



State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

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

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

**RE: FINAL PERMIT TO INSTALL
FRANKLIN COUNTY
Application No: 01-07864**

CERTIFIED MAIL

DATE: March 29, 2000

Columbus Power Partners, CPP Generating Facility
Attn: Ms. Becca Stone
150 West Jefferson Avenue Suite 1700
Detroit, MI 48226

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

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

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

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

Very truly yours,

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

cc: USEPA
DAPC, CDO

Tracy Freeman, PIC



**Permit To Install
Terms and
Conditions**

**Issue Date: March 29, 2000
Effective Date: March 29, 2000**

FINAL PERMIT TO INSTALL 01-07864

Application Number: 01-07864
APS Premise Number: 0125040945
Permit Fee: **\$4000**
Name of Facility: Columbus Power Partners, CPP Generating Facility
Person to Contact: Attn: Becca Stone
Address: 150 West Jefferson Avenue Suite 1700
Detroit, MI 48226

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2500 Jackson Pike Road
Columbus, Ohio**

Description of proposed emissions unit(s):
**TWO 110 MEGAWATT GAS AND OIL FIRED SIMPLE CYCLE TURBINES WITH A DRY LOW NOX
COMBUSTOR FOR GAS FIRING AND H2O INJECTION FOR OIL.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS - STATE/FEDERAL ONLY**A. State and Federally Enforceable Permit To Install General Terms and Conditions****1. Monitoring and Related Recordkeeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.11 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements.

Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

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

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress

reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

B. State Only Enforceable Permit To Install General Terms and Conditions**1. Compliance Requirements**

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

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

4. Air Pollution Nuisance

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

5. Termination of Permit To Install

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

6. Construction of New Sources(s)

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

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

7. Public Disclosure

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

8. Applicability

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

Columbus Power Partners, CPP Generating Facility

Facility ID: **0125040945**

PTI Application: **01-07864**

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9. 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.

10. Construction Compliance Certification

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

11. 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>
Particulate Matter	16.8
Nitrogen Oxides	150
Carbon Monoxide	26.6
VOC	10.0
Sulfur Dioxide	14.5

Columbus Power Partners, CPP Generating Facility

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Part II -Facility Specific Terms and Conditions

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

The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States 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.

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

None.

Part III - Special Terms and Conditions for Specific Emissions Unit(s)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

Natural gas-fired simple cycle, turbine generator with #2 fuel oil backup; 1,222 MMBtu/hr rated heat input when burning fuel oil and 1085 MMBtu/hr rated heat input when firing natural gas based on lower heating value of the fuels and at base load under ISO conditions; includes water injection NOx reduction system while firing #2 fuel oil and use of a dry low NOx (DLN) combustor while firing natural gas.

OAC rule 3745-31-05(D)

OAC rule 3745-23-06(B)

OAC rule 3745-21-08(B)

OAC rule 3745-17-07(A)(1)

40 CFR Part 75

40 CFR Part 60, Subpart
GG

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

OAC rule 3745-15-07

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

OAC rule 3745-18-06 (F)

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Emissions Unit ID: **B001**

Applicable Emissions
Limitations/Control
Measures

The facility shall combust oil that contains equal to or less than 0.05 percent by weight sulfur.*

The facility shall combust natural gas that contains equal to or less than 0.003 percent by weight sulfur.*

Sulfur dioxide (SO₂) emissions shall not exceed 0.05 pound per million Btu (MMBtu) of actual heat input and 61.1 lbs per hour while firing #2 fuel oil.*

SO₂ emissions shall not exceed 0.003 pound per MMBtu of actual heat input and 3.1 lbs per hour while firing natural gas.*

SO₂ emissions from B001 and B002 shall not exceed 14.5 tons per year (tpy) based on a rolling 12-month summation.

The carbon monoxide (CO) emissions from B001 shall not exceed 15.2 lbs per hour and 5 ppmvd CO at 15% oxygen while firing #2 fuel oil.*

The CO emissions from

B001 shall not exceed 13.3 lbs per hour and 5 ppmvd CO at 15% oxygen while firing natural gas.*

The CO emissions from B001 and B002 shall not exceed 26.6 tons per year based on a rolling 12-month summation.

The volatile organic compound (VOC) emissions from B001 shall not exceed 14.6 lbs per hour and 3 ppmvd VOC at 15% oxygen while firing #2 fuel oil.*

The VOC emissions from B001 shall not exceed 4.3 lbs per hour and 1 ppmvd VOC at 15% oxygen while firing natural gas.*

The VOC emissions from B001 and B002 shall not exceed 10.0 tons per year based on a rolling 12-month summation.

Particulate matter (PM) emissions shall not exceed 0.027 pound per MMBtu of actual heat input and 33.0 lbs per hour while firing #2 fuel oil.*

PM emissions shall not exceed 0.0061 pound per MMBtu of actual heat input and 6.6 lbs per hour while firing natural gas.*

PM emissions from B001 and B002 shall not exceed 16.8 tons per year based on a rolling 12-month summation.

The nitrogen oxide (NO_x) emissions from B001 shall not exceed 209.0 lbs per hour and 42 ppmvd NO_x at 15% oxygen while firing #2 fuel oil.*

The NO_x emissions from B001 shall not exceed 109.0 lbs per hour and 25 ppmvd NO_x at 15% oxygen while firing natural gas.*

The NO_x emissions from B001 and B002 when firing natural gas shall not exceed 120 tons per year based on a rolling 12-month summation.*

The NO_x emissions from B001 and B002 when firing #2 fuel oil shall not exceed 30 tons per year based on a rolling 12-month summation.*

Reference the special terms and conditions A.III.1., 2., 3., 8., and 9. for specific monitoring and record keeping requirements. Reference the special terms and conditions A.IV.7. for specific reporting requirements.

The NO_x emission limitations established pursuant to 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

The SO₂ emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

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Emissions Unit ID: **B001**

The SO₂ emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

The NO_x emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

The CO emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

The visible emissions opacity limitations for natural gas established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by this rule.

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule when combusting No.2 fuel oil.

The particulate emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the

emission limitations established by this rule.

See Part I, term B.4.

Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except for cold start-up and shutdown periods while firing natural gas.

Fuel oil use is limited to times when the permittee's natural gas supplier has declared an emergency natural gas curtailment and only if the other fuel oil usage restrictions contained in this permit are met.* See term II. 8

* For purposes of this permit, all limits denoted by * are OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The hourly emission limitations were established to reflect the potential to emit for B001. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

II. Operational Restrictions

1. The minimum stack height for emissions unit B001 shall be at least 120 feet above the ground.
2. Use of fuel oil is allowed only when the permittee's natural gas supplier invokes a natural gas curtailment under the conditions of the permittee's natural gas supplier contract. The use of fuel oil shall be limited to the extent of the curtailment.

Compliance Method

Compliance with this requirement shall be demonstrated by the maintenance of documentation from the natural gas supplier concerning the implementation of a natural gas curtailment.

3. The maximum annual #2 fuel oil usage rate for emissions units B001 and B002 shall not exceed 2,550,240 gallons per year, based upon a rolling, 12-month summation of the #2 fuel oil usage rate.

To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the #2 fuel oil usage rates specified in the following table:

<u>Month</u>	<u>Maximum Allowable #2 fuel oil Usage (gallons per year)</u>
1	1,275,120
1-2	1,912,680
1-3	2,295,216
1-4	2,323,552
1-5	2,351,888
1-6	2,380,224
1-7	2,408,560
1-8	2,436,896
1-9	2,465,232

Columbus Power Partners, CPP Generating Facility

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Emissions Unit ID: **B001**

1-10	2,493,568
1-11	2,521,904
1-12	2,550,240

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual #2 fuel oil usage rate limitation shall be based upon a rolling, 12-month summation of the usage rates.

4. The emissions of CO, PM, VOC and SO₂, from a combination of natural gas and #2 fuel oil usage for B001 and B002 shall not exceed the following emission limits based upon a rolling 12-month summation of the emissions: 26.6 tpy CO, 16.8 tpy PM, 10.0 tpy VOC, and 14.5 tpy of SO₂.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of CO (Tons)</u>
1	9.8
1-2	19.6
1-3	20.3
1-4	21.0
1-5	21.7
1-6	22.4
1-7	23.1
1-8	23.8
1-9	24.5
1-10	25.2
1-11	25.9
1-12	26.6

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOC (Tons)</u>
1	3.5
1-2	7.0
1-3	7.3
1-4	7.6
1-5	7.9
1-6	8.2
1-7	8.5
1-8	8.8
1-9	9.1

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1-10	9.4
1-11	9.7
1-12	10.0

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of PM (Tons)</u>
1	5.7
1-2	11.4
1-3	11.9
1-4	12.5
1-5	13.0
1-6	13.5
1-7	14.1
1-8	14.6
1-9	15.2
1-10	15.7
1-11	16.3
1-12	16.8

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<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of SO₂ (Tons)</u>
1	6.4
1-2	10.6
1-3	11.0
1-4	11.4
1-5	11.8
1-6	12.2
1-7	12.6
1-8	12.9
1-9	13.3
1-10	13.7
1-11	14.1
1-12	14.5

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for CO, PM, VOC, and SO₂ shall be based upon a rolling, 12-month summation of the monthly emissions.

5. The emissions of NO_x, from natural gas usage for B001 and B002 shall not exceed the following emission limit based upon a rolling 12-month summation of the emissions:

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of NO_x (Tons)</u>
1	78
1-2	102
1-3	103.8
1-4	105.6
1-5	107.4
1-6	109.2
1-7	111.0
1-8	112.8
1-9	114.6
1-10	116.4
1-11	118.2
1-12	120

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for NO_x shall be based upon a rolling, 12-month summation of the monthly emissions.

6. The quality of natural gas burned in this emissions unit shall have a combination of heat and sulfur contents which are sufficient to comply with the allowable sulfur dioxide emission limitation of 0.003 lb SO₂/MMBtu of actual heat input.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D1072-80, ASTM method D3031-81, or ASTM method D3246-81 for sulfur content; and ASTM method D1826-77 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Central District Office.

Sulfur monitoring for natural gas shall be conducted as follows:

- a. Twice monthly for six months,
 - i. If this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:
- b. Once per calendar quarter for six calendar quarters
 - i. If this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:
- c. Semi annually, during the first and third calendar quarters of the calendar year.
- d. Should any sulfur analysis indicate non-compliance with 40 CFR 60.333, sulfur monitoring shall be conducted weekly during the interim period when the monitoring schedule is being re-examined.

If there is a change in the fuel supply, the owner/operator must notify the Administrator (The Ohio EPA Central District Office) of such changes for re-examination of the monitoring schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when the monitoring schedule is being re-examined.

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Natural gas analysis can be conducted at a single separate site for B001 and B002 provided there are no additional entry points for natural gas or other sulfur containing streams between the proposed sampling site and emission units B001 and B002.

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The quality of #2 fuel oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb SO₂/MMBtu of actual heat input.

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D2880-78, ASTM method D1552-83, ASTM method D4057-81, or ASTM method D129-64 for sulfur content; and ASTM method D240-76 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Central District Office.

7. With the exception of start-up and shut-down, emission unit B001 shall not be operated at or below 50% capacity (load).
8. This facility is permitted to use fuel oil in lieu of natural gas only when the permittee's natural gas supplier has declared an emergency natural gas curtailment and only if the other fuel oil usage restrictions contained in this permit are met. This permittee shall maintain records detailing the date and time the natural gas supplier has implemented the curtailment and the date, and amount of fuel oil used.

III. Monitoring and/or Recordkeeping Requirements

1. Certification

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

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

Date:Emissions Unit ID: **B001**

monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6 and/or 40 CFR Part 75.

2. In lieu of the requirement of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, Columbus Power Partners shall install and operate NO_x continuous emissions monitoring system for each source (B001 and B002) burning oil and natural gas.

In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 subpart GG (section 60.334(b)), Columbus Power Partners shall install and operate systems to continuously monitor and record emissions of NO_x from emissions unit B001 in accordance with this permit.

The permittee shall operate and maintain equipment to continuously monitor and record NO_x from B001 in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x, emissions of NO_x in units of the applicable standard in the appropriate averaging period, (lb/hr), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring systems designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
4. The permittee shall maintain monthly records of the natural gas usage rate for emissions units B001 and B002.
5. The permittee shall maintain monthly records of the following information for emissions units B001 and B002:
 - a. The #2 fuel oil usage rate for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative #2 fuel oil rate for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the #2 fuel oil usage rates

Date:Emissions Unit ID: **B001**

6. The permittee shall maintain monthly records of the following information for emissions units B001 and B002:
 - a. The PM, NO_x, CO, SO₂, and VOC emissions for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative PM, NO_x, CO, SO₂, and VOC emissions for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the PM, NO_x, CO, SO₂, and VOC emissions.

7. The permittee shall monitor the sulfur content of the number two fuel oil being fired in the turbine. The frequency of the monitoring shall be determined as follows:

- a. If the turbine is supplied its number two fuel oil from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- b. If the turbine is supplied its number two fuel oil without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or number two fuel oil vendors may develop custom fuel schedules for the determination of the values based on the design and operation of the affected facility and the characteristics of the number two fuel oil supply. These custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.
- c. For each shipment of number two fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or number two fuel oil supplier's analyses for sulfur content and heat content.

8. The permittee shall comply with the provisions for monitoring of SO₂ emissions from each turbine as contained in Section 75.11 (d), 40 CFR Part 75, Subpart B-Monitoring Provisions, Appendix D of Part 75 - as established under the Acid Rain Program.

9. The permittee shall comply with the recordkeeping provisions for SO₂ emissions from each turbine as contained in Section 75.54, 40 CFR Part 75, Subpart F-Recordkeeping Requirements - as established under the Acid Rain Program.

10. Records of fuel sample analysis and fuel supply shall be retained for a period of five years and be available for inspection.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify all exceedances of the rolling, 12-month #2 fuel oil usage limitation, and the PM, NO_x, CO, SO₂, and VOC emission limitations and, for the first twelve calendar months of operation following issuance of this permit, all exceedances of the maximum

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allowable cumulative #2 fuel oil usage limitation and the PM, NO_x, CO, SO₂, and VOC emission limitations.

2. For the purpose of reports required under 40 CFR Part 60.7(c), periods of excess emissions that shall be reported are defined as follows:

Nitrogen Oxides. In lieu of the excess emission reports required under 40 CFR Part 60.334, Columbus Power Partners shall submit excess emission reports as specified in Section IV.4. of the terms and conditions.

3. The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(g) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These reports shall be postmarked by April 30, July 30, October 30 and January 30 and shall cover the previous calendar quarters.
4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (109 lbs/hr while burning natural gas and 209 lbs/hr while burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central 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 emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall also submit annual reports which specify the total PM, NO_x, CO, SO₂, and

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VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil (#2 fuel oil) which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
- a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted average sulfur content (percent by weight) for the oil received during each calendar month;
 - c. the weighted average heat content (Btu/gallon) of the oil received during each calendar month; and,
 - d. the weighted average SO₂ emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F).

In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

The permittee shall comply with the reporting provisions for SO₂ and opacity as contained in Sections 75.60, 75.64 and 75.65 of Chapter 75, Subpart G-Reporting Requirements, Appendix D - as established under the Acid Rain Program.

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

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

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

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

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

Reports are to be sent to:

Environmental Protection Agency

- Permit Management Unit

Box 163669

Columbus, Ohio 43216-3669

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District Office
Lum Creek Drive
Columbus, Ohio 43207-3417

V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations-

3.1 lbs/hr and 0.003 lb/MMBtu of SO₂ emissions when burning natural gas
61.1 lbs/hr and 0.05 lb/MMBtu of SO₂ emissions when burning #2 fuel oil

6.6 lbs/hr PM and 0.0061 lb PM/MMBtu when burning natural gas;
33.0 lbs/hr PM and 0.027 lb PM/MMBtu when burning #2 fuel oil;

109.0 lbs/hr NO_x and 25 ppmvd NO_x at 15% oxygen, during natural gas combustion;
209.0 lbs/hr NO_x and 42 ppmvd NO_x at 15% oxygen, during #2 fuel oil combustion;

13.3 lbs/hr CO and 5.0 ppmvd CO at 15% oxygen, during natural gas combustion;
15.2 lbs/hr CO and 5.0 ppmvd CO at 15% oxygen, during No. 2 fuel oil combustion;

4.3 lbs/hr VOC and 1.0 ppmvd VOC at 15% oxygen, during natural gas combustion;
14.6 lbs/hr VOC and 3.0 ppmvd VOC at 15% oxygen, during #2 fuel oil combustion;

Applicable Compliance Method-

Compliance with the lb/hr and lb MMBtu emission limits for particulate matter while burning natural gas shall be demonstrated by the manufacturer's guaranteed emissions data.

The permittee shall conduct, or have conducted, emission testing for B001 in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the NO_x, CO, and VOC emissions limits while burning natural gas and SO₂, PM, NO_x, CO, and VOC emissions limits while burning #2 fuel oil.

- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for SO₂, Method 6C of 40 CFR Part 60, Appendix A,
 for PM while burning #2 fuel oil, USEPA Reference Method 5,
 for NO_x, Method 7E of 40 CFR Part 60, Appendix A,
 for CO Method 10 of 40 CFR Part 60, Appendix A, and
 for VOC Method 18 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- iv. 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, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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, Central 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, Central District Office.

Compliance with the lb/hr and ppmvd NO_x emission limits shall also be demonstrated by the monitoring in terms A.III.1- A.III.3

- b. Emission Limitation-

10.0 tons per year VOC, as a rolling 12-month limit.

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a

summation of volatile organic compound emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The volatile organic compound emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs VOC/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain VOC emissions in tons per month.
- ii. The volatile organic compound emissions from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs VOC/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain VOC emissions in tons per month.

The monthly VOC emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total VOC emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

c. Emission Limitation-

120 tpy Nitrogen Oxides, as a rolling 12-month limit when burning natural gas and 30 tpy as a rolling 12-month limit when burning #2 fuel oil.

Applicable Compliance Method-

Compliance with the NO_x emission limitations of 120 and 30 tpy shall be determined by the following:

- i. The hourly NO_x emission rates, as determined by the continuous NO_x emissions monitor for B001 and B002 shall be summed for both the emissions units for each day of operation; and
- ii. The daily NO_x emission rates, as recorded in i. above, shall then be summed for the 12-month period.

d. Emission Limitation-

16.8 tpy PM, as a rolling 12-month limit

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of particulate emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The particulate matter emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs particulate matter/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain particulate matter emissions in tons per month.
- ii. The particulate matter emissions from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs particulate matter/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain particulate matter emissions in tons per month.

The monthly particulate matter emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total particulate matter emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

e. Emission Limitation-

26.6 tpy maximum CO, as a rolling 12-month limit.

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of carbon monoxide emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The carbon monoxide emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs carbon monoxide/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to carbon monoxide emissions in tons per month.
- ii. The carbon monoxide from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs carbon monoxide/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain carbon monoxide emissions in tons per month.

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The monthly carbon monoxide emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total carbon monoxide emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

f. Emission Limitation-

The facility shall combust oil that contains equal to or less than 0.05 percent by weight sulfur.

The facility shall combust natural gas that contains equal to or less than 0.003 percent by weight sulfur.

Applicable Compliance Method

Record keeping and reporting requirements in section A.III.9, A.IV.5., and A.IV.6.

For natural gas, the permittee shall determine compliance with the fuel sulfur content limitation in accordance with the procedures specified in ASTM D1072-80, D3031-81, or D 3246-81.

For the fuel oil, the permittee shall determine compliance with sulfur content limitation in accordance with the procedures specified in ASTM D2880-78, D1552-83, D4057-81 or D129-64.

g. Emission Limitation-

14.5 tpy SO₂

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of sulfur dioxide emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The sulfur dioxide emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs sulfur dioxide/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain sulfur dioxide emissions in tons per month.
- ii. The sulfur dioxide from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs sulfur dioxide/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain sulfur dioxide emissions in tons per month.

The monthly sulfur dioxide emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total sulfur dioxide emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

h. Emission Limitation-

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule when combusting No.2 fuel oil.

Applicable Compliance Method-

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

i. Emission Limitation-

10% visible emissions opacity limit as a 6 minute average while burning natural gas.

Applicable Compliance Method-

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, USEPA Reference Method 9.

VI. Miscellaneous Requirements

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

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Emissions Unit ID: **B001**

ColumnPTI A₁**Date: March 29, 2000**Emissions Unit ID: **B001****B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas-fired simple cycle, gas-combustion-turbine generator with #2 fuel oil backup; 1,222 MMBtu/hr rated heat input; includes water injection NO _x reduction system while firing #2 fuel oil and use of a dry low NO _x (DLN) combustor while firing natural gas.	None	None

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

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Date:

Facility ID: **0125040945**

Emissions Unit ID: **B001**

None.

VI. Miscellaneous Requirements

None.

Part III - Special Terms and Conditions for Specific Emissions Unit(s) [Continued]

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
Natural gas-fired simple cycle, turbine generator with #2 fuel oil backup; 1,222 MMBtu/hr rated heat input when burning fuel oil and 1085 MMBtu/hr rated heat input when firing natural gas; includes water injection NOx reduction system while firing #2 fuel oil and use of a dry low NOx (DLN) combustor while firing natural gas.	OAC rule 3745-31-05(D)

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	07(A)(1)	Applicable Emissions <u>Limitations/Control Measures</u>
40 CFR Part 75	OAC rule 3745-17-11(B)(4)	The facility shall combust oil that contains equal to or less than 0.05 percent by weight sulfur.*
40 CFR Part 60, Subpart GG	OAC rule 3745-15-07	The facility shall combust natural gas that contains equal to or less than 0.003 percent by weight sulfur.*
	OAC rule 3745-31-05(A)(3)	Sulfur dioxide (SO ₂) emissions shall not exceed 0.05 pounds per million Btu (MMBtu) of actual heat input and 61.1 lbs per hour while firing #2 fuel oil.* SO ₂ emissions shall not exceed 0.003 pound per MMBtu of actual heat input and 3.1 lbs per hour while firing natural gas.* SO ₂ emissions from B001 and B002 shall not exceed 14.5 tons per year (tpy) based on a rolling 12-month summation.
OAC rule 3745-18-06 (F)		The carbon monoxide (CO) emissions from B001 shall not exceed 15.2 lbs per hour and 5 ppmvd CO at 15% oxygen while firing #2 fuel oil.*
OAC rule 3745-23-06(B)		The CO emissions from B001 shall not exceed 13.3 lbs per hour and 5 ppmvd CO at 15% oxygen while firing natural gas.*
OAC rule 3745-21-08(B)		The CO emissions from B001 and B002 shall not exceed 26.6 tons per year based on a rolling 12-month summation.
OAC rule 3745-17-		The volatile organic compound (VOC) emissions from B001 shall not exceed 14.6 lbs per hour and 3 ppmvd VOC at 15% oxygen while firing #2 fuel oil.* The VOC emissions from B001 shall not

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exceed 4.3 lbs per hour and 1 ppmvd VOC at 15% oxygen while firing natural gas.*

The VOC emissions from B001 and B002 shall not exceed 10.0 tons per year based on a rolling 12-month summation.

Particulate matter (PM) emissions shall not exceed 0.027 pounds per MMBtu of actual heat input and 33.0 lbs per hour while firing #2 fuel oil.*

PM emissions shall not exceed 0.0061 pounds per MMBtu of actual heat input and 6.6 lbs per hour while firing natural gas.*

PM emissions from B001 and B002 shall not exceed 16.8 tons per year based on a rolling 12-month summation.

The nitrogen oxide (NO_x) emissions from B001 shall not exceed 209.0 lbs per hour and 42 ppmvd NO_x at 15% oxygen while firing #2 fuel oil.*

The NO_x emissions from B001 shall not exceed 109.0 lbs per hour and 25 ppmvd NO_x at 15% oxygen while firing natural gas.*

The NO_x emissions from B001 and B002 when firing natural gas shall not exceed 120 tons per year based on a rolling 12-month summation.*

The NO_x emissions from B001 and B002 when firing #2 fuel oil shall not exceed 30 tons per year based on a rolling 12-month summation.*

Reference the special terms and conditions A.III.1., 2., 3., 8., and 9. for specific monitoring and record keeping requirements. Reference the special terms and conditions A.IV.7. for specific reporting requirements.

The NO_x emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

The SO₂ emission limitations established pursuant to OAC rule 3745-31-05 are more stringent than the emission limitations established by this rule.

The SO₂ emission limitations established pursuant to OAC rule 3745-31-05 (A)(3) are more stringent than the emission limitations established by this rule.

The NO_x emission limitations established pursuant to OAC rule 3745-31-05 (A)(3) are more stringent than the emission

limitations established by this rule.

The CO emission limitations established pursuant to OAC rule 3745-31-05 (A)(3) are more stringent than the emission limitations established by this rule.

The visible emissions opacity limitations established pursuant to OAC rule 3745-31-05 (A)(3) are more stringent than the emission limitations established by this rule.

The particulate emission limitations established pursuant to OAC rule 3745-31-05 (A)(3) are more stringent than the emission limitations established by this rule.

See Part I, term B.4

Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except for cold start-up and shutdown periods while firing natural gas.

Fuel oil use is limited to times when the permittee's natural gas supplier has declared an emergency natural gas curtailment and only if the other fuel oil usage restrictions contained in this permit are met.* See term II. 8

*For purposes of this permit, all limits denoted by * are OAC rule 3745-31-05(A)(3).

Emissions Unit ID: B002

2. Additional Terms and Conditions

2.a The hourly emission limitations were established to reflect the potential to emit for B002. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

II. Operational Restrictions

1. The minimum stack height for emissions unit B002 shall be at least 120 feet above the ground.
2. Use of fuel oil is allowed only when the permittee’s natural gas supplier invokes a natural gas curtailment under the conditions of the permittee’s natural gas supplier contract. The use of fuel oil shall be limited to the extent of the curtailment.

Compliance Method

Compliance with this requirement shall be demonstrated by the maintenance of documentation from the natural gas supplier concerning the implementation of a natural gas curtailment.

3. The maximum annual #2 fuel oil usage rate for emissions units B001 and B002 shall not exceed 2,550,240 gallons per year, based upon a rolling, 12-month summation of the #2 fuel oil usage rate.

To ensure enforceability during the first 12 calendar months of operation following issuance of this permit, the permittee shall not exceed the #2 fuel oil usage rates specified in the following table:

<u>Month</u>	<u>Maximum Allowable #2 fuel oil Usage (gallons per year)</u>
1	1,275,120
1-2	1,912,680
1-3	2,295,216
1-4	2,323,552
1-5	2,351,888
1-6	2,380,224
1-7	2,408,560
1-8	2,436,896
1-9	2,465,232
1-10	2,493,568
1-11	2,521,904
1-12	2,550,240

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual #2 fuel oil usage rate limitation shall be based upon a rolling, 12-month summation of

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the usage rates.

4. The emissions of CO, PM, VOC and SO₂ from a combination of natural gas and #2 fuel oil usage for B001 and B002 shall not exceed the following emission limits based upon a rolling 12-month summation of the emissions: 26.6 tpy CO, 16.8 tpy PM, 10.0 tpy VOC, and 14.5 tpy of SO₂.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of CO (Tons)</u>
1	9.8
1-2	19.6
1-3	20.3
1-4	21.0
1-5	21.7
1-6	22.4
1-7	23.1
1-8	23.8
1-9	24.5
1-10	25.2
1-11	25.9
1-12	26.6

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOC (Tons)</u>
1	3.5
1-2	7.0
1-3	7.3
1-4	7.6
1-5	7.9
1-6	8.2
1-7	8.5
1-8	8.8
1-9	9.1
1-10	9.4

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1-11	9.7
1-12	10.0

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of PM (Tons)</u>
1	5.7
1-2	11.4
1-3	11.9
1-4	12.5
1-5	13.0
1-6	13.5
1-7	14.1
1-8	14.6
1-9	15.2
1-10	15.7
1-11	16.3
1-12	16.8

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of SO₂ (Tons)</u>
1	6.4
1-2	10.6
1-3	11.0
1-4	11.4
1-5	11.8
1-6	12.2
1-7	12.6
1-8	12.9
1-9	13.3
1-10	13.7
1-11	14.1
1-12	14.5

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for CO, PM, VOC, and SO₂ shall be based upon a rolling, 12-month summation of the monthly emissions.

- The emissions of NO_x, from natural gas usage for B001 and B002 shall not exceed the following emission limit based upon a rolling 12-month summation of the emissions:

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

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<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of NO_x (Tons)</u>
1	78
1-2	102
1-3	103.8
1-4	105.6
1-5	107.4
1-6	109.2
1-7	111.0
1-8	112.8
1-9	114.6
1-10	116.4
1-11	118.2
1-12	120

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for NO_x shall be based upon a rolling, 12-month summation of the monthly emissions.

6. The quality of natural gas burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.003 lb SO₂/MMBtu of actual heat input.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D1072-80, ASTM method D3031-81, or ASTM method D3246-81 for sulfur content; and ASTM method D1826-77 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Central District Office.

Sulfur monitoring for natural gas shall be conducted as follows:

- a. Twice monthly for six months,
 - i. If this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:

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- b. Once per calendar quarter for six calendar quarters
 - i. If this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:
- c. Semi annually, during the first and third calendar quarters of the calendar year.
- d. Should any sulfur analysis indicate non-compliance with 40 CFR 60.333, sulfur monitoring shall be conducted weekly during the interim period when the monitoring schedule is being re-examined.

If there is a change in the fuel supply, the owner/operator must notify the Administrator (The Ohio EPA Central District Office) of such changes for re-examination of the monitoring schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when the monitoring schedule is being re-examined.

Natural gas analysis can be conducted at a single separate site for B001 and B002 provided there are no additional entry points for natural gas or other sulfur containing streams between the proposed sampling site and emission units B001 and B002.

The quality of #2 fuel oil burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.05 lb SO₂/MMBtu of actual heat input.

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D2880-78, ASTM method D1552-83, ASTM method D4057-81, or ASTM method D129-64 for sulfur content; and ASTM method D240-76 for heat content. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used upon written approval by the Ohio EPA, Central District Office.

- 7. With the exception of start-up and shut-down, emission unit B002 shall not be operated at or below 50% capacity (load).
- 8. This facility is permitted to use fuel oil in lieu of natural gas only when the permittee's natural gas supplier has declared an emergency natural gas curtailment and only if the other fuel oil usage restrictions contained in this permit are met. This permittee shall maintain records detailing the date and time the natural gas supplier has implemented the curtailment and the date, and amount of fuel oil used.

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III. Monitoring and/or Recordkeeping Requirements

1. Certification

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

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

2. In lieu of the requirement of 40 CFR Part 60.334(a) (Subpart GG) to install and operate a continuous monitoring system to monitor the ratio of water to fuel being fired in each turbine, Columbus Power Partners shall install and operate NO_x continuous emissions monitoring system for each source (B001 and B002) burning oil and natural gas.

In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR 60 subpart GG (section 60.334(b)), Columbus Power Partners shall install and operate systems to continuously monitor and record emissions of NO_x from emissions unit B001 in accordance with this permit.

The permittee shall operate and maintain equipment to continuously monitor and record NO_x from B001 in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x, emissions of NO_x

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in units of the applicable standard in the appropriate averaging period, (lb/hr), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring systems designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F and/or 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
4. The permittee shall maintain monthly records of the natural gas usage rate for emissions units B001 and B002.
5. The permittee shall maintain monthly records of the following information for emissions units B001 and B002:
 - a. The #2 fuel oil usage rate for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative #2 fuel oil rate for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the #2 fuel oil usage rates.
6. The permittee shall maintain monthly records of the following information for emissions units B001 and B002:
 - a. The PM, NO_x, CO, SO₂, and VOC emissions for each month.
 - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative PM, NO_x, CO, SO₂, and VOC emissions for each calendar month.
 - c. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the PM, NO_x, CO, SO₂, and VOC emissions.
7. The permittee shall monitor the sulfur content of the number two fuel oil being fired in the turbine. The frequency of the monitoring shall be determined as follows:
 - a. If the turbine is supplied its number two fuel oil from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

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- b. If the turbine is supplied its number two fuel oil without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or number two fuel oil vendors may develop custom fuel schedules for the determination of the values based on the design and operation of the affected facility and the characteristics of the number two fuel oil supply. These custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.
- c. For each shipment of number two fuel oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or number two fuel oil supplier's analyses for sulfur content and heat content.

8. The permittee shall comply with the provisions for monitoring of SO₂ emissions from each turbine as contained in Section 75.11 (d), 40 CFR Part 75, Subpart B-Monitoring Provisions, Appendix D of Part 75 - as established under the Acid Rain Program.

9. The permittee shall comply with the recordkeeping provisions for SO₂ emissions from each turbine as contained in Section 75.54, 40 CFR Part 75, Subpart F-Recordkeeping Requirements - as established under the Acid Rain Program.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify all exceedances of the rolling, 12-month #2 fuel oil usage limitation, and the PM, NO_x, CO, SO₂, and VOC emission limitations and, for the first twelve calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative #2 fuel oil usage limitation and the PM, NO_x, CO, SO₂, and VOC emission limitations.

2. For the purpose of reports required under 40 CFR Part 60.7(c), periods of excess emissions that shall be reported are defined as follows:

Nitrogen Oxides. In lieu of the excess emission reports required under 40 CFR Part 60.334, Columbus Power Partners shall submit excess emission reports as specified in Section IV.4. of the terms and conditions.

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

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

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in the terms and conditions of this permit (109 lbs/hr while burning natural gas and 209 lbs/hr while burning number two fuel oil). These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central 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 emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall also submit annual reports which specify the total PM, NO_x, CO, SO₂, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.
6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil (#2 fuel oil) which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted average sulfur content (percent by weight) for the oil received during each

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calendar month;

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

d. the weighted average SO₂ emission rate (lbs/MMBtu of actual heat input) of the oil combusted during each calendar month (the SO₂ emission rate shall be calculated as specified in OAC rule 3745-18-04(F).

In proportion to the quantity of oil received in each shipment during each calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

The permittee shall comply with the reporting provisions for SO₂ and opacity as contained in Sections 75.60, 75.64 and 75.66 of 40 CFR Part 75, Subpart G-Reporting Requirements, Appendix D - as established under the Acid Rain Program.

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

Central District Office
3232 Alum Creek Drive
Columbus, Ohio 43207-3417

Testing Requirements

Compliance with the emission limitation(s) in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

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a. Emission Limitations-

3.1 lbs/hr and 0.003 lb/MMBtu of SO₂ emissions when burning natural gas
61.1 lbs/hr and 0.05 lb/MMBtu of SO₂ emissions when burning #2 fuel oil

6.6 lbs/hr PM and 0.0061 lb PM/MMBtu when burning natural gas;
33.0 lbs/hr PM and 0.027 lb PM/MMBtu when burning #2 fuel oil;

109.0 lbs/hr NO_x and 25 ppmvd NO_x at 15% oxygen, during natural gas combustion;
209.0 lbs/hr NO_x and 42 ppmvd NO_x at 15% oxygen, during #2 fuel oil combustion;

13.3 lbs/hr CO and 5.0 ppmvd CO at 15% oxygen, during natural gas combustion;
15.2 lbs/hr CO and 5.0 ppmvd CO at 15% oxygen, during No. 2 fuel oil combustion;

4.3 lbs/hr VOC and 1.0 ppmvd VOC at 15% oxygen, during natural gas combustion;
14.6 lbs/hr VOC and 3.0 ppmvd VOC at 15% oxygen, during #2 fuel oil combustion;

Applicable Compliance Method-

Compliance with the lb/hr and lb MMBtu emission limits for particulate matter while burning natural gas shall be demonstrated by the manufacturer's guaranteed emissions data.

The permittee shall conduct, or have conducted, emission testing for B001 in accordance with the following requirements:

- i. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the emissions unit.
- ii. The emission testing shall be conducted to demonstrate compliance with the NO_x, CO, and VOC emissions limits while burning natural gas and SO₂, PM, NO_x, CO, and VOC emissions limits while burning #2 fuel oil.
- iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for SO₂, Method 6C of 40 CFR Part 60, Appendix A,
for PM while burning #2 fuel oil, USEPA Reference Method 5,
for NO_x, Method 7E of 40 CFR Part 60, Appendix A,

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for CO Method 10 of 40 CFR Part 60, Appendix A, and
for VOC Method 18 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- iv. 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, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central 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, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central 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, Central 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, Central District Office.

Compliance with the lb/hr and ppmvd NO_x emission limits shall also be demonstrated by the monitoring in terms A.III.1- A.III.3

b. Emission Limitation-

10.0 tons per year VOC, as a rolling 12-month limit.

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of volatile organic compound emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The volatile organic compound emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units

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B001 and B002 with the average emission rate (lbs VOC/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain VOC emissions in tons per month.

- ii. The volatile organic compound emissions from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs VOC/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain VOC emissions in tons per month.

The monthly VOC emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total VOC emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

c. Emission Limitation-

120 tpy Nitrogen Oxides, as a rolling 12-month limit when burning natural gas and 30 tpy as a rolling 12-month limit when burning #2 fuel oil.

Applicable Compliance Method-

Compliance with the NOx emission limitations of 120 and 30 tpy shall be determined by the following:

- i. The hourly NOx emission rates, as determined by the continuous NOx emissions monitor for B001 and B002 shall be summed for both the emissions units for each day of operation; and
- ii. The daily NOx emission rates, as recorded in i. above, shall then be summed for the 12-month period.

d. Emission Limitation-

16.8 tpy PM, as a rolling 12-month limit

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of particulate emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The particulate matter emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs particulate matter/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain particulate matter emissions in tons per month.
- ii. The particulate matter emissions from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs particulate matter/10⁶ standard cubic feet) derived

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from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain particulate matter emissions in tons per month.

The monthly particulate matter emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total particulate matter emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

e. Emission Limitation-

26.6 tpy maximum CO, as a rolling 12-month limit.

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of carbon monoxide emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The carbon monoxide emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs carbon monoxide/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to carbon monoxide emissions in tons per month.
- ii. The carbon monoxide from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs carbon monoxide/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain carbon monoxide emissions in tons per month.

The monthly carbon monoxide emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total carbon monoxide emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

f. Emission Limitation-

The facility shall combust oil that contains equal to or less than 0.05 percent by weight sulfur.
The facility shall combust natural gas that contains equal to or less than 0.003 percent by weight sulfur.

Applicable Compliance Method

Record keeping and reporting requirements in section A.III.9, A.IV.5., and A.IV.6.

For natural gas, the permittee shall determine compliance with the fuel sulfur content limitation in accordance with the procedures specified in ASTM D1072-80, D3031-81, or D3246-81.

For fuel oil, the permittee shall determine compliance with the fuel sulfur content limitation in accordance with the procedures specified in ASTM D2880-78, D 1552-83, D4057-81 or D129-64.

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g. Emission Limitation-

14.5 tpy SO₂

Applicable Compliance Method-

Compliance with this limitation shall be determined at the end of the calendar month through a summation of sulfur dioxide emissions from the burning of #2 fuel oil and natural gas as follows:

- i. The sulfur dioxide emissions from the burning of #2 fuel oil shall be determined by multiplying the actual amount of #2 fuel oil used per month in gallons (reference A.III.5) in emission units B001 and B002 with the average emission rate (lbs sulfur dioxide/1,000 gallons) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain sulfur dioxide emissions in tons per month.
- ii. The sulfur dioxide from the burning of natural gas shall be determined by multiplying the actual amount of natural gas used per month in standard cubic feet (reference A.III.4.) in emission units B001 and B002 with the average emission rate (lbs sulfur dioxide/10⁶ standard cubic feet) derived from the stack test conducted under maximum operating conditions (reference A.V.1.a) and dividing by 2,000 lbs/ton to obtain sulfur dioxide emissions in tons per month.

The monthly sulfur dioxide emission rates as determined in i. and ii. shall be summed to obtain a total monthly emission rate, which shall then be added to the total sulfur dioxide emissions from the previous 11 months to determine the 12-month rolling average emission rate in tons per year.

h. Emission Limitation-

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule when combusting No.2 fuel oil.

Applicable Compliance Method-

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

i. Emission Limitation-

10% visible emissions opacity limit as a 6 minute average while burning natural gas.

Applicable Compliance Method-

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, USEPA Reference Method 9.

aneous Requirements

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

Date: March 29, 2000**Only Enforceable Section****Table Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
1. simple cycle, gas-combustion-turbine generator with #2 fuel oil backup; 1,222 MMBtu/hr rated heat input; includes water injection NOx reduction system while firing #2 fuel oil and use of a dry low NOx (DLN) combustor while firing natural gas.	None	None

2. Additional Terms and Conditions

2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

Date: March 29, 2000

Emissions Unit ID: **B002**

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Date: March 29, 2000

VI. Miscellaneous Requirements

None.

Date: March 29, 2000

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Natural gas-fired simple cycle, gas-combustion-turbine generator with #2 fuel oil backup; 1,222 MMBtu/hr rated heat input; includes water injection NOx reduction system while firing #2 fuel oil and use of a dry low NOx (DLN) combustor while firing natural gas.	None	None

2. Additional Terms and Conditions

2.a

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

Date: March 29, 2000

None.

VI. Miscellaneous Requirements

None.