



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
DEFIANCE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 03-13247

Fac ID: 0320010006

DATE: 10/28/2004

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

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

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 10/28/2004
Effective Date: 10/28/2004**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-13247

Application Number: 03-13247
Facility ID: 0320010006
Permit Fee: **\$600**
Name of Facility: Toledo Edison, Richland Peaking Station
Person to Contact: Robert Willaims
Address: 76 South Main Street, 13th Floor
Akron, OH 44308

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

Description of proposed emissions unit(s):
Installation of three Natural Gas/No 2 Fuel oil combustion turbines (130 MW).

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


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

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

calendar quarters. See B.9 below if no deviations occurred during the quarter.

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

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

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

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

10. Permit To Operate Application

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

11. Best Available Technology

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

12. Air Pollution Nuisance

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

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

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

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

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

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

6. Public Disclosure

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

7. Applicability

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

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

8. Construction Compliance Certification

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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>
NO _x	238.7
CO	195.4
VOC	16.9
PE	35.0
SO ₂	65.3
Formaldehyde	3.6

Toledo Edison, Richland Peaking Station
PTI Application: 03-13247
Modification Issued: 10/28/2004

Facility ID: 0320010006

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

Terms and conditions A.1 through A.10 apply to emissions units B001, B002, and B003 at Toledo Edison's Richland Peaking Station identified by Ohio EPA as premise number 0320010006.

1. There are three existing 327 mmBtu/hr natural gas/distillate oil-fired turbines (B001, B002, and B003) located on an adjacent property under premise number 0320010006. These turbines are owned by Toledo Edison and make this one contiguous facility. For the purposes of demonstrating that these turbines have never been subject to PSD, the last ten years of operational data was submitted. The highest year for nitrogen oxides emissions was 1994 at 14.01 tons which is far below any major source threshold.

The maximum annual fuel usage restrictions for emissions units B001, B002, and B003, combined, shall not exceed 445,000,000 cubic feet of natural gas and 2,080,000 gallons of distillate oil (number 1 and number 2 fuel oil, kerosene and diesel fuel, but excluding number 4 fuel oil), based upon a rolling, 12-month summation of the monthly fuel usage rates.

The company shall not use a combination of the above fuel usage that exceeds 100.35 tons of nitrogen oxides emissions per rolling, 12-month period based on emission factors of 0.88 lb of nitrogen oxides /mmBtu for distillate oil and 0.32 lb of nitrogen oxides/mmBtu for natural gas.

The permittee has existing records for the rolling, 12-month summation of nitrogen oxides emissions in lieu of establishing first year monthly fuel usage restrictions.

2. Emissions units B001, B002, and B003 shall each be limited to 165.14 lbs of sulfur dioxide (SO₂) emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 72.55 tons of SO₂ emissions/year, based upon a rolling, 12-month summation of the monthly SO₂ emissions.
3. Emissions units B001, B002, and B003 shall each be limited to 35.97 lbs of carbon monoxide (CO) emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 25.09 tons of CO emissions/year, based upon a rolling, 12-month summation of the monthly CO emissions.
4. Emissions units B001, B002, and B003 shall each be limited to 7.85 lbs of volatile organic compound (VOC) emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 5.47 tons of VOC emissions/year, based upon a rolling, 12-month summation of the monthly VOC emissions.
5. Emissions units B001, B002, and B003 shall each be limited to 287.76 lbs of nitrogen oxides (NO_x) emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 100.35 tons of NO_x emissions/year, based upon a rolling, 12-month summation of the monthly NO_x emissions.
6. Emissions units B001, B002, and B003 shall each be limited to 12.43 lbs of particulate emissions (PE)/hr. Emissions units B001, B002, and B003, combined, shall be limited to 5.46 tons of

Toledo Edision, Richland Peaking Station

Facility ID: 0320010006

PTI Application: 03-13247

Modification Issued: 10/28/2004

PE/year, based upon a rolling, 12-month summation of the monthly particulate emissions.

7. The permittee shall maintain monthly records of the following information for emissions units B001, B002, and B003, combined:
 - a. The total amount of natural gas and distillate oil fired, in cubic feet and gallons, respectively.
 - b. The rolling, 12-month summations of the natural gas and distillate oil usage rates, in cubic feet and gallons, respectively.
 - c. The total SO₂, CO, VOC, NO_x, and particulate emissions, in pounds or tons.
 - d. The rolling, 12-month summations of the SO₂, CO, VOC, NO_x, and particulate emissions, in tons .
8. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as ASTM method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

9. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage and emission limitations. The reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.
10. Emission Limitations:

Emissions units B001, B002, and B003 shall each be limited to 165.14 lbs of SO₂ emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 72.55 tons of SO₂ emissions/year, based upon a rolling, 12-month summation of the monthly SO₂ emissions.
Applicable Compliance Methods:

Toledo Edison, Richland Peaking Station**Facility ID: 0320010006****PTI Application: 03-13247****Modification Issued: 10/28/2004**

When firing distillate oil, compliance with the hourly SO₂ emission limitation may demonstrated by multiplying the emission factor of 1.01S lb/mmBtu (where S = the percent sulfur in the fuel) by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). When firing natural gas, compliance with the hourly SO₂ emission limitation may demonstrated by multiplying the emission factor of 0.94S lb/mmBtu (where S = the percent sulfur in the fuel) by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). These emission factors are specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1, Table 3.1-2a (04/00). If required, the permittee shall demonstrate compliance with the hourly SO₂ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Compliance with the rolling, 12-month emission limitation shall be based upon the records required pursuant to Facility Term and Condition A.7.

Emission Limitations:

Emissions units B001, B002, and B003 shall each be limited to 35.97 lbs of CO emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 25.09 tons of CO emissions/year, based upon a rolling, 12-month summation of the monthly CO emissions.

Applicable Compliance Methods:

When firing distillate oil, compliance with the hourly CO emission limitation may demonstrated by multiplying the emission factor of 0.0033 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). When firing natural gas, compliance with the hourly CO emission limitation may demonstrated by multiplying the emission factor of 0.082 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). These emission factors are specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1, Table 3.1-1 (04/00). If required, the permittee shall demonstrate compliance with the hourly CO emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Compliance with the rolling, 12-month emission limitation shall be based upon the records required pursuant to Facility Term and Condition A.7.

Emission Limitations:

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

Applicable Compliance Methods:

When firing distillate oil, compliance with the hourly VOC emission limitation may demonstrated by multiplying the emission factor of 0.00041 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). When firing natural gas, compliance with the hourly VOC

Toledo Edison, Richland Peaking Station

Facility ID: 0320010006

PTI Application: 03-13247

Modification Issued: 10/28/2004

emission limitation may demonstrated by multiplying the emission factor of 0.0021 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). These emission factors are specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1, Table 3.1-2a (04/00). If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Compliance with the rolling, 12-month emission limitation shall be based upon the records required pursuant to Facility Term and Condition A.7.

Emission Limitations:

Emissions units B001, B002, and B003 shall each be limited to 287.76 lbs of NO_x emissions/hr. Emissions units B001, B002, and B003, combined, shall be limited to 100.35 tons of NO_x emissions/year, based upon a rolling, 12-month summation of the monthly NO_x emissions.

Applicable Compliance Methods:

When firing distillate oil, compliance with the hourly NO_x emission limitation may demonstrated by multiplying the emission factor of 0.88 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). When firing natural gas, compliance with the hourly NO_x emission limitation may demonstrated by multiplying the emission factor of 0.32 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). These emission factors are specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1, Table 3.1-1 (04/00). If required, the permittee shall demonstrate compliance with the hourly NO_x emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

Compliance with the rolling, 12-month emission limitation shall be based upon the records required pursuant to Facility Term and Condition A.7.

Emission Limitations:

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

Applicable Compliance Methods:

Toledo Edison, Richland Peaking Station

Facility ID: 0320010006

PTI Application: 03-13247

Modification Issued: 10/28/2004

When firing distillate oil, compliance with the hourly PE limitation may demonstrated by multiplying the emission factor of 0.0043 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). When firing natural gas, compliance with the hourly PE limitation may demonstrated by multiplying the emission factor of 0.0019 lb/mmBtu by the emissions unit's maximum rated heat input capacity (327 mmBtu/hr). These emission factors are specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1, Table 3.1-2a (04/00). If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Compliance with the annual emission limitation shall be based upon the records required pursuant to Facility Term and Condition A.7.

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

None.

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

A. State and Federally Enforceable Section

I. Applicable Emission 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 emission 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 - 1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	OAC rule 3745-31-05(A)(3)

		<u>Applicable Emission Limitations/Control Measures</u>
OAC rule 3745-31-05(C)		Particulate emissions (PE) shall not exceed 38.0 lbs/hr. See A.I.2.j below.
	OAC rule 3745-18-06(F)	Nitrogen oxides (NO _x) emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.
	OAC rule 3745-17-11(B)(4)	During startup/shutdown periods, NO _x emissions shall not exceed 300 lbs/hr. See A.I.2.g below.
	OAC rule 3745-17-07(A)	NO _x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.
	40 CFR Part 60, Subpart GG	NO _x emissions shall not exceed 42 ppmvd NO _x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.
	OAC rule 3745-23-06(B)	Sulfur dioxide (SO ₂) emissions shall not exceed 71.0 lbs/hr.
	OAC rule 3745-21-08(B)	Carbon monoxide (CO) emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.
	40 CFR Part 75	During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.
		Volatile organic compound (VOC) emissions shall not exceed 18.4 lbs /hr

Toledo Edison, Richland Peaking Station

Facility ID: 0320010006

PTI Application: 03 13247

Modif

Emissions Unit ID: **P001**

Formaldehyde emissions shall not exceed 3.9 lbs/hr.	summation of the monthly VOC emissions.
Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.	NOx emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NOx emissions.
Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-11(B)(4), 3745-18-06(F), 3745-21-08(B), 3745-23-06(B), 3745-31-05(C), 40 CFR Part 60, Subpart GG, and 40 CFR Part 75.	Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions.
See A.I.2.e, A.II.1, and A.II.2 below.	PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, * as a rolling, 12-month summation of the monthly PE emissions.
SO ₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 tons/yr (TPY), as a rolling, 12-month summation of the monthly SO ₂ emissions.	See A.I.2.h below.
CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule. See A.I.2.a through A.I.2.d, A.I.2.h, and A.IV.1 below. See A.I.2.i below. See A.I.2.i. below.
VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9 TPY, as a rolling, 12-month	See Part I, Term and Condition A.4.

19

Toledo

PTI A

Modification Issued: 10/28/2004

Emissions Unit ID: P001

2. Additional Terms and Conditions

- 2.a** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR Part 60.334(b), the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.b** In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.c** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for this emissions unit in accordance with the requirements specified in this permit.
- 2.d** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and continuous emissions monitoring requirements for this emissions unit in accordance with the requirements specified in this permit.
- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of clean burning fuels, the use of water injection, fuel usage restrictions and compliance with the specified emission limitations and applicable rules identified above.
- 2.f** The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. Therefore, it is not necessary to develop any additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these emission limitations.
- 2.g** Startup periods shall not exceed 45 minutes in duration and shutdown periods shall not exceed 45 minutes in duration. If a more accurate NO_x emission rate for startup/shutdown periods is established based upon the continuous monitoring system data it may be used instead of the emission rate specified above (see A.I.1 above) with prior approval from the Ohio EPA.
- 2.h** The emission limitation(s) specified by this rule is (are) less stringent than the emission limitation(s) established pursuant to OAC rule 3745-31-05(A)(3).
- 2.i** The permittee has satisfied the "best available control techniques and operating practices"

Toledo Edison, Richland Peaking Station

PTI Application: 03 13247

Modif

Facility ID: 0320010006

Emissions Unit ID: **P001**

required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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

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

- 2.j** Total PM10 emissions were evaluated and did not trigger any additional federal requirements. Therefore, the total PM10 emissions are being regulated as PE.

II. Operational Restrictions

1. The maximum annual fuel usage for emissions units P001, P002, and P003 combined, shall not exceed any of the following:
 - a. 5579.72 million cubic feet of natural gas per rolling, 12-month period;
 - b. 19.08 million gallons of distillate oil per rolling, 12-month period; and
 - c. 5579.72 million cubic feet of cumulative fuel usage per rolling, 12-month period;

where:

1.0 million cubic feet of natural gas = 1.0 million cubic feet of cumulative fuel usage
1.0 million gallons of distillate oil = 292.44 million cubic feet of cumulative fuel usage.

These emissions units have been in operation for greater than 12 months and, as such, records exist to demonstrate compliance with the rolling, 12-month fuel usage restrictions upon issuance of this permit.

2. The sulfur content of the distillate oil (number 1 and number 2 fuel oil, kerosene and diesel fuel, but excluding number 4 fuel oil) used in this emissions unit shall not exceed 0.05%, by weight. (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR Part 60, Subpart GG.)

3. The permittee shall fire only natural gas or distillate oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P001, P002, and P003, combined:
 - a. the quantity of natural gas fired, in million cubic feet;
 - b. the quantity of distillate oil fired, in million gallons;
 - c. the cumulative fuel usage (as described in section A.II.1.), in million cubic feet;
 - d. the rolling, 12-month summations of the natural gas, distillate oil, and cumulative fuel usage;
 - e. the total SO₂, VOC, formaldehyde, PE, and CO (including CO emissions from any startup or shutdown of the emissions units) emissions, in pounds or tons; and
 - f. the rolling, 12-month summations of the SO₂, VOC, formaldehyde, PE, and CO emissions, in tons.
2. The permittee shall maintain daily records of the following information for emissions units P001, P002, and P003, combined:
 - a. the total NO_x emissions, in pounds or tons, using the data from the nitrogen oxides continuous monitoring systems, including startup/shutdown periods;
 - b. the rolling, 365-day summation of the NO_x emissions, in tons;
 - c. for each day during which the permittee burns a prohibited fuel (i.e., one other than natural gas or distillate oil), the permittee shall maintain a record of the type and quantity of fuel burned in these emissions units; and
 - d. the duration of each startup and shutdown period.
3. The permittee shall monitor and record the sulfur content of the natural gas being burned in this emissions unit or make the demonstration that the sulfur content of the natural gas does not need to be monitored and recorded in accordance with the provisions specified in 40 CFR Part

Toledo Edison, Richland Peaking Station

PTI Application: 03 13247

Modif

Facility ID: 0320010006

Emissions Unit ID: **P001**

60.334(h). Owners, operators or fuel vendors may develop custom fuel schedules for the determination of the sulfur content based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR Parts 60.334(i)(3)(i) and 60.334(i)(3)(ii), these custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.

Analyses for the purpose of determining the sulfur content of the natural gas may be performed by the permittee, the fuel vendor, or any other qualified agency in accordance with the analytical methods specified in 40 CFR Part 60, Subpart GG, Section 60.335(d) or equivalent methods as approved by the Administrator.

4. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

Alternative 1:

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

Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as ASTM method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

5. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.

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

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the

Emissions Unit ID: P001

continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in ppmvd at 15% oxygen on an hourly average basis, NO_x in ppmvd at 15% oxygen as a 4-hr average, lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity checks or relative accuracy test audits and magnitude of manual calibration adjustments.

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

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

If the NO_x monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data specified in 40 CFR Part 75.

6. The permittee shall operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
7. The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

IV. Reporting Requirements

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

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

2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the following:

Modification Issued: 10/28/2004

- a. the rolling, 12-month natural gas, distillate oil, and cumulative fuel usage limitations;
- b. the rolling, 12-month SO₂, VOC, formaldehyde, PE, and CO emission limitations;
- c. the rolling, 365-day NO_x emission limitation;
- d. the distillate oil sulfur content restriction;
- e. the startup and shutdown period duration limitation; and
- f. each day when a prohibited fuel (i.e., one other than natural gas or distillate oil) was fired in emissions units P001, P002 or P003.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable emission limitations specified in the terms and conditions of this permit.

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

If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system 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 the NSPS, the source owner/operator is hereby advised of the requirement to report

Toledo Edison, Richland Peaking Station

PTI Application: 03 13247

Modif

Facility ID: 0320010006

Emissions Unit ID: P001

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);

Modification Issued: 10/28/2004

- c. Actual start-up date (within 15 days after such date); and,
- d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

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

and

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

Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

- 1. Emission Limitations:

NO_x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.

NO_x emissions shall not exceed 42 ppmvd NO_x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.

NO_x emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods, NO_x emissions shall not exceed 300 lbs/hr.

Applicable Compliance Methods:

Compliance with the hourly and ppmvd NO_x emission limitations shall be demonstrated based upon the data generated by the continuous NO_x emissions monitoring system specified in section A.III.5.

Modification Issued: 10/28/2004

If required, the permittee shall demonstrate compliance with the hourly (except for the startup/shutdown emission limitation) and ppmvd NO_x emission limitations through emission tests performed in accordance with section A.V.5 below.

2. Emission Limitations:

PE shall not exceed 38.0 lbs/hr.

SO₂ emissions shall not exceed 71.0 lbs/hr.

CO emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.

VOC emissions shall not exceed 18.4 lbs/hr.

Formaldehyde emissions shall not exceed 3.9 lbs/hr.

Applicable Compliance Method:

The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations were established using the emissions unit's maximum rated heat input capacity and emission factors provided by the permittee and/or the manufacturer of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly (except for the CO startup/shutdown emission limitation) emission limitations through emission tests performed in accordance with section A.V.5 below.

3. Emission Limitations:

Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule.

Applicable Compliance Methods:

Emissions Unit ID: **P001**

When firing natural gas, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

When firing distillate oil, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

4. Emission Limitations:

SO₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 TPY, as a rolling, 12-month summation of the monthly SO₂ emissions.

CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.

VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9 TPY, as a rolling, 12-month summation of the monthly VOC emissions.

NO_x emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NO_x emissions.

Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions.

PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, as a rolling, 12-month summation of the monthly PE emissions.

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined based upon the records required pursuant to sections A.III.1 and A.III.2.

5. 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 to demonstrate compliance with the NO_x hourly and ppmvd emission limitations, and the CO, VOC, PE, formaldehyde, and SO₂* hourly emission limitations.
 - b. The following test method(s) shall be employed to demonstrate compliance with the NO_x, CO, VOC, PE, formaldehyde, and SO₂ emission limitations: for NO_x, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A, for PE Methods 1 through 5 of 40 CFR Part 60, Appendix A, for SO₂ Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, for VOC Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A, for formaldehyde, Methods 1 through 4 and 323 of 40 CFR Part 60, Appendix A and for CO Methods 1

through 4 and 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.

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

* In lieu of SO₂ emission testing, the permittee may use the sulfur content data from section A.III in conjunction with the corresponding fuel usage rates to determine the SO₂ mass emissions.

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

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

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

VI. Miscellaneous Requirements

1. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

B. State Only Enforceable Section

I. Applicable Emission 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 emission 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 Emission Limitations/Control Measures</u>
P001 - 1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	Air Toxic Policy	N/A

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the 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 from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde
 TLV (ug/m3): 272.69
 Maximum Hourly Emission Rate (lbs/hr): 11.7
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.00
 MAGLC (ug/m3): 6.49

35

Toledo

PTI A

Modification Issued: 10/28/2004

Emissions Unit ID: **P001**

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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

Toledo Edison, Richland Peaking Station

PTI Application: 03 13247

Modif

Facility ID: 0320010006

Emissions Unit ID: **P001**

show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None.

38

Toledo

PTI A

Modification Issued: 10/28/2004

Emissions Unit ID: **P001**

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 Emission 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 emission 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 - 1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	OAC rule 3745-31-05(A)(3)

		<u>Applicable Emission Limitations/Control Measures</u>
OAC rule 3745-31-05(C)		Particulate emissions (PE) shall not exceed 38.0 lbs/hr. See A.I.2.j below.
	OAC rule 3745-18-06(F)	Nitrogen oxides (NO _x) emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.
	OAC rule 3745-17-11(B)(4)	During startup/shutdown periods, NO _x emissions shall not exceed 300 lbs/hr. See A.I.2.g below.
	OAC rule 3745-17-07(A)	NO _x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.
	40 CFR Part 60, Subpart GG	NO _x emissions shall not exceed 42 ppmvd NO _x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.
	OAC rule 3745-23-06(B)	Sulfur dioxide (SO ₂) emissions shall not exceed 71.0 lbs/hr.
	OAC rule 3745-21-08(B)	Carbon monoxide (CO) emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.
	40 CFR Part 75	During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.
		Volatile organic compound (VOC) emissions shall not exceed 18.4 lbs /hr

Formaldehyde emissions shall not exceed 3.9 lbs/hr.	VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9	See A.I.2.i below.
Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.	TPY, as a rolling, 12-month summation of the monthly VOC emissions.	See A.I.2.i. below.
Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-11(B)(4), 3745-18-06(F), 3745-21-08(B), 3745-23-06(B), 3745-31-05(C), 40 CFR Part 60, Subpart GG, and 40 CFR Part 75.	NOx emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NOx emissions.	See Part I, Term and Condition A.4.
See A.I.2.e, A.II.1, and A.II.2 below.	Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions.	
SO ₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 tons/yr (TPY), as a rolling, 12-month summation of the monthly SO ₂ emissions.	PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, * as a rolling, 12-month summation of the monthly PE emissions.	
CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.	See A.I.2.h below.	
	See A.I.2.h below.	
	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule.	
	See A.I.2.a through A.I.2.d, A.I.2.h, and A.IV.1 below.	

Toledo Edison, Richland Peaking Station

DTI Application: 03 13247

Facility ID: 0320010006

Emissions Unit ID: P002

2. Additional Terms and Conditions

- 2.a** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR Part 60.334(b), the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.b** In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.c** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for this emissions unit in accordance with the requirements specified in this permit.
- 2.d** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and continuous emissions monitoring requirements for this emissions unit in accordance with the requirements specified in this permit.
- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of clean burning fuels, the use of water injection, fuel usage restrictions and compliance with the specified emission limitations and applicable rules identified above.
- 2.f** The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. Therefore, it is not necessary to develop any additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these emission limitations.
- 2.g** Startup periods shall not exceed 45 minutes in duration and shutdown periods shall not exceed 45 minutes in duration. If a more accurate NO_x emission rate for startup/shutdown periods is established based upon the continuous monitoring system data it may be used instead of the emission rate specified above (see A.I.1 above) with prior approval from the Ohio EPA.
- 2.h** The emission limitation(s) specified by this rule is (are) less stringent than the emission limitation(s) established pursuant to OAC rule 3745-31-05(A)(3).
- 2.i** The permittee has satisfied the "best available control techniques and operating practices"

required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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

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

- 2.j** Total PM10 emissions were evaluated and did not trigger any additional federal requirements. Therefore, the total PM10 emissions are being regulated as PE.

II. Operational Restrictions

1. The maximum annual fuel usage for emissions units P001, P002, and P003 combined, shall not exceed any of the following:
 - a. 5579.72 million cubic feet of natural gas per rolling, 12-month period;
 - b. 19.08 million gallons of distillate oil per rolling, 12-month period; and
 - c. 5579.72 million cubic feet of cumulative fuel usage per rolling, 12-month period;

where:

1.0 million cubic feet of natural gas = 1.0 million cubic feet of cumulative fuel usage
1.0 million gallons of distillate oil = 292.44 million cubic feet of cumulative fuel usage.

These emissions units have been in operation for greater than 12 months and, as such, records exist to demonstrate compliance with the rolling, 12-month fuel usage restrictions upon issuance of this permit.

Emissions Unit ID: P002

2. The sulfur content of the distillate oil (number 1 and number 2 fuel oil, kerosene and diesel fuel, but excluding number 4 fuel oil) used in this emissions unit shall not exceed 0.05%, by weight. (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR Part 60, Subpart GG.)
3. The permittee shall fire only natural gas or distillate oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P001, P002, and P003, combined:
 - a. the quantity of natural gas fired, in million cubic feet;
 - b. the quantity of distillate oil fired, in million gallons;
 - c. the cumulative fuel usage (as described in section A.II.1.), in million cubic feet;
 - d. the rolling, 12-month summations of the natural gas, distillate oil, and cumulative fuel usage;
 - e. the total SO₂, VOC, formaldehyde, PE, and CO (including CO emissions from any startup or shutdown of the emissions units) emissions, in pounds or tons; and
 - f. the rolling, 12-month summations of the SO₂, VOC, formaldehyde, PE, and CO emissions, in tons.
2. The permittee shall maintain daily records of the following information for emissions units P001, P002, and P003, combined:
 - a. the total NO_x emissions, in pounds or tons, using the data from the nitrogen oxides continuous monitoring systems, including startup/shutdown periods;
 - b. the rolling, 365-day summation of the NO_x emissions, in tons;
 - c. for each day during which the permittee burns a prohibited fuel (i.e., one other than natural gas or distillate oil), the permittee shall maintain a record of the type and quantity of fuel burned in these emissions units; and
 - d. the duration of each startup and shutdown period.
3. The permittee shall monitor and record the sulfur content of the natural gas being burned in this emissions unit or make the demonstration that the sulfur content of the natural gas does not need to be monitored and recorded in accordance with the provisions specified in 40 CFR Part 60.334(h). Owners, operators or fuel vendors may develop custom fuel schedules for the

determination of the sulfur content based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR Parts 60.334(i)(3)(i) and 60.334(i)(3)(ii), these custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.

Analyses for the purpose of determining the sulfur content of the natural gas may be performed by the permittee, the fuel vendor, or any other qualified agency in accordance with the analytical methods specified in 40 CFR Part 60, Subpart GG, Section 60.335(d) or equivalent methods as approved by the Administrator.

4. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

Alternative 1:

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

Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as ASTM method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

5. The permittee shall operate and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.

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

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NOx monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous NOx monitoring system: emissions of NOx in ppmvd at 15% oxygen on an hourly average basis, NOx in ppmvd at 15% oxygen as a 4-hr average, lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity checks or relative accuracy test audits and magnitude of manual calibration adjustments.

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

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

If the NOx monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data specified in 40 CFR Part 75.

6. The permittee shall operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
7. The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

IV. Reporting Requirements

1. The permittee shall submit quarterly reports that identify each period during which an exemption

Emissions Unit ID: P002

for ice-fog provided in 40 CFR Part 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.

2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the following:
 - a. the rolling, 12-month natural gas, distillate oil, and cumulative fuel usage limitations;
 - b. the rolling, 12-month SO₂, VOC, formaldehyde, PE, and CO emission limitations;
 - c. the rolling, 365-day NO_x emission limitation;
 - d. the distillate oil sulfur content restriction;
 - e. the startup and shutdown period duration limitation; and
 - f. each day when a prohibited fuel (i.e., one other than natural gas or distillate oil) was fired in emissions units P001, P002 or P003.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable emission limitations specified in the terms and conditions of this permit.

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

If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system 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 the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

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

and

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

Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

1. Emission Limitations:

NO_x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.

NO_x emissions shall not exceed 42 ppmvd NO_x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.

NOx emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods, NOx emissions shall not exceed 300 lbs/hr.

Applicable Compliance Methods:

Compliance with the hourly and ppmvd NOx emission limitations shall be demonstrated based upon the data generated by the continuous NOx emissions monitoring system specified in section A.III.5.

If required, the permittee shall demonstrate compliance with the hourly (except for the startup/shutdown emission limitation) and ppmvd NOx emission limitations through emission tests performed in accordance with section A.V.5 below.

2. Emission Limitations:

PE shall not exceed 38.0 lbs/hr.

SO₂ emissions shall not exceed 71.0 lbs/hr.

CO emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.

VOC emissions shall not exceed 18.4 lbs/hr.

Formaldehyde emissions shall not exceed 3.9 lbs/hr.

Applicable Compliance Method:

The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations were established using the emissions unit's maximum rated heat input capacity and emission factors provided by the permittee and/or the manufacturer of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly (except for the CO startup/shutdown emission limitation) emission limitations through emission tests performed in accordance with section A.V.5 below.

3. Emission Limitations:

Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule.

Applicable Compliance Methods:

When firing natural gas, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

When firing distillate oil, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

4. Emission Limitations:

SO₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 TPY, as a rolling, 12-month summation of the monthly SO₂ emissions.

CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.

VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9 TPY, as a rolling, 12-month summation of the monthly VOC emissions.

NO_x emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NO_x emissions.

Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions.

PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, as a rolling, 12-month summation of the monthly PE emissions.

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined based upon the records required pursuant to sections A.III.1 and A.III.2.

5. 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 to demonstrate compliance with the NO_x hourly and ppmvd emission limitations, and the CO, VOC, PE, formaldehyde, and SO₂* hourly emission limitations.
- b. The following test method(s) shall be employed to demonstrate compliance with the NO_x, CO, VOC, PE, formaldehyde, and SO₂ emission limitations: for NO_x, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A, for PE Methods 1 through 5 of 40 CFR Part 60, Appendix A, for SO₂ Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, for

Emissions Unit ID: P002

VOC Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A, for formaldehyde, Methods 1 through 4 and 323 of 40 CFR Part 60, Appendix A and for CO Methods 1 through 4 and 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.

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

* In lieu of SO₂ emission testing, the permittee may use the sulfur content data from section A.III in conjunction with the corresponding fuel usage rates to determine the SO₂ mass emissions.

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

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

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

VI. Miscellaneous Requirements

1. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

B. State Only Enforceable Section**I. Applicable Emission 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 emission 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 Emission Limitations/Control Measures</u>
1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	Air Toxic Policy	N/A

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the 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 from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration

(MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde

TLV (ug/m3): 272.69

Maximum Hourly Emission Rate (lbs/hr): 11.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.00

MAGLC (ug/m3): 6.49

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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.

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 Emission 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 emission 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>
P003 - 1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-31-05(C)

Modification Issued: 10/28/2004

	<u>Applicable Emission Limitations/Control Measures</u>
OAC rule 3745-17-11(B)(4)	
OAC rule 3745-17-07(A)	Particulate emissions (PE) shall not exceed 38.0 lbs/hr. See A.I.2.j below.
40 CFR Part 60, Subpart GG	Nitrogen oxides (NO _x) emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.
OAC rule 3745-23-06(B)	During startup/shutdown periods, NO _x emissions shall not exceed 300 lbs/hr. See A.I.2.g below.
OAC rule 3745-21-08(B)	NO _x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.
40 CFR Part 75	NO _x emissions shall not exceed 42 ppmvd NO _x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.
	Sulfur dioxide (SO ₂) emissions shall not exceed 71.0 lbs/hr.
	Carbon monoxide (CO) emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.
	During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.
	Volatile organic compound (VOC) emissions shall not exceed 18.4 lbs /hr
	Formaldehyde emissions shall not exceed 3.9 lbs/hr.
OAC rule 3745-18-06(F)	

Modification Issued: 10/28/2004

Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.	emissions. NOx emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NOx emissions.
Compliance with this rule also includes compliance with OAC rules 3745-17-07(A), 3745-17-11(B)(4), 3745-18-06(F), 3745-21-08(B), 3745-23-06(B), 3745-31-05(C), 40 CFR Part 60, Subpart GG, and 40 CFR Part 75.	Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions. PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, * as a rolling, 12-month summation of the monthly PE emissions.
See A.I.2.e, A.II.1, and A.II.2 below.	
SO ₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 tons/yr (TPY), as a rolling, 12-month summation of the monthly SO ₂ emissions.	See A.I.2.h below. See A.I.2.h below.
CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule. See A.I.2.a through A.I.2.d, A.I.2.h, and A.IV.1 below.
VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9 TPY, as a rolling, 12-month summation of the monthly VOC	See A.I.2.i below. See A.I.2.i. below. See Part I, Term and Condition A.4.

Modification Issued: 10/28/2004**2. Additional Terms and Conditions**

- 2.a** In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR Part 60.334(b), the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.b** In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine, the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.
- 2.c** In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for this emissions unit in accordance with the requirements specified in this permit.
- 2.d** In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and continuous emissions monitoring requirements for this emissions unit in accordance with the requirements specified in this permit.
- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of clean burning fuels, the use of water injection, fuel usage restrictions and compliance with the specified emission limitations and applicable rules identified above.
- 2.f** The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. Therefore, it is not necessary to develop any additional monitoring, record keeping, and/or reporting requirements to ensure compliance with these emission limitations.
- 2.g** Startup periods shall not exceed 45 minutes in duration and shutdown periods shall not exceed 45 minutes in duration. If a more accurate NO_x emission rate for startup/shutdown periods is established based upon the continuous monitoring system data it may be used instead of the emission rate specified above (see A.I.1 above) with prior approval from the Ohio EPA.
- 2.h** The emission limitation(s) specified by this rule is (are) less stringent than the emission limitation(s) established pursuant to OAC rule 3745-31-05(A)(3).
- 2.i** The permittee has satisfied the "best available control techniques and operating practices"

Toledo Edison, Richland Peaking Station

DTI Application: 03 13247

Facility ID: 0320010006

Emissions Unit ID: **P003**

required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

Modification Issued: 10/28/2004

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

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

- 2.j** Total PM10 emissions were evaluated and did not trigger any additional federal requirements. Therefore, the total PM10 emissions are being regulated as PE.

II. Operational Restrictions

1. The maximum annual fuel usage for emissions units P001, P002, and P003 combined, shall not exceed any of the following:
 - a. 5579.72 million cubic feet of natural gas per rolling, 12-month period;
 - b. 19.08 million gallons of distillate oil per rolling, 12-month period; and
 - c. 5579.72 million cubic feet of cumulative fuel usage per rolling, 12-month period;

where:

1.0 million cubic feet of natural gas = 1.0 million cubic feet of cumulative fuel usage
1.0 million gallons of distillate oil = 292.44 million cubic feet of cumulative fuel usage.

These emissions units have been in operation for greater than 12 months and, as such, records exist to demonstrate compliance with the rolling, 12-month fuel usage restrictions upon issuance of this permit.

2. The sulfur content of the distillate oil (number 1 and number 2 fuel oil, kerosene and diesel fuel, but excluding number 4 fuel oil) used in this emissions unit shall not exceed 0.05%, by weight. (This limit is at the threshold limit for acid rain monitoring requirements and is more stringent than the sulfur limit required by 40 CFR Part 60, Subpart GG.)

3. The permittee shall fire only natural gas or distillate oil in this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units P001, P002, and P003, combined:
 - a. the quantity of natural gas fired, in million cubic feet;
 - b. the quantity of distillate oil fired, in million gallons;
 - c. the cumulative fuel usage (as described in section A.II.1.), in million cubic feet;
 - d. the rolling, 12-month summations of the natural gas, distillate oil, and cumulative fuel usage;
 - e. the total SO₂, VOC, formaldehyde, PE, and CO (including CO emissions from any startup or shutdown of the emissions units) emissions, in pounds or tons; and
 - f. the rolling, 12-month summations of the SO₂, VOC, formaldehyde, PE, and CO emissions, in tons.
2. The permittee shall maintain daily records of the following information for emissions units P001, P002, and P003, combined:
 - a. the total NO_x emissions, in pounds or tons, using the data from the nitrogen oxides continuous monitoring systems, including startup/shutdown periods;
 - b. the rolling, 365-day summation of the NO_x emissions, in tons;
 - c. for each day during which the permittee burns a prohibited fuel (i.e., one other than natural gas or distillate oil), the permittee shall maintain a record of the type and quantity of fuel burned in these emissions units; and
 - d. the duration of each startup and shutdown period.
3. The permittee shall monitor and record the sulfur content of the natural gas being burned in this emissions unit or make the demonstration that the sulfur content of the natural gas does not need to be monitored and recorded in accordance with the provisions specified in 40 CFR Part 60.334(h). Owners, operators or fuel vendors may develop custom fuel schedules for the determination of the sulfur content based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in 40 CFR Parts 60.334(i)(3)(i) and 60.334(i)(3)(ii), these custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.

Analyses for the purpose of determining the sulfur content of the natural gas may be performed by the permittee, the fuel vendor, or any other qualified agency in accordance with the analytical methods specified in 40 CFR Part 60, Subpart GG, Section 60.335(d) or equivalent methods as

Modification Issued: 10/28/2004

- approved by the Administrator.
4. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

Alternative 1:

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

Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as ASTM method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

5. The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and

Emissions Unit ID: **P003**

includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in ppmvd at 15% oxygen on an hourly average basis, NO_x in ppmvd at 15% oxygen as a 4-hr average, lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity checks or relative accuracy test audits and magnitude of manual calibration adjustments.

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

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

If the NO_x monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data specified in 40 CFR Part 75.

6. The permittee shall operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. The monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
7. The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

IV. Reporting Requirements

Modification Issued: 10/28/2004

1. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the following:
 - a. the rolling, 12-month natural gas, distillate oil, and cumulative fuel usage limitations;
 - b. the rolling, 12-month SO₂, VOC, formaldehyde, PE, and CO emission limitations;
 - c. the rolling, 365-day NO_x emission limitation;
 - d. the distillate oil sulfur content restriction;
 - e. the startup and shutdown period duration limitation; and
 - f. each day when a prohibited fuel (i.e., one other than natural gas or distillate oil) was fired in emissions units P001, P002 or P003.

The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable emission limitations specified in the terms and conditions of this permit.

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

Emissions Unit ID: P003

included in the quarterly report.

If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system 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 the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and,
 - d. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

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

and

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

Bowling Green, Ohio 43402

V. Testing Requirements/Compliance Methods Determinations

1. Emission Limitations:

NO_x emissions shall not exceed 25 ppmvd at 15% oxygen as a 4-hr average when firing natural gas, excluding startup/shutdown periods.

NO_x emissions shall not exceed 42 ppmvd NO_x at 15% oxygen as a 4-hr average when firing distillate oil, excluding startup/shutdown periods.

Modification Issued: 10/28/2004

NOx emissions shall not exceed 251.4 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods, NOx emissions shall not exceed 300 lbs/hr.

Applicable Compliance Methods:

Compliance with the hourly and ppmvd NOx emission limitations shall be demonstrated based upon the data generated by the continuous NOx emissions monitoring system specified in section A.III.5.

If required, the permittee shall demonstrate compliance with the hourly (except for the startup/shutdown emission limitation) and ppmvd NOx emission limitations through emission tests performed in accordance with section A.V.5 below.

2. Emission Limitations:

PE shall not exceed 38.0 lbs/hr.

SO₂ emissions shall not exceed 71.0 lbs/hr.

CO emissions shall not exceed 40.0 lbs/hr, excluding startup/shutdown periods.

During startup/shutdown periods CO emissions shall not exceed 281 lbs/hr.

VOC emissions shall not exceed 18.4 lbs/hr.

Formaldehyde emissions shall not exceed 3.9 lbs/hr.

Applicable Compliance Method:

The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations reflect the hourly potential emissions for this emissions unit. The hourly PE, SO₂, CO, VOC, and formaldehyde emission limitations were established using the emissions unit's maximum rated heat input capacity and emission factors provided by the permittee and/or the manufacturer of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly (except for the CO startup/shutdown emission limitation) emission limitations through emission tests performed in accordance with section A.V.5 below.

3. Emission Limitations:

Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average when firing natural gas.

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average when firing distillate oil, except as specified by rule.

Applicable Compliance Methods:

When firing natural gas, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

When firing distillate oil, compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

Modification Issued: 10/28/2004

4. Emission Limitations:

SO₂ emissions from emissions units P001, P002, and P003, combined, shall not exceed 65.3 TPY, as a rolling, 12-month summation of the monthly SO₂ emissions.

CO emissions from emissions units P001, P002, and P003, combined, shall not exceed 195.4 TPY, as a rolling, 12-month summation of the monthly CO emissions.

VOC emissions from emissions units P001, P002, and P003, combined, shall not exceed 16.9 TPY, as a rolling, 12-month summation of the monthly VOC emissions.

NO_x emissions from emissions units P001, P002, and P003, combined, shall not exceed 238.7 TPY, as a rolling, 365-day summation of the daily NO_x emissions.

Formaldehyde emissions from emissions units P001, P002, and P003, combined, shall not exceed 3.6 TPY, as a rolling, 12-month summation of the monthly formaldehyde emissions.

PE from emissions units P001, P002, and P003, combined, shall not exceed 35.0 TPY, as a rolling, 12-month summation of the monthly PE emissions.

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined based upon the records required pursuant to sections A.III.1 and A.III.2.

5. 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 to demonstrate compliance with the NO_x hourly and ppmvd emission limitations, and the CO, VOC, PE, formaldehyde, and SO₂* hourly emission limitations.

b. The following test method(s) shall be employed to demonstrate compliance with the NO_x, CO, VOC, PE, formaldehyde, and SO₂ emission limitations: for NO_x, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A, for PE Methods 1 through 5 of 40 CFR Part 60, Appendix A, for SO₂ Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A, for VOC Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A, for formaldehyde, Methods 1 through 4 and 323 of 40 CFR Part 60, Appendix A and for CO Methods 1 through 4 and 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.

Modification Issued: 10/28/2004

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

* In lieu of SO₂ emission testing, the permittee may use the sulfur content data from section A.III in conjunction with the corresponding fuel usage rates to determine the SO₂ mass emissions.

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

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

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

VI. Miscellaneous Requirements

1. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
2. Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

B. State Only Enforceable Section

I. Applicable Emission 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 emission 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 Emission Limitations/Control Measures</u>
P003 - 1673 mmBtu/hr natural gas-fired simple cycle turbine generator, with distillate oil backup, controlled with a water injection NOx reduction system	Air Toxic Policy	N/A

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the 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 from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde
 TLV (ug/m3): 272.69

Modification Issued: 10/28/2004

Maximum Hourly Emission Rate (lbs/hr): 11.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.00

MAGLC (ug/m3): 6.49

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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

Emissions Unit ID: **P003**

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.

Modification Issued: 10/28/2004

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.