural gas is granted by USEPA, then those related requirements of the permit shall be considered to be waived as well.

11. For each day during which the permittee combusts a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. Nitrogen Oxides:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average nitrogen oxides values in excess of the applicable nitrogen oxides emission limitations (lbs/hr and ppmvd at 15% oxygen).

The reports shall also document any continuous nitrogen oxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective

action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total nitrogen oxides emissions for the calendar quarter (in tons).

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

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. Sulfur Dioxide:

The permittee shall submit reports (hardcopy or electronic format) 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 sulfur dioxide values in excess of the applicable sulfur dioxide emission limitation (lb/mmBtu).

The reports shall also document any continuous sulfur dioxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total sulfur dioxide emissions for the calendar quarter (in tons).

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

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. Carbon Monoxide:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average carbon monoxide values in excess of the applicable carbon monoxide emission limitation (lbs/hr).

The reports shall also document any continuous carbon monoxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total carbon monoxide emissions for the calendar quarter (in tons).

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

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 notify the Director (the Regional Air Pollution Control Agency) in writing of any record which shows a deviation of:

a. The rolling, 365-day usage limitation for number two fuel oil;

b. The rolling, 365-day usage limitation for natural gas;

c. The rolling, 365-day tons per year nitrogen oxides emission limitation;

d. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting natural gas;

e. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting number two fuel oil;

f. The rolling, 365-day carbon monoxide emission limitation for this emissions unit;

g. The rolling, 365-day carbon monoxide emission limitation for emissions units B001, B002, and B003;

h. The maximum sulfur content of the number two fuel oil and/or natural gas; and

i. The allowable duration for all start-up and shutdown periods.

The notification shall include a copy of such a record and shall be sent to the Director (the Regional Air Pollution Control Agency) within 45 days after the deviation occurs.

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-
When combusting natural gas, PM/PM_{10} emissions shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu.

When combusting number two fuel oil, PM/PM_{10} emissions shall not exceed 15.0 lbs/hr and 0.013 lb/mmBtu.

Applicable Compliance Method-
When combusting natural gas, compliance with the emission limitations specified above will be assumed due to the negligible amount of particulates generated during the combustion of natural gas.

When combusting number two fuel oil, compliance with the emission limitations specified above shall be based upon an emission factor of 0.0062 lb/mmBtu multiplied by the emissions unit's rated capacity (1115 mmBtu/hr). This emission factor was established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with these mass emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation-
Total PM/PM_{10} emissions shall not exceed 15.5 tons/yr.

Applicable Compliance Method-
Compliance with this limitation shall be determined through a summation of particulate emissions from the combustion of number two fuel oil and natural gas.

When the emissions unit is combusting number two fuel oil, the particulate emissions shall be determined using the lbs/hr value from Section A.V.1.a. multiplied by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

When the emissions unit is combusting natural gas, the particulate emissions shall be determined by multiplying the manufacturer's emission factor of 0.0072 lb/mmBtu by the rated capacity of the emissions unit (1115 mmBtu/hr) and then multiplying the resulting lbs/hr value by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

c. Emission Limitations-
When combusting natural gas, nitrogen oxides emissions shall not exceed 113 lbs/hr.
When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 195 lbs/hr.

Applicable Compliance Method-
Compliance with the lbs/hr emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitations-
When combusting natural gas, nitrogen oxides emissions shall not exceed 25 ppmvd at 15% oxygen.

When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 42 ppmvd at 15% oxygen.

Applicable Compliance Method-
Compliance with the ppm emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

e. Emission Limitation-
Total nitrogen oxides emissions shall not exceed 132 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.2. and A.III.5.

f. Emission Limitation-
Carbon monoxide emissions shall not exceed 2000 lbs/hr (maximum 1-hour limitation).

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Section A.III.3. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitations-
When combusting natural gas, carbon monoxide emissions shall not exceed 1700 lbs/hr, based on a 30-day average.

When combusting number two fuel oil, carbon monoxide emissions shall not exceed 350 lbs/hr, based on a 30-day average.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.6.

h. Emission Limitation-
Carbon monoxide emissions shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

i. Emission Limitation-
Carbon monoxide emissions from emissions units B001, B002, and B003 combined shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

j. Emission Limitation-
Volatile organic compound emissions shall not exceed 10.0 lbs/hr.

Applicable Compliance Method-
Compliance with this emission limitation shall be determined using the following emission factors and the records required pursuant to Sections A.III.4. and A.III.5. 0.004 lb/mmBtu when the emissions unit is combusting natural gas and 0.003 lb/mmBtu when the emissions unit is combusting number two fuel oil. These emission factors were established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

k. Emission Limitation-
Volatile organic compound emissions shall not exceed 15.0 tons/yr.

Applicable Compliance Method-
Compliance with this limitation shall be determined through a summation of volatile organic compound emissions from the combustion of number two fuel oil and natural gas.

The volatile organic compound emissions shall be determined using the average lbs/hr values from Section A.V.1.j multiplied by the annual hours of operation (summation of the daily values from Section A.III.5) and dividing by 2000 lbs/ton.

l. Emission Limitation-
0.00057 lb SO_2/mmBtu actual heat input, while burning natural gas
0.055 lb SO_2/mmBtu actual heat input, while burning No. 2 fuel oil

Applicable Compliance Method -
When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content, in accordance with the appropriate ASTM method (such as, ASTM method D3031), 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 shall be based upon the fuel analysis and record keeping requirements specified in A.II.1. and A.III.8. and the use of the equations specified in OAC rule 3745-18-04(F). When combusting number two fuel oil, sulfur dioxide emissions shall not exceed 0.055 lb/mmBtu.

If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A,

Methods 1 through 4 and 6C.

m. Emission Limitation-
30.86 TPY SO_2

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.1, A.III.4, and A.III.5.

n. Emission Limitation-
Visible particulate emissions shall not exceed 10% opacity as a 6-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 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides and sulfur dioxide 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. *This permit will supercede PTI 08-02507 issued on July 15, 1994 and subsequently modified on December 20, 1995 and January 15, 1998. This modification represents an increase in the allowable percent sulfur content of the number two fuel oil from 0.02% to 0.05%. The modification results in an increase of 18.46 TPY SO_2 for each emissions unit B001- B003, which will result in a total increase for all three units of 55.38 TPY SO_2 (3 x 18.46 TPY). Therefore, since the increase is greater than 40 TPY SO_2, the major modification threshold, this is a major modification, subject to OAC rules 3745-31-10 through 3745-31-20 permitting requirements.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B001 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: **B002**

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	Applicable Rules/Requirements	
B002 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2; *Modification	OAC rule 3745-31-05 (A)(3)	
		40 CFR Part 75
		OAC rule rules 3745-31-10 through 3745-31-20.
		OAC rule 3745-17-07 (A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) OAC rule 3745-23-06 40 CFR Part 60 Subpart GG OAC rule 3745-16-02

Applicable Emissions Limitations/Control Measures	
SO_2: 0.00057 lb/mmBtu during natural gas combustion, 0.055 lb/MMBTU during fuel oil combustion; 30.86 TPY	365-day limitation.
VOC: 10.0 lbs/hr, 15.0 TPY	Visible particulate emissions shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.
PM/PM_{10}: 8 lbs/hr, 0.0072 lb/MMBTU during natural gas combustion; 15.0 lbs/hr, 0.013 lb/MMBTU during fuel oil combustion; 15.5 TPY	See A.I.2.d.
NO_X: 113 lbs/hr, 25 ppmvd at 15% oxygen during natural gas combustion, 195 lbs/hr and 42 ppmvd at 15% oxygen during fuel oil combustion; 132 TPY,as a rolling 365-day limitation.	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20 and 40 CR Part 52, Sections 52.21.
CO: 2000 lbs/hr maximum 1 hour limit (1700 lbs/hr during natural gas combustion or 350 lbs/hr during fuel oil combustion, based on a 30 day average); 160.8 TPY maximum, as a rolling 365-day limit, with the total combined CO emissions for B001, B002, and B003 not to exceed 160.8 TPY, as a rolling	See Part I, term A.4. SO_2 emissions shall not exceed 30.86 tons per rolling, 12-month period. The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Sections 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 52.21, the permittee shall use water injection to reduce nitrogen oxide emissions to 25 ppmvd at 15% oxygen, at peak load, when burning natural gas, and 42 ppmvd at 15% oxygen, at peak load, when burning number two fuel oil.

2.b In accordance with 3745-31-10 through 3745-31-20 , the permittee shall use natural gas as the primary fuel and No.2 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 synchronization.

2.d The minimum stack height for this emissions unit shall be at least 88 feet above the ground.

II. Operational Restrictions

1. The sulfur content of the No. 2 fuel oil fired in this emissions unit shall not exceed 0.05% sulfur, 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 maximum number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 365-day period.

4. The maximum natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 365-day 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, 365-day period.

6. Start-up shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30 minutes.

7. The permittee shall combust only natural gas and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Sulfur Dioxide:

The permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit, in units of the applicable standard(s), when combusting number two fuel oil. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: emissions of sulfur dioxide in lb/mmBtu actual heat input on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. Nitrogen Oxides:

The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in ppmvd at 15% oxygen, lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Carbon Monoxide:

The permittee shall operate and maintain equipment to continuously monitor and record carbon monoxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous carbon monoxide monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous carbon monoxide monitoring system: emissions of carbon monoxide in lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4. The permittee shall maintain daily records of the total actual heat input values, in lb(s)/mmBtu corrected to ISO standard day conditions. The total actual heat input values shall be determined through the appropriate F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19. The emissions unit load shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer of the emissions unit.

5. The permittee shall maintain daily records of the following information:

a. The amount of number two fuel oil burned, in gallons;

b. The rolling, 365-day summation of the number two fuel oil usage, in gallons;

c. The amount of natural gas burned, in cubic feet;

d. The rolling, 365-day summation of the natural gas usage, in cubic feet;

e. The rolling, 365-day summation of the nitrogen oxides emissions, in tons;

f. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for this emissions unit;

g. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for emissions units B001, B002, and B003;

h. The rolling, 365-day summation of sulfur dioxide emissions, in tons;

i. The number of hours the emissions unit is in operation when combusting natural gas; and

j. The number of hours the emissions unit is in operation when combusting number two fuel oil.

6. The permittee shall maintain monthly records of the following information:

a. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting natural gas;

b. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting number two fuel oil; and

c. The duration of all start-up and shutdown periods.

7. When the emissions unit is combusting natural gas or number two fuel oil and the nitrogen oxides continuous monitoring system is not operational, the permittee shall continuously monitor and record the fuel consumption and the ratio of water to fuel being combusted.

8. In accordance with Subpart GG, Section 60.334(b), the permittee shall monitor the sulfur content of the fuel being fired in the turbine. The frequency of determination of this value shall be as follows:

a. If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

b. If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. The permittee may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used to comply with paragraph (b) of Section 60.334.

9. 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.

10. The permittee shall determine fuel sulfur content in accordance with the requirements of Subpart GG, Section 60.335(d) and (e).

If a waiver of the fuel sulfur monitoring requirement for the pipeline natural gas is granted by USEPA, then those related requirements of the permit shall be considered to be waived as well.

11. For each day during which the permittee combusts a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. Nitrogen Oxides:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average nitrogen oxides values in excess of the applicable nitrogen oxides emission limitations (lbs/hr and ppmvd at 15% oxygen).

The reports shall also document any continuous nitrogen oxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total nitrogen oxides emissions for the calendar quarter (in tons).

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

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. Sulfur Dioxide:

The permittee shall submit reports (hardcopy or electronic format) 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 sulfur dioxide values in excess of the applicable sulfur dioxide emission limitation (lb/mmBtu).

The reports shall also document any continuous sulfur dioxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total sulfur dioxide emissions for the calendar quarter (in tons).

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

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. Carbon Monoxide:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average carbon monoxide values in excess of the applicable carbon monoxide emission limitation (lbs/hr).

The reports shall also document any continuous carbon monoxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be

included in the quarterly report. These reports shall also contain the total carbon monoxide emissions for the calendar quarter (in tons).

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

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 notify the Director (the Regional Air Pollution Control Agency) in writing of any record which shows a deviation of:

a. The rolling, 365-day usage limitation for number two fuel oil;

b. The rolling, 365-day usage limitation for natural gas;

c. The rolling, 365-day tons per year nitrogen oxides emission limitation;

d. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting natural gas;

e. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting number two fuel oil;

f. The rolling, 365-day carbon monoxide emission limitation for this emissions unit;

g. The rolling, 365-day carbon monoxide emission limitation for emissions units B001, B002, and B003;

h. The maximum sulfur content of the number two fuel oil and/or natural gas; and

i. The allowable duration for all start-up and shutdown periods.

The notification shall include a copy of such a record and shall be sent to the Director (the Regional Air Pollution Control Agency) within 45 days after the deviation occurs.

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-
When combusting natural gas, PM/PM_{10} emissions shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu.

When combusting number two fuel oil, PM/PM_{10} emissions shall not exceed 15.0 lbs/hr and 0.013 lb/mmBtu.

Applicable Compliance Method-
When combusting natural gas, compliance with the emission limitations specified above will be assumed due to the negligible amount of particulates generated during the combustion of natural gas.

When combusting number two fuel oil, compliance with the emission limitations specified above shall be based upon an emission factor of 0.0062 lb/mmBtu multiplied by the emissions unit's rated capacity (1115 mmBtu/hr). This emission factor was established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with these mass emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation-
Total PM/PM_{10} emissions shall not exceed 15.5 tons/yr.

Applicable Compliance Method-
Compliance with this limitation shall be determined through a summation of particulate emissions from the combustion of number two fuel oil and natural gas.

When the emissions unit is combusting number two fuel oil, the particulate emissions shall be determined using the lbs/hr value from Section A.V.1.a. multiplied by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

When the emissions unit is combusting natural gas, the particulate emissions shall be determined by multiplying the manufacturer's emission factor of 0.0072 lb/mmBtu by the rated capacity of the emissions unit (1115 mmBtu/hr) and then multiplying the resulting lbs/hr value by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

c. Emission Limitations-

When combusting natural gas, nitrogen oxides emissions shall not exceed 113 lbs/hr. When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 195 lbs/hr.

Applicable Compliance Method-
Compliance with the lbs/hr emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitations-
When combusting natural gas, nitrogen oxides emissions shall not exceed 25 ppmvd at 15% oxygen.

When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 42 ppmvd at 15% oxygen.

Applicable Compliance Method-
Compliance with the ppm emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

e. Emission Limitation-
Total nitrogen oxides emissions shall not exceed 132 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.2. and A.III.5.

f. Emission Limitation-
Carbon monoxide emissions shall not exceed 2000 lbs/hr (maximum 1-hour limitation).

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Section A.III.3. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitations-
When combusting natural gas, carbon monoxide emissions shall not exceed 1700 lbs/hr, based on a 30-day average.

When combusting number two fuel oil, carbon monoxide emissions shall not exceed 350 lbs/hr, based on a 30-day average.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.6.

h. Emission Limitation-
Carbon monoxide emissions shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

i. Emission Limitation-
Carbon monoxide emissions from emissions units B001, B002, and B003 combined shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

j. Emission Limitation-
Volatile organic compound emissions shall not exceed 10.0 lbs/hr.

Applicable Compliance Method-
Compliance with this emission limitation shall be determined using the following emission factors and the records required pursuant to Sections A.III.4. and A.III.5. 0.004 lb/mmBtu when the emissions unit is combusting natural gas and 0.003 lb/mmBtu when the emissions unit is combusting number two fuel oil. These emission factors were established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

k. Emission Limitation-
Volatile organic compound emissions shall not exceed 15.0 tons/yr.

Applicable Compliance Method-

Compliance with this limitation shall be determined through a summation of volatile organic compound emissions from the combustion of number two fuel oil and natural gas.

The volatile organic compound emissions shall be determined using the average lbs/hr values from Section A.V.1.j multiplied by the annual hours of operation (summation of the daily values from Section A.III.5) and dividing by 2000 lbs/ton.

l. Emission Limitation-
0.00057 lb SO_2/mmBtu actual heat input, while burning natural gas
0.055 lb SO_2/mmBtu actual heat input, while burning No. 2 fuel oil

Applicable Compliance Method
When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content, in accordance with the appropriate ASTM method (such as, ASTM method D3031), 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 shall be based upon the fuel analysis and record keeping requirements specified in A.II.1. and A.III.8. and the use of the equations specified in OAC rule 3745-18-04(F). When combusting number two fuel oil, sulfur dioxide emissions shall not exceed 0.055 lb/mmBtu.

If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

m. Emission Limitation-
30.86 TPY SO_2

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.1, A.III.4, and A.III.5.

n. Emission Limitation-
Visible particulate emissions shall not exceed 10% opacity as a 6-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 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides and sulfur dioxide 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. *This permit will supercede PTI 08-02507 issued on July 15, 1994 and subsequently modified on December 20, 1995 and January 15, 1998. This modification represents an increase in the allowable percent sulfur content of the number two fuel oil from 0.02% to 0.05%. The modification results in an increase of 18.46 TPY SO_2 for each emissions unit B001- B003, which will result in a total increase for all three units of 55.38 TPY SO_2 (3 x 18.46 TPY). Therefore, since the increase is greater than 40 TPY SO_2, the major modification threshold, this is a major modification, subject to OAC rules3745-31-10 through 3745-31-20 permitting requirements.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B002 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping 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	Applicable Rules/Requirements	
B003 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NO_x (DLN) combustor controls, CT-3; *Modification	OAC rule 3745-31-05 (A)(3)	
		40 CFR Part 75
		OAC rules 3745-31-10 through 3745-31-20.
		OAC rule 3745-17-07 (A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) OAC rule 3745-23-06 40 CFR Part 60 Subpart GG OAC rule 3745-16-02

Applicable Emissions Limitations/Control Measures	
	periods.
	See A.I.2.d.
SO_2: 0.00057 lb/mmBtu during natural gas combustion, 0.055 lb/MMBTU during fuel oil combustion; 30.86 TPY	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52, Sections 52.21.
VOC: 10.0 lbs/hr, 15.0 TPY	See Part I, term A.4.
PM/PM_{10}: 8 lbs/hr, 0.0072 lb/MMBTU during natural gas combustion; 15.0 lbs/hr, 0.013 lb/MMBTU during fuel oil combustion; 15.5 TPY	SO_2 emissions shall not exceed 30.86 tons per year per rolling, 12-month period
NO_X: 62 lbs/hr, 15 ppmvd at 15% oxygen during natural gas combustion, 195 lbs/hr and 42 ppmvd at 15% oxygen during fuel oil combustion; 110 TPY, as a rolling 365-day limitation.	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Sections 52.21 and OAC rules 3745-31-05 (A)(3), and 3745-31-10 through 3745-31-20.
CO: 301 lbs/hr during natural gas combustion, 800 lbs/hr during fuel oil combustion; 160.8 TPY maximum, as a rolling 365-day limit, with the total combined CO emissions for B001, B002, and B003 not to exceed 160.8 TPY, as a rolling 365-day limitation.	
Visible particulate emissions shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown	

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 52.21, the permittee shall use water injection and dry low NO_x (DLN) combustion technology to reduce nitrogen oxide emissions to 15 ppmvd at 15% oxygen, at peak load, when burning natural gas, and 42 ppmvd at 15% oxygen, at peak load, when burning number two fuel oil.

2.b In accordance with 40 CFR Part 52.21 OAC rules 3745-31-10 through 3745-31-20, the permittee shall use natural gas as the primary fuel and No.2 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 synchronization.

2.d The minimum stack height for this emissions unit shall be at least 88 feet above the ground.

II. Operational Restrictions

1. The sulfur content of the No. 2 fuel oil fired in this emissions unit shall not exceed 0.05% sulfur, 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 maximum number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 365-day period.

4. The maximum natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 365-day 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, 365-day period.

6. Start-up shall not exceed a maximum of 30 minutes. Shutdown periods shall not exceed 30

minutes.

7. The permittee shall combust only natural gas and/or number two fuel oil in this emissions unit.

III. Monitoring and/or Record keeping Requirements

1. Sulfur Dioxide:

The permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit, in units of the applicable standard(s), when combusting number two fuel oil. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: emissions of sulfur dioxide in lb/mmBtu actual heat input on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. Nitrogen Oxides:

The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in ppmvd at 15% oxygen, lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual

calibration adjustments.

3. Carbon Monoxide:

The permittee shall operate and maintain equipment to continuously monitor and record carbon monoxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous carbon monoxide monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous carbon monoxide monitoring system: emissions of carbon monoxide in lbs/hr on an hourly average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4. The permittee shall maintain daily records of the total actual heat input values, in lb(s)/mmBtu corrected to ISO standard day conditions. The total actual heat input values shall be determined through the appropriate F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19. The emissions unit load shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer of the emissions unit.

5. The permittee shall maintain daily records of the following information:

a. The amount of number two fuel oil burned, in gallons;

b. The rolling, 365-day summation of the number two fuel oil usage, in gallons;

c. The amount of natural gas burned, in cubic feet;

d. The rolling, 365-day summation of the natural gas usage, in cubic feet;

e. The rolling, 365-day summation of the nitrogen oxides emissions, in tons;

f. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for

this emissions unit;

g. The rolling, 365-day summation of the carbon monoxide emissions, in pounds or tons for emissions units B001, B002, and B003;

h. The rolling, 365-day summation of sulfur dioxide emissions, in tons;

i. The number of hours the emissions unit is in operation when combusting natural gas; and

j. The number of hours the emissions unit is in operation when combusting number two fuel oil.

6. The permittee shall maintain monthly records of the following information:

a. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting natural gas;

b. The 30-day average, hourly carbon monoxide emission rate when the emissions unit is combusting number two fuel oil; and

c. The duration of all start-up and shutdown periods.

7. When the emissions unit is combusting natural gas or number two fuel oil and the nitrogen oxides continuous monitoring system is not operational, the permittee shall continuously monitor and record the fuel consumption and the ratio of water to fuel being combusted.

8. In accordance with Subpart GG, Section 60.334(b), the permittee shall monitor the sulfur content of the fuel being fired in the turbine. The frequency of determination of this value shall be as follows:

a. If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

b. If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. The permittee may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used to comply with paragraph (b) of Section 60.334.

9. 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.

10. The permittee shall determine fuel sulfur content in accordance with the requirements of Subpart GG, Section 60.335(d) and (e).

If a waiver of the fuel sulfur monitoring requirement for the pipeline natural gas is granted by USEPA, then those related requirements of the permit shall be considered to be waived as well.

11. For each day during which the permittee combusts a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. Nitrogen Oxides:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average nitrogen oxides values in excess of the applicable nitrogen oxides emission limitations (lbs/hr and ppmvd at 15% oxygen).

The reports shall also document any continuous nitrogen oxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total nitrogen oxides emissions for the calendar quarter (in tons).

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

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. Sulfur Dioxide:

The permittee shall submit reports (hardcopy or electronic format) 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 sulfur dioxide values in excess of the applicable sulfur dioxide emission limitation (lb/mmBtu).

The reports shall also document any continuous sulfur dioxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total sulfur dioxide emissions for the calendar quarter (in tons).

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

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. Carbon Monoxide:

The permittee shall submit reports (hardcopy or electronic format) 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 1-hour average carbon monoxide values in excess of the applicable carbon monoxide emission limitation (lbs/hr).

The reports shall also document any continuous carbon monoxide monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These reports shall also contain the total carbon monoxide emissions for the calendar quarter (in tons).

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

to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These reports shall also contain the total carbon monoxide emissions for the calendar quarter (in tons).

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 notify the Director (the Regional Air Pollution Control Agency) in writing of any record which shows a deviation of:

a. The rolling, 365-day usage limitation for number two fuel oil;

b. The rolling, 365-day usage limitation for natural gas;

c. The rolling, 365-day tons per year nitrogen oxides emission limitation;

d. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting natural gas;

e. The 30-day average, hourly carbon monoxide emission limitation when the emissions unit was combusting number two fuel oil;

f. The rolling, 365-day carbon monoxide emission limitation for this emissions unit;

g. The rolling, 365-day carbon monoxide emission limitation for emissions units B001, B002, and B003;

h. The maximum sulfur content of the number two fuel oil and/or natural gas; and

i. The allowable duration for all start-up and shutdown periods.

The notification shall include a copy of such a record and shall be sent to the Director (the Regional Air Pollution Control Agency) within 45 days after the deviation occurs.

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-
When combusting natural gas, PM/PM_{10} emissions shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu.

When combusting number two fuel oil, PM/PM_{10} emissions shall not exceed 15.0 lbs/hr and 0.013 lb/mmBtu.

Applicable Compliance Method-
When combusting natural gas, compliance with the emission limitations specified above will be assumed due to the negligible amount of particulates generated during the combustion of natural gas.

When combusting number two fuel oil, compliance with the emission limitations specified above shall be based upon an emission factor of 0.0062 lb/mmBtu multiplied by the emissions unit's rated capacity (1115 mmBtu/hr). This emission factor was established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with these mass emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

b. Emission Limitation-
Total PM/PM_{10} emissions shall not exceed 15.5 tons/yr.

Applicable Compliance Method-
Compliance with this limitation shall be determined through a summation of particulate emissions from the combustion of number two fuel oil and natural gas.

When the emissions unit is combusting number two fuel oil, the particulate emissions shall be determined using the lbs/hr value from Section A.V.1.a. multiplied by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

When the emissions unit is combusting natural gas, the particulate emissions shall be determined by multiplying the manufacturer's emission factor of 0.0072 lb/mmBtu by the rated capacity of the emissions unit (1115 mmBtu/hr) and then multiplying the resulting lbs/hr value by the annual hours of operation (summation of the daily values from Section A.III.5.) and dividing by 2000 lbs/ton.

c. Emission Limitations-
When combusting natural gas, nitrogen oxides emissions shall not exceed 62 lbs/hr.
When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 195 lbs/hr.

Applicable Compliance Method-
Compliance with the lbs/hr emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

d. Emission Limitations-
When combusting natural gas, nitrogen oxides emissions shall not exceed 15 ppmvd at 15% oxygen.

When combusting number two fuel oil, nitrogen oxides emissions shall not exceed 42 ppmvd at 15% oxygen.

Applicable Compliance Method-
Compliance with the ppm emission limitations shall be based on NO_x CEMs data. If stack testing is required, to determine compliance with the NO_x lb/hr allowable emission rate, then the test method to be used shall be 40 CFR Part 60, Appendix A, Reference Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

e. Emission Limitation-
Total nitrogen oxides emissions shall not exceed 110 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.2. and A.III.5.

f. Emission Limitations-
When combusting natural gas, carbon monoxide emissions shall not exceed 301 lbs/hr
When combusting number two fuel oil, carbon monoxide emissions shall not exceed 800 lbs/hr.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.6. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

g. Emission Limitation-
Carbon monoxide emissions shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

h. Emission Limitation-
Carbon monoxide emissions from emissions units B001, B002, and B003 combined shall not exceed 160.8 tons/yr, as a rolling, 365-day limitation.

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.3. and A.III.5.

i. Emission Limitation-
Volatile organic compound emissions shall not exceed 10.0 lbs/hr.

Applicable Compliance Method-
Compliance with this emission limitation shall be determined using the following emission factors and the records required pursuant to Sections A.III.4. and A.III.5. 0.004 lb/mmBtu when the emissions unit is combusting natural gas and 0.003 lb/mmBtu when the emissions unit is combusting number two fuel oil. These emission factors were established based upon emission data from the initial compliance demonstration conducted for this emissions unit on May 10, 1995. If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

j. Emission Limitation-
Volatile organic compound emissions shall not exceed 15.0 tons/yr.

Applicable Compliance Method-
Compliance with this limitation shall be determined through a summation of volatile organic compound emissions from the combustion of number two fuel oil and natural gas.

The volatile organic compound emissions shall be determined using the average lbs/hr values from Section A.V.1.j multiplied by the annual hours of operation (summation of the daily values from Section A.III.5) and dividing by 2000 lbs/ton.

k. Emission Limitation-
0.00057 lb SO_2/mmBtu actual heat input, while burning natural gas
0.055 lb SO_2/mmBtu actual heat input, while burning No. 2 fuel oil

Applicable Compliance Method -
When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel. If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content, in accordance with the appropriate ASTM method (such as, ASTM method D3031), 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 shall be based upon the fuel analysis and record keeping requirements specified in A.II.1. and A.III.8. and the use of the equations specified in OAC rule 3745-18-04(F). When combusting number two fuel oil, sulfur dioxide emissions shall not exceed 0.055 lb/mmBtu.

If required, the permittee shall demonstrate compliance with this mass emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

l. Emission Limitation-
30.86 TPY SO_2

Applicable Compliance Method-
Compliance shall be based upon the records required pursuant to Sections A.III.1, A.III.4, and A.III.5.

m. Emission Limitation-
Visible particulate emissions shall not exceed 10% opacity as a 6-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 40 CFR Part 60, Appendix A, Method 9.

VI. Miscellaneous Requirements

1. The quality assurance/quality control plan for the continuous nitrogen oxides and sulfur dioxide 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. *This permit will supercede PTI 08-02507 issued on July 15, 1994 and subsequently modified on December 20, 1995 and January 15, 1998. This modification represents an increase in the allowable percent sulfur content of the number two fuel oil from 0.02% to 0.05%. The modification results in an increase of 18.46 TPY SO_2 for each emissions unit B001- B003, which will result in a total increase for all three units of 55.38 TPY SO_2 (3 x 18.46 TPY). Therefore, since the increase is greater than 40 TPY SO_2, the major modification threshold, this is a major modification, subject to OAC rules 3745-31-10 through 3745-31-20 permitting requirements.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B003 - 80 MW (1115 mmBtu/hr heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NO_x (DLN) combustor controls, CT-3		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None