



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WASHINGTON COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:

Lazarus Gov.
Center

Application No: 06-06167

DATE: 1/18/2001

Duke Energy Washington County LLC
William C Campbell III
5400 Westheimer Court
Houston, TX 77056

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

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

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Director's 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
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA
Alan Lloyd OEPA/DAPC

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: January 18, 2001
Effective Date: Established Pursuant to PSD Term and Condition
Referenced in 40 CFR 124.15, 124.19 and 124.20**

FINAL PERMIT TO INSTALL 06-06167

Application Number: 06-06167
APS Premise Number: 0684000212
Permit Fee: **\$600**
Name of Facility: Duke Energy Washington County LLC
Person to Contact: William C Campbell III
Address: 5400 Westheimer Court
Houston, TX 77056

Location of proposed air contaminant source(s) [emissions unit(s)]:
**State Route 83
Beverly, Ohio**

Description of proposed emissions unit(s):
Baseload natural gas fired combined cycle power plant 620 MW.

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

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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

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Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35 , the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

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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. Air Pollution Nuisance

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

5. 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.

6. 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.

7. 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.

8. 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).

9. Construction Compliance Certification

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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

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	316.3
SO2	113.1
CO	909
VOC	126.4
PM	207.3
ammonia (NH3)	269
formaldehyde	7.2
sulfuric acid	17.2

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

NONE

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

NONE

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

B001 - 46.6 MMBtu/hr
natural gas fired boiler

40 CFR 60 Subpart Dc
OAC rule 3745-18-06(A)

OAC rule 3745-17-10(B)(1)

OAC rule 3745-17-07(A)

40 CFR 52.21
OAC rule 3745-31- (13) thru (20)

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Applicable Emissions
Limitations/Control
Measures

The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart Dc, OAC rule 3745-18-06(A), 3745-17-10(B)(1), OAC rule 3745-17-07(A), 40 CFR 52.21, and OAC 3745-31-(13) thru (20).

nitrogen oxide (NO_x) emissions shall not exceed 0.11 lb/MMBtu actual heat input 5.3 lb/hr, and 1.3 ton per year

sulfur dioxide (SO₂) emissions shall not exceed 0.0057 lb/MMBtu actual heat input 0.28 lb/hr, and 0.07 ton per year

carbon monoxide (CO) emissions shall not exceed 0.14 lb/MMBtu actual heat input 6.62 lb/hr, and 1.7 ton per year

volatile organic compounds (VOC) emissions shall not exceed 0.014 lb/MMBtu actual heat input 0.7 lb/hr, and 0.18 ton per

year

particulate matter (PM) emissions shall not exceed 0.932 lb/hr, and 0.23 ton per year

The emission limitations specified by these rules are less stringent than those established above;

0.020 lb PM/MMBtu actual heat input,

20% opacity as a six minute average, except as provided by rule

The tons per rolling 12-month period shall not exceed :

- NO_x - 1.3
- SO₂ - 0.07
- PM - 0.23
- CO - 1.7
- VOC - 0.18

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2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emission unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 standard cubic feet.
2. The maximum annual hours of operation of emissions unit B001 shall not exceed 500 hours, based upon a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months following the startup of this emissions unit the permittee shall not exceed the monthly hours of operation restrictions specified in the following table:

Month	Cumulative hours of Operation
1	300
36526	500
36527	500
36528	500
36529	500
36530	500
36531	500
36532	500
36533	500
36534	500
36535	500
36536	500

After the first 12 calendar months following the startup of emissions unit B001, compliance with the annual hours of operation restriction shall be based on a rolling, 12-month summation.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit
2. The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in the emission unit. Fuel sampling and analysis shall be conducted according to the procedures and

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at the frequency specified by 40 CFR Part 75, Appendix D.

3. The permittee shall maintain monthly records of the following information for each emissions unit:
 - a. Hours of operation of the boiler;
 - b. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the hours of operation.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative hours of operation for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per standard cubic foot. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
4. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

Emissions Unit ID: B001

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- 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
Southeast District Office
Division of Air Pollution Control
2195 Front Street
Logan, Ohio 43138

5. PSD REQUIREMENTS

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Appeals Board of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:

United States Environmental Protection Agency
Environmental Appeals Board
401 M Street, SW (MC-113do)
Washington, DC 20460

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V. Testing Requirements

1. Emission Limitation:

NO_x

0.11 lb/MMBtu, 5.3 lb/hr, and 1.3 tons per year

Applicable Compliance Method:

lb/MMBtu

Compliance shall be demonstrated using the manufacturer supplied performance data emission factor (0.11 lb NO_x /MMBTU).

lb/hr

Compliance shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.11 lb NO_x /MMBTU) by the maximum Btu input rate (46.6 MMBTU/hr).

tons per year

Compliance shall be demonstrated by multiplying the hourly NO_x emission rate (5.3 lb/hr) by actual hours/year and dividing by 2000 lb/ton.

2. Emission Limitation:

SO₂

0.0057 lb/MMBTU, 0.28 lb/hr, and 0.07 tons per year

Applicable Compliance Method:

lb/MMBTU

Compliance shall be demonstrated using the manufacturer supplied performance data emission factor (0.0057 lb SO₂ /MMBTU).

lb/hr

Compliance shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.0057 lb SO₂ /MMBTU) by the maximum Btu input rate (46.6 MMBTU/hr).

tons per year

Compliance shall be demonstrated by multiplying the hourly SO₂ emission rate (0.28 lb/hr) by actual hours/year and dividing by 2000 lb/ton.

3. Emission Limitation:

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CO

0.14 lb/MMBTU, 6.62 lb/hr, and 1.7 tons per year

Applicable Compliance Method:

lb/MMBTU

Compliance shall be demonstrated using the manufacturer supplied performance data emission factor (0.14 lb CO /MMBTU)

lb/hr

Compliance shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.14 lb CO /MMBTU) by the maximum Btu input rate (46.6 MMBTU/hr).

tons per year

Compliance shall be demonstrated by multiplying the hourly emission rate (6.62 lb/hr) by actual hours/year and dividing by 2000 lb/ton.

4. Emission Limitation:

VOC

0.014 lb/MMBTU, 0.7 lb/hr, and 0.18 tons per year

Applicable Compliance Method:

lb/MMBTU

Compliance shall be demonstrated using the manufacturer supplied performance data emission factor (0.014 lb VOC /MMBTU).

lb/hr

Compliance shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.014 lb VOC /MMBTU) by the maximum Btu input rate (46.6 MMBTU/hr)

tons per year

Compliance shall be demonstrated by multiplying the hourly emission rate (0.7 lb/hr) by actual hours/year and dividing by 2000 lb/ton.

5. Emission Limitation:

PM

0.02 lb/MMBTU, 0.932 lb/hr, and 0.23 ton per year

Applicable Compliance Method:

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lb/MMBTU

Compliance shall be demonstrated using the manufacturer supplied performance data emission factor (0.010 lb PM /MMBTU).

lb/hr

Compliance shall be demonstrated by multiplying the manufacturer supplied performance data emission factor (0.010 lb PM /MMBTU) by the maximum Btu input rate (46.6 MMBTU/hr).

tons per year

Compliance shall be demonstrated by multiplying the hourly emission rate (0.466 lb/hr) by actual hours/year and dividing by 2000 lb/ton.

6. Emission Limitation:

Tons per rolling 12 -month period shall not exceed :

NO_x - 1.3

SO₂ - 0.07

PM - 0.23

CO - 1.7

VOC - 0.18

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the record keeping required A.III.3. and multiply by the above lb/hr emission rate.

7. Emission Limitation:

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

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Applicable Compliance Method:

Compliance shall be demonstrated by the method specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

NONE

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B001 - 46.6 MMBtu/hr natural gas fired boiler		NONE

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

NONE

III. Monitoring and/or Recordkeeping Requirements

NONE

IV. Reporting Requirements

NONE

V. Testing Requirements

NONE

VI. Miscellaneous Requirements

NONE

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P001 - 170 MW GE 7FA natural gas-fired dry low NOx (DLN) combustion turbine with duct firing operating in combined cycle mode controlled by Selective Catalytic Reduction (SCR)	OAC Rule 3745-31-05 (A)(3) OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-05 (A)(3)

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OAC Rule 3745-31-05
(A)(3)

40 CFR Part 75

OAC rule 3745-103

OAC Rule 3745-31-05
(A)(3)

40 CFR part 60, Subpart GG

40 CFR part 60, Subpart Da

OAC rule 3745-18-06(F)

OAC Rule 3745-17-11 (B)(4)

OAC Rule 3745-17-07(A)

40 CFR 52.21

OAC rule 3745-31- (13) thru (20)

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Applicable Emissions Limitations/Control Measures		
The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart GG, OAC rule 3745-18-06(F), 3745-17-11(B)(4), OAC rule 3745-17-07(A), 40 CFR 52.21, and OAC 3745-31-(13) thru (20).	shall not exceed 26.6 lbs/hr	sulfuric acid emissions shall not exceed 2.2 lbs/hr
EMISSION LIMITS WITHOUT DUCT BURNER FIRING nitrogen oxides (NO _x) emissions shall not exceed 3.5 ppmvd at 15% Oxygen and 24.7 lbs /hr	formaldehyde emissions shall not exceed 0.8 lbs/hr	STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.)
PM emissions shall not exceed 19.0 lbs/hr	sulfuric acid emissions shall not exceed 1.7 lbs/hr	nitrogen oxides (NO _x) emissions shall not exceed 32.2 tons per year
sulfur dioxide (SO ₂) shall not exceed 11.2 lbs/hr	EMISSION LIMITS WITH DUCT BURNER FIRING (limited to 4,500 hours per year) nitrogen oxides (NO _x) emissions shall not exceed 3.5 ppmvd at 15% Oxygen and 32.3 lbs /hr	carbon monoxide (CO) emissions shall not exceed 186.6 tons per year
carbon monoxide (CO) emissions shall not exceed 10 ppmvd at 15% Oxygen and 43.0 lbs/hr	PM emissions shall not exceed 28.0 lbs/hr	volatile organic compounds (VOC) emissions shall not exceed 12.6 tons per year
volatile organic compounds (VOC) emissions shall not exceed 3.0 lbs/hr	sulfur dioxide (SO ₂) shall not exceed 14.5 lbs/hr	TOTAL TONS PER YEAR (including 4,260 hours per year without duct burners, 4,500 hours per year with duct burners, startups, and shutdowns)
ammonia (NH ₃) emissions	carbon monoxide (CO) emissions shall not exceed 14 ppmvd at 15% Oxygen and 78.0 lbs/hr	nitrogen oxides (NO _x) emissions shall not exceed
	volatile organic compounds (VOC) emissions shall not exceed 19.6 lbs/hr	157.5 tons per year
	ammonia (NH ₃) emissions shall not exceed 34.6 lbs/hr	PM emissions shall not exceed 103.5 tons per year
	formaldehyde emissions shall not exceed 0.82 lbs/hr	sulfur dioxide (SO ₂) shall not exceed 56.5 tons per year
		carbon monoxide (CO) emissions shall not exceed 453.7 tons per year
		volatile organic compounds (VOC) emissions shall not exceed 63.1 tons per year

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ammonia (NH3) emissions shall not exceed 134.5 tons per year	VOC - 63.1 H2SO4 - 8.6 See A.I.2.c.
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formaldehyde emissions shall not exceed 3.6 tons per year	See A.I.2.c.
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sulfuric acid emissions shall not exceed 8.6 tons per year	
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Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average

operational restriction, see II. 1.

see A.2.b.

see A.2.a.

see A.2.a.

see A.2.a.

see A.2.a.

The tons per rolling 12-month period shall not exceed :

- NOx - 157.5
- SO2 - 56.5
- PM - 103.5
- CO - 453.7

2. Additional Terms and Conditions

- 2.a** The emissions limit based on this applicable rule is equivalent to or less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.b** The emissions limits based on this applicable rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- 2.c** If the permittee is subject to the requirements of 40 CFR Part 75 concerning acid rain, the permittee shall ensure that any effected 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.

II. Operational Restrictions

- 1.** The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 standard cubic feet.
- 2.** The permit to install for this emissions unit (P001) was evaluated based actual materials (typical coatings and clean up materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the air permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy (Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling:

Pollutant: Formaldehyde

TLV (ug/m³): 273 (Converted from the STEL)

Maximum Hourly Emission Rate (lbs/hr): 1.64*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 0.23

MAGLC (ug/m³): 6.49

Pollutant: Sulfuric Acid

TLV (ug/m³): 1000

Maximum Hourly Emission Rate (lbs/hr): 4.4*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 2.5

MAGLC (ug/m³): 23.8

Pollutant: Ammonia

TLV (ug/m³): 17000

Maximum Hourly Emission Rate (lbs/hr): 69.2*

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.2

MAGLC (ug/m3): 404.8

* This was modeled for emissions units P001 & P002 combined.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used, 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 in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

3. Startup and Shut down shall be defined as when the unit is running at less than 50% of electric load, but under no circumstances shall startups exceed 250 minutes in duration and shutdowns shall not exceed 2 hours in duration. Startup and shutdowns shall be limited to 260 cycles(one startup and one shutdown) per year. Each start up and shutdowns shall be limited to the following:

Pollutant	lbs/start up	lbs/shut down	total lbs/startup and one shutdown
NOx	212.7	35	247.7
CO	1,174	261.5	1435.5
VOC	84.7	12	96.7

4. The maximum annual hours of operation of the duct burners for emissions unit P001 shall not exceed 4,500 hours, based upon a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months following the startup of this emissions unit, the permittee shall not exceed the monthly hours of operation restrictions specified in the following table:

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Month	Cumulative hours of Operation
1	720
36526	1440
36527	2160
36528	2880
36529	3600
36530	4320
36531	4500
36532	4500
36533	4500
36534	4500
36535	4500
36536	4500

After the first 12 calendar months following the startup of emissions unit P001, compliance with the annual hours of operation restriction shall be based on a rolling, 12-month summation.

5. Continuous NO_x Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous NO_x 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.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 6, and 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 NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 6, and 40 CFR Part 75.

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

7. Continuous CO Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous **CO** 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 4 and 6 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous **CO** monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. 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 **CO** 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 4 and 6.

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

9. Continuous O₂ or CO₂ Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous **O₂** or **CO₂** monitoring system, the permittee shall

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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 3 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 3, and 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 O₂ or CO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 3, and 40 CFR Part 75.

10. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ or CO₂ monitoring system designed to ensure continuous valid and representative readings of O₂ or CO₂ emissions in units of the applicable standard. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ or CO₂ monitoring system must be kept on site and available for inspection during regular office hours.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for each emissions unit:
 - a. The natural gas usage rate for each month (in standard cubic feet).
 2. The permittee shall maintain monthly records of the following information for each emissions unit:
 - a. Hours of operation of the turbine
 - b. Hours of operation of the duct burners
 - c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the hours of operation.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative hours of operation for each calendar month.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements of the appropriate sections specified in 40 CFR Part 60.13 and 40 CFR Part 75.

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

4. The permittee shall operate and maintain equipment to continuously monitor and record CO 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 .

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

5. The permittee shall operate and maintain equipment to continuously monitor and record O₂ or CO₂ from this emissions unit in percent O₂ or CO₂. Such continuous monitoring and recording equipment shall comply with the requirements in the appropriate sections specified in 40 CFR Part 60.13 and 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous O₂ or CO₂ monitoring system including, but not limited to, percent O₂ or CO₂ on an instantaneous (one-minute) basis, emissions of O₂ or CO₂ 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.

6. The permittee shall install, calibrate, operate, and maintain continuous monitoring systems to monitor and record the average hourly fuel consumption of the combustion turbine and duct burner. The fuel flow monitoring systems comply with the requirements of 40 CFR Part 75, Appendix D.
7. The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in the combustion turbine and duct burner. Fuel sampling and analysis shall be conducted according to the procedures and at the frequency specified by 40 CFR Part 75, Appendix D.
8. The permittee shall determine the hourly heat input rate to the combustion turbine and duct burner from the fuel flow rate as determined in term A.III.6 and fuel gross calorific value as determined

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in term A.III.7. The heat input rate shall be calculated in accordance with the procedures in Section 5 of 40 CFR Part 75, Appendix F.

9. The permittee shall maintain records of the following information for each emissions unit:
 - a. Number of startups, and the duration of each startup.
 - b. Number of shutdowns, and the duration of each shutdown.

10. The permittee shall maintain hourly records of the following information for this emissions unit:

in lb(s)/hr emissions rate for NO_x and CO as obtained from terms III.3. and 4. based upon an hourly averaging period as allowed in the appropriate sections of 40 CFR Part 60.

11. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the operating hours;
 - b. during the first 12 calendar months of operation, the permittee shall record the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.
 - d. during the first 12 calendar months of operation, the cumulative NO_x and CO emissions, in tons (i.e., $\frac{b \times \text{term } 10}{2,000}$, for each pollutant); and
 - e. beginning after the first 12 calendar months of operation, the rolling, 12-month NO_x and CO emissions, in tons (i.e., $\frac{c \times \text{term } 10}{2,000}$, for each pollutant).

12. PSD REQUIREMENTS

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the

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final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Appeals Board of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:

United States Environmental Protection Agency
Environmental Appeals Board
401 M Street, SW (MC-113do)
Washington, DC 20460

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurred.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
3. 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 NO_x values in excess of the applicable limits specified in 40 CFR Part 76 and any limitations specified in the terms and conditions of this permit or variance. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

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

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

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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.

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
5. 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 **CO** values in excess of any applicable limitation(s) specified in OAC Chapter 3745-21, 40 CFR Part 60, or any limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total **CO** emissions for the calendar quarter (in tons).

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

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

6. Pursuant to 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 all instances of continuous **O₂** or **CO₂** monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective

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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 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 be included in the quarterly report. These quarterly 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.

7. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per standard cubic foot. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
8. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
9. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for emissions unit P001 in accordance with this permit.
10. This emissions unit is subject to the applicable provisions of Subpart Da. and GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
- c. actual start-up date (within 15 days after such date); and,
- d. date of performance testing (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

Duke Energy Washington County LLC

PTI Application: 06-06167

Issued

Facility ID: 0684000212

Emissions Unit ID: P001

Columbus, Ohio 43216-3669

and

Ohio Environmental Protection Agency

Southeast District Office

Division of Air Pollution Control

2195 Front Street

Logan, Ohio 43138

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the NO_x and CO outlet concentration, and the mass emissions limitations for NO_x,* CO, Formaldehyde, VOC PM, and visible emission limitation.
 - c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for PM, Method 5 of 40 CFR Part 60, Appendix A; for visible emission limitations, Method 9, 40 CFR Part 60 Appendix A; for Formaldehyde, SW-846 Method 0011; 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.
 - d. The testing shall be conducted while the emissions unit is operating at or near its maximum capacity with and without duct burner firing, unless otherwise specified or approved by Ohio EPA or local air agency.
 - e. 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, Southeast 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, Southeast District Office refusal to accept the results of the emission test(s).
 - f. Personnel from the Ohio EPA, Southeast 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.
 - g. A comprehensive written report on the results of the emissions test(s) shall be signed by

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the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast 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, Southeast District Office.

* Using the test methods and procedures required under 40 CFR Part 60.335.

2. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

a. Emission Limitation

NO_x emissions shall not exceed 3.5 ppmvd at 15% Oxygen
24.7 lbs/hr without duct burner firing
32.3 lbs/hr with duct burner firing
157.5 tons per year, which includes 32.2 tons for startups and shutdowns

Applicable Compliance Method

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition V.1 and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition III.3. based upon an hourly averaging period as allowed in 40 CFR Part 60. Compliance with the annual emission limitation shall be determined by the record keeping required in condition III. 1., 2., and 3. The annual emissions associated with start-up and shut-down shall be demonstrated by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

b. Emission Limitation

PM emissions shall not exceed
19.0 lbs/hr without duct burner firing
28.0 lbs/hr with duct burner firing
103.5 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

c. Emission Limitation

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SO₂ emissions shall not exceed
11.2 lbs/hr without duct burner firing
14.5 lbs/hr with duct burner firing
56.5 tons per year

Applicable Compliance Method

Compliance with the hourly emission limitation shall be determined by the record keeping required in condition III. 1., 2., and 8. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

d. Emission Limitation

VOC emissions shall not exceed
3.0 lbs/hr without duct burner firing
19.6 lbs/hr with duct burner firing
63.1 tons per year, which includes 12.6 tons for startups and shutdowns

Applicable Compliance Method

Compliance with the lbs/hr limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton. The annual emissions associated with start-up and shut-down shall be determined by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

e. Emission Limitation

CO emissions shall not exceed
10 ppmvd at 15% Oxygen without duct burner firing
14 ppmvd at 15% Oxygen with duct burner firing
43.0 lbs/hr without duct burner firing
78.0 lbs/hr with duct burner firing
453.7 tons per year, which includes 186.6 tons for startups and shutdowns

Applicable Compliance Method

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition V.1 and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition III.4. based upon an hourly averaging period as allowed in 40 CFR Part 60. Compliance with the annual emission limitation shall be determined by the record

keeping required in condition III. 1., 2., and 4. The annual emissions associated with start-up and shut-down shall be determined by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

f. Emission Limitation

ammonia (NH₃) emissions shall not exceed
26.6 lbs/hr without duct burner firing
34.6 lbs/hr with duct burner firing
134.5 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0136 pound of ammonia/MMBtu heat input (emission factor supplied by the permittee) by the maximum Btu rating. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

g. Emission Limitation

Formaldehyde emissions shall not exceed
0.8 lbs/hr without duct burner firing
0.82 lbs/hr with duct burner firing
3.6 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

h. Emission Limitation

Sulfuric acid (H₂SO₄) emissions shall not exceed
1.7 lbs/hr without duct burner firing
2.2 lbs/hr with duct burner firing
8.6 tons per year

Applicable Compliance Method

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0017 pound of sulfuric acid/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

i. Emission Limitation

Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average.

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.

VI. Miscellaneous Requirements

1. In accordance with good engineering practices, the SCR unit on emissions unit P001 shall be installed, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation & maintenance manual, as provided by the manufacturer.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - 170 MW GE 7FA natural gas-fired dry low NOx (DLN) combustion turbine with duct firing operating in combined cycle mode controlled by Selective Catalytic Reduction (SCR)	NONE	NONE

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

NONE

III. Monitoring and/or Recordkeeping Requirements

NONE

IV. Reporting Requirements

NONE

V. Testing Requirements

NONE

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VI. Miscellaneous Requirements

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NONE

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P002 - 170 MW GE 7FA natural gas-fired dry low NOx (DLN) combustion turbine with duct firing operating in combined cycle mode controlled by Selective Catalytic Reduction (SCR)	OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-05 (A)(3)
	OAC Rule 3745-31-05 (A)(3)

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OAC Rule 3745-31-05 (A)(3)	40 CFR Part 75 OAC rule 3745-103
OAC Rule 3745-31-05 (A)(3)	40 CFR part 60, Subpart GG 40 CFR part 60, Subpart Da OAC rule 3745-18-06(F) OAC Rule 3745-17-11 (B)(4) OAC Rule 3745-17-07(A) 40 CFR 52.21 OAC rule 3745-31- (13) thru (20)

<p>Applicable Emissions Limitations/Control Measures</p>	<p>shall not exceed 26.6 lbs/hr</p>	<p>sulfuric acid emissions shall not exceed 2.2 lbs/hr</p>
<p>The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart GG, OAC rule 3745-18-06(F), 3745-17-11(B)(4), OAC rule 3745-17-07(A), 40 CFR 52.21, and OAC 3745-31-(13) thru (20).</p>	<p>formaldehyde emissions shall not exceed 0.8 lbs/hr</p>	<p>STARTUP AND SHUTDOWN EMISSIONS (also see A.II.3.)</p>
<p>EMISSION LIMITS WITHOUT DUCT BURNER FIRING</p>	<p>sulfuric acid emissions shall not exceed 1.7 lbs/hr</p>	<p>nitrogen oxides (NO_x) emissions shall not exceed 32.2 tons per year</p>
<p>nitrogen oxides (NO_x) emissions shall not exceed 3.5 ppmvd at 15% Oxygen and 24.7 lbs /hr</p>	<p>EMISSION LIMITS WITH DUCT BURNER FIRING (limited to 4,500 hours per year)</p>	<p>carbon monoxide (CO) emissions shall not exceed 186.6 tons per year</p>
<p>PM emissions shall not exceed 19.0 lbs/hr</p>	<p>nitrogen oxides (NO_x) emissions shall not exceed 3.5 ppmvd at 15% Oxygen and 32.3 lbs /hr</p>	<p>volatile organic compounds (VOC) emissions shall not exceed 12.6 tons per year</p>
<p>sulfur dioxide (SO₂) shall not exceed 11.2 lbs/hr</p>	<p>PM emissions shall not exceed 28.0 lbs/hr</p>	<p>TOTAL TONS PER YEAR (including 4,260 hours per year without duct burners, 4,500 hours per year with duct burners, startups, and shutdowns)</p>
<p>carbon monoxide (CO) emissions shall not exceed 10 ppmvd at 15% Oxygen and 43.0 lbs/hr</p>	<p>sulfur dioxide (SO₂) shall not exceed 14.5 lbs/hr</p>	<p>nitrogen oxides (NO_x) emissions shall not exceed 157.5 tons per year</p>
<p>volatile organic compounds (VOC) emissions shall not exceed 3.0 lbs/hr</p>	<p>carbon monoxide (CO) emissions shall not exceed 14 ppmvd at 15% Oxygen and 78.0 lbs/hr</p>	<p>PM emissions shall not exceed 103.5 tons per year</p>
<p>ammonia (NH₃) emissions</p>	<p>volatile organic compounds (VOC) emissions shall not exceed 19.6 lbs/hr</p>	<p>sulfur dioxide (SO₂) shall not exceed 56.5 tons per year</p>
	<p>ammonia (NH₃) emissions shall not exceed 34.6 lbs/hr</p>	<p>carbon monoxide (CO) emissions shall not exceed 453.7 tons per year</p>
	<p>formaldehyde emissions shall not exceed 0.82 lbs/hr</p>	<p>volatile organic compounds (VOC) emissions shall not exceed</p>

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63.1 tons per year | VOC - 63.1

H2SO4 - 8.6

ammonia (NH3) emissions shall not exceed | See A.I.2.c.

134.5 tons per year | See A.I.2.c.

formaldehyde emissions shall not exceed

3.6 tons per year

sulfuric acid emissions shall not exceed

8.6 tons per year

Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average

operational restriction, see II. 1.

see A.2.b.

see A.2.a.

see A.2.a.

see A.2.a.

see A.2.a.

The tons per rolling 12-month period shall not exceed :

NOx - 157.5

SO2 - 56.5

PM - 103.5

CO - 453.7

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2. Additional Terms and Conditions

- 2.a** The emissions limit based on this applicable rule is equivalent to or less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.b** The emissions limits based on this applicable rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- 2.c** If the permittee is subject to the requirements of 40 CFR Part 75 concerning acid rain, the permittee shall ensure that any effected 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.

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1. The permittee shall burn only natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 2 grains per 100 standard cubic feet.
2. The permit to install for this emissions unit (P001) was evaluated based actual materials (typical coatings and clean up materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the air permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy (Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling:

Pollutant: Formaldehyde

TLV (ug/m3): 273 (Converted from the STEL)

Maximum Hourly Emission Rate (lbs/hr): 1.64*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.23

MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid

TLV (ug/m3): 1000

Maximum Hourly Emission Rate (lbs/hr): 4.4*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.5

MAGLC (ug/m3): 23.8

Pollutant: Ammonia

TLV (ug/m3): 17000

Maximum Hourly Emission Rate (lbs/hr): 69.2*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 39.2

MAGLC (ug/m3): 404.8

* This was modeled for emissions units P001 & P002 combined.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials, that would

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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 in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- 3.** Startup and Shut down shall be defined as when the unit is running at less than 50% of electric load, but under no circumstances shall startups exceed 250 minutes in duration and shutdowns shall not exceed 2 hours in duration. Startup and shutdowns shall be limited to 260 cycles(one startup and one shutdown) per year. Each start up and shutdowns shall be limited to the following:

Pollutant	lbs/start up	lbs/shut down	total lbs/startup and one shutdown
NOx	212.7	35	247.7
CO	1,174	261.5	1435.5

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VOC	84.7	12	96.7
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4. The maximum annual hours of operation of the duct burners for emissions unit P002 shall not exceed 4,500 hours, based upon a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months following the startup of this emissions unit the permittee shall not exceed the monthly hours of operation restrictions specified in the following table:

Month	Cumulative hours of Operation
1	720
36526	1440
36527	2160
36528	2880
36529	3600
36530	4320
36531	4500
36532	4500
36533	4500
36534	4500
36535	4500
36536	4500

After the first 12 calendar months following the startup of emissions unit P002, compliance with the annual hours of operation restriction shall be based on a rolling, 12-month summation.

5. Continuous **NO_x** Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous **NO_x** 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.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 6, and 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

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EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 6 and 40 CFR Part 75.

6. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
7. Continuous CO Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous CO 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 4 and 6 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. 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 CO 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 4 and 6.

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

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9. Continuous O₂ or CO₂ Monitoring - Certified Systems
Statement of Certification

Prior to the installation of the continuous O₂ or CO₂ 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 3 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 3, and 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 O₂ or CO₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 3 and 40 CFR Part 75.

10. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ or CO₂ monitoring system designed to ensure continuous valid and representative readings of O₂ or CO₂ emissions in units of the applicable standard. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ or CO₂ monitoring system must be kept on site and available for inspection during regular office hours.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for each emissions unit:
- a. The natural gas usage rate for each month (in standard cubic feet).
2. The permittee shall maintain monthly records of the following information for each emissions unit:
- a. Hours of operation of the turbine

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- b. Hours of operation of the duct burners
- c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the hours of operation.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative hours of operation for each calendar month.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements of the appropriate sections specified in 40 CFR Part 60.13 and 40 CFR Part 75.

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

4. The permittee shall operate and maintain equipment to continuously monitor and record CO 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 .

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

5. The permittee shall operate and maintain equipment to continuously monitor and record O₂ or CO₂ from this emissions unit in percent O₂ or CO₂. Such continuous monitoring and recording equipment shall comply with the requirements of the appropriate sections specified in 40 CFR Part 60.13 and 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous O₂ or CO₂ monitoring system including, but not limited to, percent O₂ or CO₂ on an instantaneous (one-minute) basis, emissions of O₂ or CO₂ 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.

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6. The permittee shall install, calibrate, operate, and maintain continuous monitoring systems to monitor and record the average hourly fuel consumption of the combustion turbine and duct burner. The fuel flow monitoring systems comply with the requirements of 40 CFR Part 75, Appendix D.
7. The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in the combustion turbine and duct burner. Fuel sampling and analysis shall be conducted according to the procedures and at the frequency specified by 40 CFR Part 75, Appendix D.
8. The permittee shall determine the hourly heat input rate to the combustion turbine and duct burner from the fuel flow rate as determined in term A.III.6 and fuel gross calorific value as determined in term A.III.7. The heat input rate shall be calculated in accordance with the procedures in Section 5 of 40 CFR Part 75, Appendix F.
9. The permittee shall maintain records of the following information for each emissions unit:
 - a. Number of startups, and the duration of each startup.
 - b. Number of shutdowns, and the duration of each shutdown.
10. The permittee shall maintain hourly records of the following information for this emissions unit:

in lb(s)/hr emissions rate for NO_x and CO as obtained from terms III.3. and 4. based upon an hourly averaging period as allowed in the appropriate sections of 40 CFR Part 60.
11. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the operating hours;
 - b. during the first 12 calendar months of operation, the permittee shall record the cumulative operating hours for each calendar month; and
 - c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the operating hours.
 - d. during the first 12 calendar months of operation, the cumulative NO_x and CO emissions, in tons (i.e., $\frac{b \times \text{term } 10}{2,000}$, for each pollutant); and
 - e. beginning after the first 12 calendar months of operation, the rolling, 12-month NO_x and CO emissions, in tons (i.e., $\frac{c \times \text{term } 10}{2,000}$, for each pollutant).

12. PSD REQUIREMENTS

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The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Appeals Board of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:

United States Environmental Protection Agency
Environmental Appeals Board
401 M Street, SW (MC-113do)
Washington, DC 20460

IV. Reporting Requirements

- 1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurred.
- 2.** The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
- 3.** 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 NO_x values in excess of the applicable limits specified in 40 CFR Part 76 and any limitations specified in the terms and

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

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

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.

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.
5. 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 **CO** values in excess of any applicable limitation(s) specified in OAC Chapter 3745-21, 40 CFR Part 60, or any limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total **CO** emissions for the calendar quarter (in tons).

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

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

6. Pursuant to 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 all instances of continuous O₂ or CO₂ 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 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 be included in the quarterly report. These quarterly 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.
7. The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per standard cubic foot. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
8. The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of condition II.3. above. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
9. In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for emissions unit P001 in accordance with this permit.
10. This emissions unit is subject to the applicable provisions of Subpart Da and GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

- a. construction date (no later than 30 days after such date);
- b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

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- 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
Southeast District Office
Division of Air Pollution Control
2195 Front Street
Logan, Ohio 43138

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with the NO_x and CO outlet concentration, and the mass emissions limitations for NO_x,* CO, Formaldehyde, VOC PM, and visible emission limitations.
 - c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for NO_x, Method 20 of 40 CFR Part 60, Appendix A; for PM, Method 5 of 40 CFR Part 60, Appendix A; for visible emission limitations, Method 9, 40 CFR Part 60 Appendix A; for Formaldehyde, SW-846 Method 0011; 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.

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- d. The testing shall be conducted while the emissions unit is operating at or near its maximum capacity with and without duct burner firing, unless otherwise specified or approved by Ohio EPA or local air agency.
- e. 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, Southeast 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, Southeast District Office refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA, Southeast 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.
- g. 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, Southeast 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, Southeast District Office.

* Using the test methods and procedures required under 40 CFR Part 60.335.

- 2. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation

NO_x emissions shall not exceed 3.5 ppmvd at 15% Oxygen
 24.7 lbs/hr without duct burner firing
 32.3 lbs/hr with duct burner firing
 157.5 tons per year, which includes 32.2 tons for startups and shutdowns

Applicable Compliance Method

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition V.1 and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition III.3. based upon an hourly averaging period as allowed in 40 CFR Part 60. Compliance with the annual emission limitation shall be determined by the record keeping required in condition III. 1., 2., and 3. The annual emissions associated with

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start-up and shut-down shall be determined by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

b. Emission Limitation

PM emissions shall not exceed
19.0 lbs/hr without duct burner firing
28.0 lbs/hr with duct burner firing
103.5 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

c. Emission Limitation

SO₂ emissions shall not exceed
11.2 lbs/hr without duct burner firing
14.5 lbs/hr with duct burner firing
56.5 tons per year

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Applicable Compliance Method

Compliance with the hourly emission limitation shall be determined by the record keeping required in condition III. 1., 2., and 8. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

d. Emission Limitation

VOC emissions shall not exceed
3.0 lbs/hr without duct burner firing
19.6 lbs/hr with duct burner firing
63.1 tons per year, which includes 12.6 tons for startups and shutdowns

Applicable Compliance Method

Compliance with the lbs/hr limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton. The annual emissions associated with start-up and shut-down shall be determined by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

e. Emission Limitation

CO emissions shall not exceed
10 ppmvd at 15% Oxygen without duct burner firing
14 ppmvd at 15% Oxygen with duct burner firing
43.0 lbs/hr without duct burner firing
78.0 lbs/hr with duct burner firing
453.7 tons per year, which includes 186.6 tons for startups and shutdowns

Applicable Compliance Method

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition V.1 and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition III.4. based upon an hourly averaging period as allowed in 40 CFR Part 60. Compliance with the annual emission limitation shall be determined by the record keeping required in condition III. 1., 2., and 4. The annual emissions associated with start-up and shut-down shall be determined by the record keeping required in condition III. 9. using the lbs/ start-up and shut-down values in condition III.3.

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f. Emission Limitation

ammonia (NH₃) emissions shall not exceed
26.6 lbs/hr without duct burner firing
34.6 lbs/hr with duct burner firing
134.5 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor of 0.0136 pound of ammonia/MMBtu heat input (emission factor supplied by the permittee) by the maximum Btu rating. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

g. Emission Limitation

Formaldehyde emissions shall not exceed
0.8 lbs/hr without duct burner firing
0.82 lbs/hr with duct burner firing
3.6 tons per year

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing in condition V.1. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

h. Emission Limitation

Sulfuric acid (H₂SO₄) emissions shall not exceed
1.7 lbs/hr without duct burner firing
2.2 lbs/hr with duct burner firing
8.6 tons per year

Applicable Compliance Method

Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the

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emission factor of 0.0017 pound of sulfuric acid/MM Btu heat input (emission factor supplied by the permittee) by the maximum Btu rating. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

i. Emission Limitation

Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average.

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.

VI. Miscellaneous Requirements

1. In accordance with good engineering practices, the SCR unit on emissions unit P002 shall be installed, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation & maintenance manual, as provided by the manufacturer.

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - 170 MW GE 7FA natural gas-fired dry low NOx (DLN) combustion turbine with duct firing operating in combined cycle mode controlled by Selective Catalytic Reduction (SCR)	NONE	NONE

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

NONE

III. Monitoring and/or Recordkeeping Requirements

NONE

IV. Reporting Requirements

NONE

V. Testing Requirements

NONE

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VI. Miscellaneous Requirements

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NONE