State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

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

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
DEFIANCE COUNTY
Application No: 03-3247

DATE: December 17, 1999

Toledo Edison , Richland Peaking Station
Robert Williams
76th South Main Street, 13th Floor
Akron, OH 44308

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, buy 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,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA
DAPC, NWDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install Terms and Conditions

Issue Date: December 17, 1999
Effective Date: December 17, 1999

FINAL PERMIT TO INSTALL 03-3247

Application Number:	03-3247
APS Premise Number:	0320010043
Permit Fee:	**$600**
Name of Facility:	Toledo Edison, Richland Peaking Station
Person to Contact:	Robert Williams
Address:	76th South Main Street, 13th Floor Akron, OH 44308

Location of proposed air contaminant source(s) [emissions unit(s)]:
Carpenter Road South US 24
Defiance, **Ohio**

Description of proposed emissions unit(s):
3-1431 MMBTU/HR NATURAL GAS/#2 OIL FIRED COMBUSTION TURBINES.

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 Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted 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.11 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted 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.

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 Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted 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 are inadequate 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 prove to be inadequate 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. 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.

9. 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.

10. 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
$N0_x$	120.0
CO	20.8
VOC	9.2
PE	20.8
$S0_2$	37.9

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. There are three existing 327 mm BTU/hr natural gas/#2 oil fired turbines (B001, B002, and B003) located on an adjacent property under premise number 032010006. These turbines are owned by Toledo Edison and make this one contiguous facility. For the purposes of demonstrating that these turbines have never been subject to PSD, the last ten years of operational data was submitted. The highest year for NOx emissions was 1994 at 14.01 tons which is far below any major source threshold.

The maximum annual fuel usage restrictions for emissions units B001, B002 and B003 shall not exceed 445,000,000 cubic feet of natural gas and 2,080,000 gallons of #2 Oil or Distillate Oil, based upon a rolling, 12-month summation of the fuel usage figures.

The company shall not use a combination of the above fuel usage that exceeds 100.35 tons NOx per rolling 12-month period based on an emission factor of 0.698 lbs/mm BTU for fuel oil and 0.44 lbs/mm BTU for natural gas.

The permittee has existing records in lieu of first year monthly restrictions.

2. Each emissions units B001, B002 and B003 shall be limited to 165.14 lbs of sulfur dioxide (SO_2) /hr and 72.55 tons per year, based upon a rolling, 12-month summation of the monthly emissions for emissions units B001, B002 and B003, combined.

3. Each emissions units B001, B002 and B003 shall be limited to 35.97 lbs carbon monoxide (CO)

/hr, and 25.09 tons per year, based upon a rolling, 12-month summation of the monthly emissions for emissions units B001, B002 and B003, combined.

4. Each emissions units B001, B002 and B003 shall be limited to 7.85 lbs volatile organic compounds (VOC) /hr, and 5.47 tons per year, based upon a rolling, 12-month summation of the monthly emissions for emissions units B001, B002 and B003, combined.

5. Each emissions units B001, B002 and B003 shall be limited to 228.25 lbs nitrogen oxides (NOx) /hr, and 100.35 tons per year, based upon a rolling, 12-month summation of the monthly emissions for emissions units B001, B002 and B003, combined.

6. Each emissions units B001, B002 and B003 shall be limited to 12.43 lbs particulate emissions (PE)/hr, and 5.46 tons per year, based upon a rolling, 12-month summation of the monthly emissions for emissions units B001, B002 and B003, combined.

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

   a. The fuel usage rates for each month.

   b. The cubic feet natural gas fired for each month.

   c. The number gallons of #2 oil or distillate oil fired for each month.

   d. The rolling, 12 month summation of the fuel usage restrictions.

8. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage restrictions. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

9. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 oil or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

10. In the following compliance methods determinations, the hourly limit applies to each individual turbine, and the annual limit applies to the cumulative emissions from all three turbines, B001, B002, and B003:

   <u>Emission Limitation</u>

   165.14 lbs sulfur dioxide (SO_2) /hr, 72.55 tons/rolling 12-month period

Applicable Compliance Method

Compliance with the hourly SO_2 emission rate shall be demonstrated by multiplying the appropriate emission factor times the heat input of the unit. Compliance with the annual limit shall be determined by the recordkeeping requirements in A.7.

Emission Limitation

35.97 lbs carbon monoxide (CO) /hr, 25.09 tons/rolling 12-month period.

Applicable Compliance Method

Compliance with the hourly CO emission rate shall be demonstrated by multiplying the appropriate emission factor times the heat input of the unit. Compliance with the annual limit shall be determined by the recordkeeping requirements in A.7.

Emission Limitation

7.85 lbs volatile organic compounds (VOC) /hr, 5.47 tons/rolling 12-month period

Applicable Compliance Method

Compliance with the hourly VOC emission rate shall be demonstrated by multiplying the appropriate emission factor times the heat input of the unit. Compliance with the annual limit shall be determined by the recordkeeping requirements in A.7.

Emission Limitation

228.25 lbs nitrogen oxides (NOx) /hr, 100.35 tons/rolling 12-month period

Applicable Compliance Method

Compliance with the hourly NOx emission rate shall be demonstrated by multiplying the appropriate emission factor times the heat input of the unit. Compliance with the annual limit shall be determined by the recordkeeping requirements in A.7.

Emission Limitation

12.43 lbs particulate emissions (PE)/hr, 5.46 tons PE/year.

Applicable Compliance Method

Compliance with the hourly PE emission rate shall be demonstrated by multiplying the appropriate emission factor times the heat input of the unit. Compliance with the annual limit shall be determined by the recordkeeping requirements in A.7.

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
130 MW Natural gas-fired simple cycle turbine generator with #2 fuel oil backup; 1,431 MM BTU/hr rate heat input; includes water injection NOx reduction system.	OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-05 (D)

	Applicable Emissions Limitations/Control Measures	
	38.0 lbs particulate emissions (PE)/hr	120.0 TPY NOx as a rolling, 12-month summation combined from P001, P002 and P003.
OAC Rule 3745-18-06 (F)	251.0 lbs nitrogen oxides (NO_x) /hr.	20.8 TPY PM10* as a rolling, 12-month summation combined from P001, P002 and P003.
OAC Rule 3745-17-11 (B)(4)	NO_x emissions shall not exceed 25 ppmvd at 15% Oxygen when firing natural gas.	*for purposes of this permit, all PM10 is considered to be PM.
OAC Rule 3745-17-07	NO_x emissions shall not exceed 42 ppmvd NO_x at 15% Oxygen when firing #2 Oil/Distillate Oil.	4,246,206,300 cubic feet of natural gas based upon a rolling, 12-month summation combined from P001, P002 and P003.
	71.0 lbs sulfur dioxide (SO_2) /hr	
NSPS Subpart GG	15.0 lbs carbon monoxide (CO) /hr	11,064,326 gallons of #2/distillate oil based upon a rolling, 12-month summation combined from P001, P002 and P003.
	17.2 lbs volatile organic compounds (VOC) /hr	
	Visible particulate emissions from any stack shall not exceed 10 percent	0.5 lb SO_2/mmBTU heat input.
OAC Rule 23-06 (B)	opacity as a six-minute average when burning Natural Gas, except as specified	0.04 lb PE/mmBTU heat input.
OAC Rule 3745-21-08 (B)	by rule.	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average when burning #2 fuel oil/distillate oil, except as specified by rule.
40 CFR Part 75	37.9 TPY SO_2 as a rolling 12-month summation combined from P001, P002 and P003.	The NO_x required by this rule is less stringent than the one established as BACT.
	20.8 TPY CO as a rolling, 12-month summation combined from P001, P002 and P003.	150 ppm SO_2 at 15% O_2.
	9.2 TPY VOC as a rolling, 12-month summation combined from P001, P002 and P003.	See 2.a. below.
		See 2.i. below.

See 2.j. below.

See Part I, term A.4.

2. Additional Terms and Conditions

2.a The sulfur content of the #2 Oil/Distillate Oil used in emissions unit P001 shall not exceed 0.05% by weight (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR part 60 subpart GG).

2.b In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from emissions unit P001 in accordance with this permit.

2.c In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install and operate systems to continuously monitor and record emissions of NOx for emissions unit P001 in accordance with this permit.

2.d In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports from emissions unit P001 in accordance with this permit.

2.e In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for emissions unit P001 in accordance with this permit.

2.f Compliance with OAC rule 3745-31-15 shall be demonstrated by the use of natural gas, the use of water injection, hours of operation limits and compliance with 40 CFR Part 60 Subpart GG.

2.g The hourly emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting

requirements to ensure compliance with these limits.

2.h The design electric output of each unit, as measured at the generator terminal, is 130 MW. This value corresponds to a fuel oil flow of 12,207 gallons/hr (per unit). The facility's information management system shall be capable of monitoring and recording electric output (in MW) and fuel oil flow (in gallons) for each unit. This emissions unit shall operate within five percent (5%) of the design electric output and corresponding fuel flow when burning #2 oil/distillate oil except for startup (not to exceed 45 minutes in duration) and shutdown (not to exceed 45 minutes in duration).

2.i This emissions unit shall minimize nitrogen oxide emissions by use of the latest available control techniques and operating practices in accordance with best current technology.

2.j This emissions unit shall minimize carbon monoxide emissions by use of the best available control techniques and operating practices in accordance with best current technology.

2.k To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the NOx emission rates specified in the following table:

Month	Cumulative summation of the NOx emission rate
1	24.0
1-2	48.0
1-3	72.0
1-4	96.0
1-5	120.0
1-6	120.0
1-7	120.0
1-8	120.0

1-9	120.0
1-10	120.0
1-11	120.0
1-12	120.0

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual emission limitation shall be based on a rolling, 12-month summation.

II. Operational Restrictions

1. The maximum annual natural gas usage for emissions units P001, P002 and P003 combined, shall not exceed 4,246,206,300 cubic feet based upon a rolling, 12-month summation.

2. The maximum annual #2 oil/distillate oil usage for emissions units P001, P002, and P003 combined, shall not exceed 11,064,326 gallons based upon a rolling 12-month summation.

3. To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Cumulative Summation of Natural Gas usage (cubic feet)	Cumulative Summation of #2 Oil or Distillate Oil usage (gallons)
1	849,241,260	2,212,865
1-2	1,698,482,520	4,425,730
1-3	2,547,723,780	6,638,595
1-4	3,396,965,040	8,851,460
1-5	4,246,206,300	11,064,326
1-6	4,246,206,300	11,064,326
1-7	4,246,206,300	11,064,326
1-8	4,246,206,300	11,064,326
1-9	4,246,206,300	11,064,326
1-10	4,246,206,300	11,064,326
1-11	4,246,206,300	11,064,326
1-12	4,246,206,300	11,064,326

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

4. The permittee shall install and operate a water injection system for control of NOx emissions.

5. The permittee shall install continuous emissions monitoring (CEM) for NOx as provided in condition A.III.4.

6. The quality of #2 fuel oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb SO_2/MMBTU of actual heat input.

   Compliance with the above mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

   The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA,

Central District Office.

III. Monitoring and/or Recordkeeping Requirements

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

   a. The fuel usage rates for each month.

   b. The cubic feet natural gas fired for each month.

   c. The number gallons of #2 oil or distillate oil fired for each month.

   d. During the first 12 calendar months of operation following the startup of emissions unit P001, the cumulative fuel usage rate for each calendar month.

   e. Beginning after the first 12 calendar months of operation following the startup of emissions unit P001, the rolling 12-month summation of the fuel usage.

2. The following records shall be maintained to demonstrate compliance with the Nitrogen Oxides (NOx) limitations established in this permit for emissions unit P001:

   a. Monthly NOx emissions, in tons.

   b. During the first 12 calendar months of operation following startup, the cumulative NOx emissions for each calendar month.

   c. Beginning after the first 12 calendar months of operation following startup, the rolling 12-month NOx emissions summation.

3. The permittee shall monitor sulfur content of the fuel being fired in the turbine. The frequency of the monitoring shall be determined 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. Owners, operators or fuel vendors may develop custom fuel schedules for the 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.

4. Statement of Certification - Continuous NOx Monitoring

a. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

b. Within 60 days of the startup of this emissions unit, the permittee shall conduct certification tests of such equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

c. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall

comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

d. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

e. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These

reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage restrictions for the first 12 calendar months of operation following the startup of the emissions unit, all exceedances of the maximum allowable cumulative fuel use restrictions. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 oil or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit deviation (excursion) reports that identify each day when the sulfur content of the #2 Oil/Distillate Oil exceed the 0.05% by weight limit established in this permit.

5. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of part A.I.2.h. above.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil (#2 fuel oil) which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (BTU/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

   a. the total quantity of oil received in each shipment (gallons);

   b. the weighted* average sulfur content (percent by weight) for the oil received during each calendar month;

   c. the weighted* average heat content (BTU/gallon) of the oil received during each calendar month; and,

   d. the weighted* average SO_2 emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO_2 emission rate shall be calculated as specified in OAC rule 3745-18-04(F).

7. Data Reporting - Continuous NOx Emissions Monitoring

   a. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and

3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations

specified in the terms and conditions of this permit or variance. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

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

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

8. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

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

b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

c. Actual start-up date (within 15 days after such date); and,

d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency

DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency
Northwest District Office
Division of Air Pollution Control
347 North Dunbridge Road
PO Box 466
Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

1. Emission Limitation

0.5 lb SO_2/mm BTU heat input

Applicable Compliance Method

The sulfur limitation required in this permit shall be monitored using the sulfur content standard methods as required in 40 CFR part 60.335 - Test Methods and Procedures.

2. Emission Limitation

251.0 lbs nitrogen oxides (NOx) /hr, 25 ppm NOx at 15% Oxygen when firing natural gas, 42 ppm NOx at 15% Oxygen when firing #2 oil .

Applicable Compliance Method

Compliance with the NOx emission and concentration limitations established by this permit shall be the continuous emissions monitoring requirement and the monitoring/record keeping required by this permit. Compliance with the NOx limits established in NSPS Subpart GG will be assumed if compliance with the limits established in this permit are achieved.

3. Emission Limitation

38.0 lbs particulate emissions (PE)/hr and 0.04 lb PE/mm BTU.

Applicable Compliance Method

Compliance with the PE limitation established by this permit shall be demonstrated by the performance test required below.

4. Emission Limitation

20% opacity as a 6-minute average when burning #2 Oil/Distillate Oil and 10% opacity as a 6-minute average when burning #2 Oil/Distillate Oil.

Applicable Compliance Method

Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

5. Emission Limitation(s)

0.05% sulfur by weight, 150 ppm SO_2 at 15% Oxygen

Applicable Compliance Method

Compliance with the sulfur content limitation and SO_2 concentration limitation established in the permit shall be demonstrated by the fuel monitoring required by section A.III.3. of this permit.

6. Emission Limitation(s)

20.8 TPY PM10 as a rolling, 12-month summation.
37.9 TPY SO_2 as a rolling 12-month summation.
20.8 TPY CO as a rolling, 12-month summation.
9.2 TPY VOC as a rolling, 12-month summation.

Applicable Compliance Method

The emission limits in this permit are based on the maximum hourly potential to emit based on 4,246,206,300 cubic feet of natural gas usage per rolling 12-month period firing natural gas and 11,064,326 gallons of #2 oil or distillate oil per rolling 12-month period. Compliance with the fuel usage restrictions established by this permit shall be determined by the record keeping required by this permit.

7. Emission Limitation(s)

120.0 TPY NO_x as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual NOx emission limitation established by this permit shall be determined by the use of a CEM and record keeping required by this permit.

8. Emissions testing requirements

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

a. The testing shall be performed at 100% of peak load.

b. The emission testing shall be conducted within 90 days following the startup of the emissions unit with the fuel used during the initial commercial operation. In the event of a switch to an alternate fuel, testing shall be conducted within 90 days following the switch to the alternate fuel.

c. The emission testing shall be conducted to demonstrate compliance with the NOx ambient concentration and mass emissions limitations, CO, VOC, PE and SO2 mass emissions limitations.

d. The following test method(s) shall be employed to demonstrate compliance with the ambient concentration and mass emissions limitations for NOx, Method 7 of 40 CFR Part 60, Appendix A, for PE Method 5 of 40 CFR Part 60, Appendix A, for SO2 Method 6 of 40 CFR Part 60, Appendix A, for VOC Method 25 of 40 CFR Part 60, Appendix A, and for CO Method 10 of 40 CFR Part 60, Appendix A,. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio

EPA, Northwest District Office.

VI. Miscellaneous Requirements

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

2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

Emissions Unit ID: **P001**

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
1431 mmBTU/hr Natural Gas/#2 Oil/Distillate Oil Fired Turbine #1	Air Toxic Policy	N/A

2. **Additional Terms and Conditions**

None.

II. Operational Restrictions

1. This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

   Pollutant: Formaldehyde

   TLV (ug/m3): 272.69

   Maximum Hourly Emission Rate (lbs/hr): 0.93

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.2380

   MAGLC (ug/m3): 6.49

   OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Emissions Unit ID: **P002**

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	
130 MW Natural gas-fired simple cycle turbine generator with #2 fuel oil backup; 1,431 MM BTU/hr rate heat input; includes water injection NOx reduction system.	OAC Rule 3745-31-05 (A)(3)	
	OAC Rule 3745-31-05 (D)	OAC Rule 3745-18-06 (F)
		OAC Rule 3745-17-11 (B)(4)
		OAC Rule 3745-17-07

	Applicable Emissions Limitations/Control Measures	
	38.0 lbs particulate emissions (PE)/hr	120.0 TPY NOx as a rolling, 12-month summation combined from P001, P002 and P003.
NSPS Subpart GG	251.0 lbs nitrogen oxides (NO_x) /hr.	20.8 TPY PM10* as a rolling, 12-month summation combined from P001, P002 and P003.
	NO_x emissions shall not exceed 25 ppmvd at 15% Oxygen when firing natural gas.	*for purposes of this permit, all PM10 is considered to be PM.
OAC Rule 23-06 (B)	NO_x emissions shall not exceed 42 ppmvd NO_x at 15% Oxygen when firing #2 Oil/Distillate Oil.	4,246,206,300 cubic feet of natural gas based upon a rolling, 12-month summation combined from P001, P002 and P003.
OAC Rule 3745-21-08 (B)	71.0 lbs sulfur dioxide (SO_2) /hr	11,064,326 gallons of #2/distillate oil based upon a rolling, 12-month summation combined from P001, P002 and P003.
40 CFR Part 75	15.0 lbs carbon monoxide (CO) /hr	0.5 lb SO_2/mmBTU heat input.
	17.2 lbs volatile organic compounds (VOC) /hr	0.04 lb PE/mmBTU heat input.
	Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average when burning Natural Gas, except as specified by rule.	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average when burning #2 fuel oil/distillate oil, except as specified by rule.
	37.9 TPY SO_2 as a rolling 12-month summation combined from P001, P002 and P003.	The NO_x required by this rule is less stringent than the one established as BACT.
	20.8 TPY CO as a rolling, 12-month summation combined from P001, P002 and P003.	150 ppm SO_2 at 15% O_2.
	9.2 TPY VOC as a rolling, 12-month summation combined from P001, P002 and P003.	See 2.a. below.
		See 2.i. below.

See 2.j. below.

See Part I, term A.4.

2. Additional Terms and Conditions

2.a The sulfur content of the #2 Oil/Distillate Oil used in emissions unit P002 shall not exceed 0.05% by weight (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR part 60 subpart GG).

2.b In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from emissions unit P002 in accordance with this permit.

2.c In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install and operate systems to continuously monitor and record emissions of NOx for emissions unit P002 in accordance with this permit.

2.d In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports from emissions unit P002 in accordance with this permit.

2.e In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for emissions unit P002 in accordance with this permit.

2.f Compliance with OAC rule 3745-31-15 shall be demonstrated by the use of natural gas, the use of water injection, hours of operation

limits and compliance with 40 CFR Part 60 Subpart GG.

2.g The hourly emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.h The design electric output of each unit, as measured at the generator terminal, is 130 MW. This value corresponds to a fuel oil flow of 12,207 gallons/hr (per unit). The facility's information management system shall be capable of monitoring and recording electric output (in MW) and fuel oil flow (in gallons) for each unit. This emissions unit shall operate within five percent (5%) of the design electric output and corresponding fuel flow when burning #2 oil/distillate oil except for startup (not to exceed 45 minutes in duration) and shutdown (not to exceed 45 minutes in duration).

2.i This emissions unit shall minimize nitrogen oxide emissions by use of the latest available control techniques and operating practices in accordance with best current technology.

2.j This emissions unit shall minimize carbon monoxide emissions by use of the best available control techniques and operating practices in accordance with best current technology.

2.k To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the NOx emission rates specified in the following table:

Month	Cumulative summation of the NOx emission rate
1	24.0
1-2	48.0
1-3	72.0
1-4	96.0
1-5	120.0
1-6	120.0
1-7	120.0

1-8	120.0
1-9	120.0
1-10	120.0
1-11	120.0
1-12	120.0

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual emission limitation shall be based on a rolling, 12-month summation.

II. Operational Restrictions

1. The maximum annual natural gas usage for emissions units P001, P002 and P003 combined, shall not exceed 4,246,206,300 cubic feet based upon a rolling, 12-month summation.

2. The maximum annual #2 oil/distillate oil usage for emissions units P001, P002, and P003 combined, shall not exceed 11,064,326 gallons based upon a rolling 12-month summation.

3. To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Cumulative Summation of Natural Gas usage (cubic feet)	Cumulative Summation of #2 Oil or Distillate Oil usage (gallons)
1	849,241,260	2,212,865
1-2	1,698,482,520	4,425,730
1-3	2,547,723,780	6,638,595
1-4	3,396,965,040	8,851,460
1-5	4,246,206,300	11,064,326
1-6	4,246,206,300	11,064,326
1-7	4,246,206,300	11,064,326
1-8	4,246,206,300	11,064,326
1-9	4,246,206,300	11,064,326
1-10	4,246,206,300	11,064,326
1-11	4,246,206,300	11,064,326
1-12	4,246,206,300	11,064,326

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

4. The permittee shall install and operate a water injection system for control of NOx emissions.

5. The permittee shall install continuous emissions monitoring (CEM) for NOx as provided in condition A.III.4.

6. The quality of #2 fuel oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb SO_2/MMBTU of actual heat input.

   Compliance with the above mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

   The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA,

Central District Office.

III. Monitoring and/or Recordkeeping Requirements

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

   a. The fuel usage rates for each month.

   b. The cubic feet natural gas fired for each month.

   c. The number gallons of #2 oil or distillate oil fired for each month.

   d. During the first 12 calendar months of operation following the startup of emissions unit P002, the cumulative fuel usage rate for each calendar month.

   e. Beginning after the first 12 calendar months of operation following the startup of emissions unit P002, the rolling 12-month summation of the fuel usage.

2. The following records shall be maintained to demonstrate compliance with the Nitrogen Oxides (NOx) limitations established in this permit for emissions unit P002:

   a. Monthly NOx emissions, in tons.

   b. During the first 12 calendar months of operation following startup, the cumulative NOx emissions for each calendar month.

   c. Beginning after the first 12 calendar months of operation following startup, the rolling 12-month NOx emissions summation.

3. The permittee shall monitor sulfur content of the fuel being fired in the turbine. The frequency of the monitoring shall be determined 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. Owners,

operators or fuel vendors may develop custom fuel schedules for the 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.

4. Statement of Certification - Continuous NOx Monitoring

a. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

b. Within 60 days of the startup of this emissions unit, the permittee shall conduct certification tests of such equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

c. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall

comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

d. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

e. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These

reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage restrictions for the first 12 calendar months of operation following the startup of the emissions unit, all exceedances of the maximum allowable cumulative fuel use restrictions. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 oil or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit deviation (excursion) reports that identify each day when the sulfur content of the #2 Oil/Distillate Oil exceed the 0.05% by weight limit established in this permit.

5. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of part A.I.2.h. above.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil (#2 fuel oil) which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (BTU/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

   a. the total quantity of oil received in each shipment (gallons);

   b. the weighted* average sulfur content (percent by weight) for the oil received during each calendar month;

   c. the weighted* average heat content (BTU/gallon) of the oil received during each calendar month; and,

   d. the weighted* average SO_2 emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO_2 emission rate shall be calculated as specified in OAC rule 3745-18-04(F).

7. Data Reporting - Continuous NOx Emissions Monitoring

   a. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency

documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations

specified in the terms and conditions of this permit or variance. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

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

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

8. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

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

b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

c. Actual start-up date (within 15 days after such date); and,

d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency
Northwest District Office
Division of Air Pollution Control
347 North Dunbridge Road
PO Box 466
Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

1. Emission Limitation

0.5 lb SO_2/mm BTU heat input

Applicable Compliance Method

The sulfur limitation required in this permit shall be monitored using the sulfur content standard methods as required in 40 CFR part 60.335 - Test Methods and Procedures.

2. Emission Limitation

251.0 lbs nitrogen oxides (NOx) /hr, 25 ppm NOx at 15% Oxygen when firing natural gas, 42 ppm NOx at 15% Oxygen when firing #2 oil .

Applicable Compliance Method

Compliance with the NOx emission and concentration limitations established by this permit shall be the continuous emissions monitoring requirement and the monitoring/record keeping required by this permit. Compliance with the NOx limits established in NSPS Subpart GG will be assumed if compliance with the limits established in this permit are achieved.

3. Emission Limitation

38.0 lbs particulate emissions (PE)/hr and 0.04 lb PE/mm BTU.

Applicable Compliance Method

Compliance with the PE limitation established by this permit shall be demonstrated by the performance test required below.

4. Emission Limitation

20% opacity as a 6-minute average when burning #2 Oil/Distillate Oil and 10% opacity as a 6-minute average when burning #2 Oil/Distillate Oil.

Applicable Compliance Method

Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

5. Emission Limitation(s)

0.05% sulfur by weight, 150 ppm SO_2 at 15% Oxygen

Applicable Compliance Method

Compliance with the sulfur content limitation and SO_2 concentration limitation established in the permit shall be demonstrated by the fuel monitoring required by section A.III.3. of this permit.

6. Emission Limitation(s)

20.8 TPY PM10 as a rolling, 12-month summation.
37.9 TPY SO_2 as a rolling 12-month summation.
20.8 TPY CO as a rolling, 12-month summation.
9.2 TPY VOC as a rolling, 12-month summation.

Applicable Compliance Method

The emission limits in this permit are based on the maximum hourly potential to emit based on 4,246,206,300 cubic feet of natural gas usage per rolling 12-month period firing natural gas and 11,064,326 gallons of #2 oil or distillate oil per rolling 12-month period. Compliance with the fuel usage restrictions established by this permit shall be determined by the record keeping required by this permit.

7. Emission Limitation(s)

120.0 TPY NO_x as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual NOx emission limitation established by this permit shall be determined by the use of a CEM and record keeping required by this permit.

8. Emissions testing requirements

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

a. The testing shall be performed at 100% of peak load.

b. The emission testing shall be conducted within 90 days following the startup of the emissions unit with the fuel used during the initial commercial operation. In the event of a switch to an alternate fuel, testing shall be conducted within 90 days following the switch to the alternate fuel.

c. The emission testing shall be conducted to demonstrate compliance with the NOx ambient concentration and mass emissions limitations, CO, VOC, PE and SO2 mass emissions limitations.

d. The following test method(s) shall be employed to demonstrate compliance with the ambient concentration and mass emissions limitations for NOx, Method 7 of 40 CFR Part 60, Appendix A, for PE Method 5 of 40 CFR Part 60, Appendix A, for SO2 Method 6 of 40 CFR Part 60, Appendix A, for VOC Method 25 of 40 CFR Part 60, Appendix A, and for CO Method 10 of 40 CFR Part 60, Appendix A,. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

Emissions Unit ID: **P002**

VI. Miscellaneous Requirements

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

2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

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
1431 mmBTU/hr Natural Gas/#2 Oil/Distillate Oil Fired Turbine #1	Air Toxic Policy	N/A

2. Additional Terms and Conditions

None.

II. Operational Restrictions

1. This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

   Pollutant: Formaldehyde

   TLV (ug/m3): 272.69

   Maximum Hourly Emission Rate (lbs/hr): 0.93

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.2380

   MAGLC (ug/m3): 6.49

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered

a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

December 17, 1999

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

A. State and Federally Enforceable Section

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
130 MW Natural gas-fired simple cycle turbine generator with #2 fuel oil backup; 1,431 MM BTU/hr rate heat input; includes water injection NOx reduction system.	OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-05 (D)

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	Applicable Emissions Limitations/Control Measures	
OAC Rule 3745-18-06 (F)		120.0 TPY NOx as a rolling, 12-month summation combined from P001, P002 and P003.
OAC Rule 3745-17-11 (B)(4)	38.0 lbs particulate emissions (PE)/hr	20.8 TPY PM10* as a rolling, 12-month summation combined from P001, P002 and P003.
	251.0 lbs nitrogen oxides (NO_x) /hr.	
OAC Rule 3745-17-07	NO_x emissions shall not exceed 25 ppmvd at 15% Oxygen when firing natural gas.	*for purposes of this permit, all PM10 is considered to be PM.
NSPS Subpart GG	NO_x emissions shall not exceed 42 ppmvd NO_x at 15% Oxygen when firing #2 Oil/Distillate Oil.	4,246,206,300 cubic feet of natural gas based upon a rolling, 12-month summation combined from P001, P002 and P003.
	71.0 lbs sulfur dioxide (SO_2) /hr	11,064,326 gallons of #2/distillate oil based upon a rolling, 12-month summation combined from P001, P002 and P003.
	15.0 lbs carbon monoxide (CO) /hr	
OAC Rule 23-06 (B)	17.2 lbs volatile organic compounds (VOC) /hr	0.5 lb SO_2/mmBTU heat input.
OAC Rule 3745-21-08 (B)	Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average when burning Natural Gas, except as specified by rule.	0.04 lb PE/mmBTU heat input.
40 CFR Part 75	37.9 TPY SO_2 as a rolling 12-month summation combined from P001, P002 and P003.	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average when burning #2 fuel oil/distillate oil, except as specified by rule.
	20.8 TPY CO as a rolling, 12-month summation combined from P001, P002 and P003.	The NO_x required by this rule is less stringent than the one established as BACT.
	9.2 TPY VOC as a rolling, 12-month summation combined from P001, P002 and P003.	150 ppm SO_2 at 15% O_2.
		See 2.a. below.
		See 2.i. below.

Emissions Unit ID: **P003**

See 2.j. below.

See Part I, term A.4.

2. Additional Terms and Conditions

2.a The sulfur content of the #2 Oil/Distillate Oil used in emissions unit P003 shall not exceed 0.05% by weight (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR part 60 subpart GG).

2.b In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 subpart GG (section 60.334(b)), the permittee shall install and operate systems to continuously monitor and record emissions of NOx from emissions unit P003 in accordance with this permit.

2.c In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install and operate systems to continuously monitor and record emissions of NOx for emissions unit P003 in accordance with this permit.

2.d In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess and emissions reports from emissions unit P003 in accordance with this permit.

2.e In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and Continuous Emissions Monitoring requirements for emissions unit P003 in accordance with this permit.

2.f Compliance with OAC rule 3745-31-15 shall be demonstrated by the use of natural gas, the use of water injection, hours of operation limits and compliance with 40 CFR Part 60 Subpart GG.

2.g The hourly emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary

to develop record keeping and/or reporting requirements to ensure compliance with these limits.

2.h The design electric output of each unit, as measured at the generator terminal, is 130 MW. This value corresponds to a fuel oil flow of 12,207 gallons/hr (per unit). The facility's information management system shall be capable of monitoring and recording electric output (in MW) and fuel oil flow (in gallons) for each unit. This emissions unit shall operate within five percent (5%) of the design electric output and corresponding fuel flow when burning #2 oil/distillate oil except for startup (not to exceed 45 minutes in duration) and shutdown (not to exceed 45 minutes in duration).

2.i This emissions unit shall minimize nitrogen oxide emissions by use of the latest available control techniques and operating practices in accordance with best current technology.

2.j This emissions unit shall minimize carbon monoxide emissions by use of the best available control techniques and operating practices in accordance with best current technology.

2.k To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the NOx emission rates specified in the following table:

Month	Cumulative summation of the NOx emission rate
1	24.0
1-2	48.0
1-3	72.0
1-4	96.0
1-5	120.0
1-6	120.0
1-7	120.0
1-8	120.0
1-9	120.0
1-10	120.0
1-11	120.0
1-12	120.0

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual emission limitation shall be based on a rolling, 12-month summation.

II. Operational Restrictions

1. The maximum annual natural gas usage for emissions units P001, P002 and P003 combined, shall not exceed 4,246,206,300 cubic feet based upon a rolling, 12-month summation.

2. The maximum annual #2 oil/distillate oil usage for emissions units P001, P002, and P003 combined, shall not exceed 11,064,326 gallons based upon a rolling 12-month summation.

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Emissions Unit ID: **P003**

3. To ensure enforceability during the first 12 calendar months following the startup of emissions units P001, P002 and P003 the permittee shall not exceed the fuel usage restrictions specified in the following table:

Month	Cumulative Summation of Natural Gas usage (cubic feet)	Cumulative Summation of #2 Oil or Distillate Oil usage (gallons)
1	849,241,260	2,212,865
1-2	1,698,482,520	4,425,730
1-3	2,547,723,780	6,638,595
1-4	3,396,965,040	8,851,460
1-5	4,246,206,300	11,064,326
1-6	4,246,206,300	11,064,326
1-7	4,246,206,300	11,064,326
1-8	4,246,206,300	11,064,326
1-9	4,246,206,300	11,064,326
1-10	4,246,206,300	11,064,326
1-11	4,246,206,300	11,064,326
1-12	4,246,206,300	11,064,326

After the first 12 calendar months following the startup of emissions units P001, P002 and P003 compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

4. The permittee shall install and operate a water injection system for control of NOx emissions.

5. The permittee shall install continuous emissions monitoring (CEM) for NOx as provided in condition A.III.4.

6. The quality of #2 fuel oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb SO_2/MMBTU of actual heat input.

   Compliance with the above mentioned specifications shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of oil.

   The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA,

Central District Office.

III. Monitoring and/or Recordkeeping Requirements

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

   a. The fuel usage rates for each month.

   b. The cubic feet natural gas fired for each month.

   c. The number gallons of #2 oil or distillate oil fired for each month.

   d. During the first 12 calendar months of operation following the startup of emissions unit P003, the cumulative fuel usage rate for each calendar month.

   e. Beginning after the first 12 calendar months of operation following the startup of emissions unit P003, the rolling 12-month summation of the fuel usage.

2. The following records shall be maintained to demonstrate compliance with the Nitrogen Oxides (NOx) limitations established in this permit for emissions unit P003:

   a. Monthly NOx emissions, in tons.

   b. During the first 12 calendar months of operation following startup, the cumulative NOx emissions for each calendar month.

   c. Beginning after the first 12 calendar months of operation following startup, the rolling 12-month NOx emissions summation.

3. The permittee shall monitor sulfur content of the fuel being fired in the turbine. The frequency of the monitoring shall be determined 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. Owners,

Emissions Unit ID: **P003**

operators or fuel vendors may develop custom fuel schedules for the 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.

4. Statement of Certification - Continuous NOx Monitoring

   a. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

   b. Within 60 days of the startup of this emissions unit, the permittee shall conduct certification tests of such equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6, and/or 40 CFR Part 75. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

   c. The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall

comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

d. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

e. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These

reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage restrictions for the first 12 calendar months of operation following the startup of the emissions unit, all exceedances of the maximum allowable cumulative fuel use restrictions. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 oil or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit deviation (excursion) reports that identify each day when the sulfur content of the #2 Oil/Distillate Oil exceed the 0.05% by weight limit established in this permit.

5. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of part A.I.2.h. above.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil (#2 fuel oil) which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (BTU/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:

   a. the total quantity of oil received in each shipment (gallons);

   b. the weighted* average sulfur content (percent by weight) for the oil received during each calendar month;

   c. the weighted* average heat content (BTU/gallon) of the oil received during each calendar month; and,

   d. the weighted* average SO_2 emission rate (lbs/MMBTU of actual heat input) of the oil combusted during each calendar month (the SO_2 emission rate shall be calculated as specified in OAC rule 3745-18-04(F).

7. Data Reporting - Continuous NOx Emissions Monitoring

   a. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and

3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in 40 CFR Part 76 or any limitations specified in the terms and conditions of this permit or variance. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

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

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

8. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

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

b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

c. Actual start-up date (within 15 days after such date); and,

d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency
Northwest District Office
Division of Air Pollution Control
347 North Dunbridge Road

PO Box 466
Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

1. Emission Limitation

0.5 lb SO_2/mm BTU heat input

Applicable Compliance Method

The sulfur limitation required in this permit shall be monitored using the sulfur content standard methods as required in 40 CFR part 60.335 - Test Methods and Procedures.

2. Emission Limitation

251.0 lbs nitrogen oxides (NOx) /hr, 25 ppm NOx at 15% Oxygen when firing natural gas, 42 ppm NOx at 15% Oxygen when firing #2 oil .

Applicable Compliance Method

Compliance with the NOx emission and concentration limitations established by this permit shall be the continuous emissions monitoring requirement and the monitoring/record keeping required by this permit. Compliance with the NOx limits established in NSPS Subpart GG will be assumed if compliance with the limits established in this permit are achieved.

3. Emission Limitation

38.0 lbs particulate emissions (PE)/hr and 0.04 lb PE/mm BTU.

Applicable Compliance Method

Compliance with the PE limitation established by this permit shall be demonstrated by the performance test required below.

4. Emission Limitation

20% opacity as a 6-minute average when burning #2 Oil/Distillate Oil and 10% opacity as a 6-minute average when burning #2 Oil/Distillate Oil.

Applicable Compliance Method

Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

5. Emission Limitation(s)

0.05% sulfur by weight, 150 ppm SO_2 at 15% Oxygen

Applicable Compliance Method

Compliance with the sulfur content limitation and SO_2 concentration limitation established in the permit shall be demonstrated by the fuel monitoring required by section A.III.3. of this permit.

6. Emission Limitation(s)

20.8 TPY PM10 as a rolling, 12-month summation.
37.9 TPY SO_2 as a rolling 12-month summation.
20.8 TPY CO as a rolling, 12-month summation.
9.2 TPY VOC as a rolling, 12-month summation.

Applicable Compliance Method

The emission limits in this permit are based on the maximum hourly potential to emit based on 4,246,206,300 cubic feet of natural gas usage per rolling 12-month period firing natural gas and 11,064,326 gallons of #2 oil or distillate oil per rolling 12-month period. Compliance with the fuel usage restrictions established by this permit shall be determined by the record keeping required by this permit.

7. Emission Limitation(s)

120.0 TPY NO_x as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual NOx emission limitation established by this permit shall be determined by the use of a CEM and record keeping required by this permit.

8. Emissions testing requirements

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

a. The testing shall be performed at 100% of peak load.

b. The emission testing shall be conducted within 90 days following the startup of the emissions unit with the fuel used during the initial commercial operation. In the event of a switch to an alternate fuel, testing shall be conducted within 90 days following the switch to the alternate fuel.

c. The emission testing shall be conducted to demonstrate compliance with the NOx ambient concentration and mass emissions limitations, CO, VOC, PE and SO2 mass emissions limitations.

d. The following test method(s) shall be employed to demonstrate compliance with the ambient concentration and mass emissions limitations for NOx, Method 7 of 40 CFR Part 60, Appendix A, for PE Method 5 of 40 CFR Part 60, Appendix A, for SO2 Method 6 of 40 CFR Part 60, Appendix A, for VOC Method 25 of 40 CFR Part 60, Appendix A, and for CO Method 10 of 40 CFR Part 60, Appendix A,. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

Emissions Unit ID: **P003**

VI. Miscellaneous Requirements

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

2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
1431 mmBTU/hr Natural Gas/#2 Oil/Distillate Oil Fired Turbine #1	Air Toxic Policy	N/A

2. Additional Terms and Conditions

None.

II. Operational Restrictions

1. This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. The emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

   Pollutant: Formaldehyde

   TLV (ug/m3): 272.69

   Maximum Hourly Emission Rate (lbs/hr): 0.93

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.2380

   MAGLC (ug/m3): 6.49

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee

maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

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VI. Miscellaneous Requirements

None.