



Street Address:

State of Ohio Environmental Protection Agency
Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov.
Center

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY
Application No: 13-03653**

CERTIFIED MAIL

DATE: 7/11/00

American Municipal Power Ohio Cleveland
Randy Meyer
2600 Airport Drive
Columbus, OH 43219

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

CBAPC



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: July 11, 2000
Effective Date: July 11, 2000**

FINAL PERMIT TO INSTALL 13-03653

Application Number: 13-03653
APS Premise Number: 1318008238
Permit Fee: **\$2400**
Name of Facility: American Municipal Power Ohio Cleveland
Person to Contact: Randy Meyer
Address: 2600 Airport Drive
Columbus, OH 43219

Location of proposed air contaminant source(s) [emissions unit(s)]:
**13611 Aspinwall Avenue
Cleveland, Ohio**

Description of proposed emissions unit(s):
Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input; 1825 KWe output) diesel generator units.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. 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 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 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. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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).

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

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14. 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.

15. 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.

B. 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>
PM	1.98
SOx	1.62
CO	6.6
NOx	85.8
TOC	1.92

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P001 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)

OAC rule 3745-31-05(D)

OAC rule 3745-17-11(B)(5)(b)

OAC rule 3745-18-06(G)

OAC rule 3745-17-07(A)

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Issued: July 11, 2000

Emissions Unit ID: **P001**

Applicable Emissions
Limitations/Control Measures

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

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Issued: July 11, 2000

Emissions Unit ID: P001

2. Additional Terms and Conditions

2.a The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P001 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P001 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P001, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575
1-12	77,040	600

After the first 12 calendar months of operation following startup of emission unit P001 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P001; and
 - b. The total hours of operation of emission unit P001.
2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

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

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

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.

3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P001, utilizing methods of calculation specified in section E of these terms and conditions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

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Emissions Unit ID: P001

2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P001;
 - b. the total monthly and annual hours of operation of emission unit P001; and
 - c. the total annual emissions of NOx, CO, PM, SO2, and total organic compounds from emission unit P001 for the previous calendar year.
 - d. the total annual emissions of NOx, CO, PM, SO2, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NOx emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NOx emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer’s emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = HP \times Ef \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = HP \times Ef \times 1/453.6 \times A \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NOx/HP-HR),

A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NOx emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary

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Emissions Unit ID: P001

Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule 3745-17-03(B)(7).

5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat

American Municipal Power Ohio Cleveland

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Facility ID: 1318008238

Emissions Unit ID: **P001**

rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

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Emissions Unit ID: **P001**

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

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Issued: July 11, 2000

Emissions Unit ID: P002

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P002 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-18-06(G)
		OAC rule 3745-17-07(A)
		OAC rule 3745-31-05(D)
	OAC rule 3745-17-11(B)(5)(b)	

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Emissions Unit ID: **P002**

Applicable Emissions
Limitations/Control Measures

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6)

consecutive minutes in any sixty-minute period.

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4.

Issue

Emissions Unit ID: P002

2. Additional Terms and Conditions

2.a The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P002 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P002 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P002, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575
1-12	77,040	600

After the first 12 calendar months of operation following startup of emission unit P002 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P002; and
 - b. The total hours of operation of emission unit P002.
2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

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

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

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.

3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P002, utilizing methods of calculation specified in section E of these terms and conditions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P002;
 - b. the total monthly and annual hours of operation of emission unit P002; and
 - c. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from emission unit P002 for the previous calendar year.
 - d. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NO_x emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NO_x emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer's emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = \text{HP} \times \text{Ef} \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = \text{HP} \times \text{Ef} \times 1/453.6 \times \text{A} \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NO_x/HP-HR),

A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NO_x emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat

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Emissions Unit ID: **P002**

rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule 3745-17-03(B)(7).

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Emissions Unit ID: P002

5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

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Emissions Unit ID: P003

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	OAC rule 3745-18-06(G)
P003 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)
		OAC rule 3745-35-05(D)
	OAC rule 3745-17-11(B)(5)(b)	

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Emissions Unit ID: **P003**

Applicable Emissions
Limitations/Control Measures

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any

sixty-minute period.

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4.

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Emissions Unit ID: P003

2. Additional Terms and Conditions

2.a The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P003 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P003 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P003, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575

1-12

77,040

600

After the first 12 calendar months of operation following startup of emission unit P003 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P003; and
 - b. The total hours of operation of emission unit P003.
2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative operating hours for each calendar month.
 - b. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of diesel fuel usage.

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.
3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P003, utilizing methods of calculation specified in section E of these terms and conditions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating

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hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P003;
 - b. the total monthly and annual hours of operation of emission unit P003; and
 - c. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from emission unit P003 for the previous calendar year.
 - d. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NO_x emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NO_x emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer's emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = HP \times Ef \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = HP \times Ef \times 1/453.6 \times A \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NO_x/HP-HR),

A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NO_x emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule 3745-17-03(B)(7).

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Emissions Unit ID: P003

5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	
P004 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)
		OAC rule 3745-35-05(D)
	OAC rule 3745-17-11(B)(5)(b)	
	OAC rule 3745-18-06(G)	

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Issued: July 11, 2000

Emissions Unit ID: **P004**

Applicable Emissions
Limitations/Control Measures

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any

sixty-minute period.

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4.

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2. Additional Terms and Conditions

- 2.a** The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P004 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P004 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P004, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575

Emissions Unit ID: P004

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77,040

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After the first 12 calendar months of operation following startup of emission unit P004 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P004; and
 - b. The total hours of operation of emission unit P004.
2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

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

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

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.

3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P004, utilizing methods of calculation specified in section E of these terms and conditions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating

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Emissions Unit ID: P004

hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P004;
 - b. the total monthly and annual hours of operation of emission unit P004; and
 - c. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from emission unit P004 for the previous calendar year.
 - d. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NO_x emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NO_x emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer's emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = HP \times Ef \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = HP \times Ef \times 1/453.6 \times A \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NO_x/HP-HR),

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A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NO_x emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule

3745-17-03(B)(7).

5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

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Issued: July 11, 2000

Emissions Unit ID: P005

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	
P005 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-18-06(G)
		OAC rule 3745-17-07(A)
		OAC rule 3745-35-05(D)
	OAC rule 3745-17-11(B)(5)(b)	

Issue

Emissions Unit ID: P005

Applicable Emissions
Limitations/Control Measures

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any

sixty-minute period.

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4

2. Additional Terms and Conditions

2.a The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P005 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P005 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P005, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575

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1-12

77,040

600

After the first 12 calendar months of operation following startup of emission unit P005 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P005; and
 - b. The total hours of operation of emission unit P005.

2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative operating hours for each calendar month.
 - b. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of diesel fuel usage.

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.

3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P005, utilizing methods of calculation specified in section E of these terms and conditions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P005;
 - b. the total monthly and annual hours of operation of emission unit P005; and
 - c. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from emission unit P005 for the previous calendar year.
 - d. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NO_x emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NO_x emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer's emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = \text{HP} \times \text{Ef} \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = \text{HP} \times \text{Ef} \times 1/453.6 \times \text{A} \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NO_x/HP-HR),

A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NO_x emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat

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rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule 3745-17-03(B)(7).

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5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

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Emissions Unit ID: P006

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	
P006 - 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.	OAC rule 3745-31-05(A)(3)	OAC rule 3745-18-06(G)
		OAC rule 3745-17-07(A)
		OAC rule 3745-35-05(D)
	OAC rule 3745-17-11(B)(5)(b)	

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Applicable Emissions
Limitations/Control Measures

NOx emissions from this emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY.

CO emissions from this emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Total Organic Compound (TOC) emissions from this emissions unit shall not exceed 1.06 lb/hr and 0.32 TPY.

Particulate emissions from this emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr and 0.33 TPY.

Sulfur dioxide emissions from this emissions unit shall not exceed 0.050 lb/mmBtu actual heat input, 0.89 lb/hr and 0.27 TPY.

Equivalent to OAC rule 3745-31-05 (A)(3) .

OAC rule 3745-31-05 (A)(3) more stringent.

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6)

consecutive minutes in any sixty-minute period.

Annual NOx emissions for facility--See terms A.2.a., B.2, B.3 and B.4.

2. Additional Terms and Conditions

2.a The total annual emissions of NO_x from all emissions units at this facility (P001, P002, P003, P004, P005 and P006) shall be limited to 85.8 tons, as a rolling 12-month summation. This annual facility NO_x emission limitation shall be achieved by restricting both the maximum quantity of diesel fuel burned (#2 oil) and the maximum annual hours of operation for these emissions units as indicated in section B.

B. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emissions limitation of 0.05 pounds SO₂/mmBtu of actual heat output.
2. The operation of the emission unit P006 (i.e., the firing of the engine with diesel fuel (#2 oil) accompanied by the generation of electricity) shall be limited to no more than 600 hours per year, based on a rolling, 12-month summation of operating hours.
3. The maximum quantity of diesel fuel which may be burned in emission unit P006 shall not exceed 77,040 gallons per year based on a rolling 12-month summation of fuel usage.
4. To ensure enforceability during the first twelve (12) months of operation following startup of the emission unit P006, the permittee shall not exceed the diesel fuel usage and operating hours limitations specified in the following table:

<u>CALENDAR MONTH(S) FOLLOWING STARTUP</u>	<u>ALLOWABLE CUMULATIVE TOTAL GALLONS OF FUEL BURNED</u>	<u>ALLOWABLE CUMULATIVE TOTAL HOURS OF OPERATION</u>
1	12,840	100
1-2	25,680	200
1-3	38,520	300
1-4	44,940	350
1-5	51,360	400
1-6	57,780	450
1-7	60,990	475
1-8	64,200	500
1-9	67,410	525
1-10	70,620	550
1-11	73,830	575
1-12	77,040	600

After the first 12 calendar months of operation following startup of emission unit P006 compliance with the annual diesel fuel usage and operating hours limitations shall be based on a rolling, 12-month summation of the operating hours and fuel usage.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The total volume (in gallons) of low sulfur No. 2 diesel fuel burned in emissions unit P006; and
 - b. The total hours of operation of emission unit P006.
2. The permittee shall maintain monthly records of the following information:
 - a. Beginning after the first 12 calendar months of operation following startup of this emissions unit, the rolling, 12-month summation of the operating hours.

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

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

Also, during the first 12 calendar months of operation following startup, the permittee shall record the cumulative diesel fuel usage for each calendar month.

3. The permittee shall calculate and record, on a monthly basis, the total emissions of NO_x, CO, SO₂, PM, and total organic compound emissions for emission unit P006, utilizing methods of calculation specified in section E of these terms and conditions.

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Emissions Unit ID: P006

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of both the rolling, 12-month fuel usage limitation and the rolling, 12-month operating hours restriction and, for the first 12 calendar months of operation following startup of this emissions unit, all exceedances of the maximum allowable cumulative diesel fuel usage and cumulative operating hours limitations. These reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).
2. The permittee shall submit an annual report which summarizes the following information:
 - a. the monthly and annual volume (in gallons) of low sulfur diesel fuel burned in emission unit P006;
 - b. the total monthly and annual hours of operation of emission unit P006; and
 - c. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from emission unit P006 for the previous calendar year.
 - d. the total annual emissions of NO_x, CO, PM, SO₂, and total organic compounds from all emissions units (P001, P002, P003, P004, P005, & P006) collectively for the previous calendar year.

This reports shall be submitted by January 31 of each year for operations during the previous calendar year.

E. Testing Requirements

1. Emissions Limitation: NO_x emissions from each emissions unit shall not exceed 47.69 lbs/hr and 14.3 TPY; NO_x emissions from this facility (emissions units P001, P002, P003, P004, P005, & P006) shall not exceed 85.8 TPY.

Applicable Compliance Method: Compliance shall be based on calculations using the rated horsepower of each emissions unit, the hours of operation recorded above, and the manufacturer's emissions factor specified below with the following equation:

$$ER(\text{HOURLY}) = HP \times Ef \times 1/453.6, \text{ and}$$

$$ER(\text{ANNUAL}) = HP \times Ef \times 1/453.6 \times A \times 1/2000.$$

Where:

HP = Rated horsepower of each engine,

Ef = Emissions factor for engine in grams/horsepower-hour (8.23 grams NO_x/HP-HR),

A = Annual hours of engine operation.

Annual emissions for the facility (P001, P002, P003, P004, P005, & P006 collectively) shall simply be the annual emissions for each engine multiplied by six. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the NO_x emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 7 or 7E.

2. Emissions Limitation: Carbon monoxide emissions from each emissions unit shall not exceed 3.67 lbs/hr and 1.1 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the CO emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 10.

3. Emissions Limitation: Total organic compound emissions from each emissions unit shall not exceed 1.06 lbs/hr and 0.32 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above.

4. Emissions Limitation: Particulate emissions from each emissions unit shall not exceed 0.062 lb/mmBtu of actual heat input, 1.09 lbs/hr, and 0.33 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat

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rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the particulate emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 5, and OAC rule 3745-17-03(B)(7).

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Emissions Unit ID: P006

5. Emissions Limitation: Sulfur dioxide emissions from each emissions unit shall not exceed 0.050 lb/mmBtu of actual heat input, 0.89 lbs/hr, and 0.27 TPY.

Applicable Compliance Method: Compliance shall be based on calculations utilizing emissions factors specified in U.S. EPA document AP-42, 5th Edition, "Compilation of Air Pollution Emissions Factors", section 3.4, table 3.4-1 (10/96), the maximum rated horsepower (or heat rate) for each engine, and the hours of operation of this emissions unit as recorded above. If required pursuant to OAC rule 3745-15-04, the permittee shall demonstrate compliance with the sulfur dioxide emissions limits of this permit by means of physical testing of the effluent from this emissions unit in accordance with testing procedures listed in 40 CFR Part 60, "Standards of Performance for New Stationary Sources", Appendix A, Method 6, and in OAC rule 3745-18-04.

6. Emissions Limitation: Visible particulate emissions from the exhaust stack serving each emissions unit shall not exceed twenty (20) percent opacity, as a six-minute average, except for a period of not more than six (6) consecutive minutes in any sixty-minute period.

Applicable Compliance Method: Compliance shall be determined through visible emissions observations in accordance with test procedures specified in 40 CFR Part 60, Method 9, and in OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

The following terms and conditions in this permit-to-install are federally enforceable : A.2.a, B.2, B.3, B.4, C.1,C.2,C.3,D.1,D.2.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653 Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input;1825 KWe output)diesel generator units. CITY/TWP Cleveland

SIC CODE 4911 SCC CODE 20200401 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.

DATE INSTALLED 03/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.72 lb/hr	0.33	1.09 lbs/hr	0.33
PM ₁₀					
Sulfur Dioxide	Attainment	0.89 lb/hr	0.27	0.89 lb/hr	0.27
Organic Compounds	Attainment	1.06 lbs/hr	0.32	1.06 lbs/hr	0.32
Nitrogen Oxides	Attainment	47.69 lbs/hr	14.3	47.69 lbs/hr	14.3
Carbon Monoxide	Attainment	3.67 lbs/hr	1.10	3.67 lbs/hr	1.10
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT=Use of Caterpillar Low NOx Combustion Control Module (for reduction of NOx emissions) and use of low sulfur (less than 0.05% by weight) diesel fuel in engine.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X** NO

IDENTIFY THE AIR CONTAMINANTS: **Note: PSD modeling performed by applicant for NOx; data on file at NEDO shows compliance with OEPA air modeling policy.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

SIC CODE 4911 SCC CODE 20200401 EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.

DATE INSTALLED 03/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.72 lb/hr	0.33	1.09 lbs/hr	0.33
PM ₁₀					
Sulfur Dioxide	Attainment	0.89 lb/hr	0.27	0.89 lb/hr	0.27
Organic Compounds	Attainment	1.06 lbs/hr	0.32	1.06 lbs/hr	0.32
Nitrogen Oxides	Attainment	47.69 lbs/hr	14.3	47.69 lbs/hr	14.3
Carbon Monoxide	Attainment	3.67 lbs/hr	1.10	3.67 lbs/hr	1.10
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT=Use of Caterpillar Low NOx Combustion Control Module (for reduction of NOx emissions) and use of low sulfur (less than 0.05% by weight) diesel fuel in engine.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

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TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X** NO

IDENTIFY THE AIR CONTAMINANTS:

**Note: PSD modeling performed by applicant for NOx; data on file at NEDO shows compliance with OEPA air modeling policy.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: P006

SIC CODE 4911 SCC CODE 20200401 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.

DATE INSTALLED 03/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.72 lb/hr	0.33	1.09 lbs/hr	0.33
PM ₁₀					
Sulfur Dioxide	Attainment	0.89 lb/hr	0.27	0.89 lb/hr	0.27
Organic Compounds	Attainment	1.06 lbs/hr	0.32	1.06 lbs/hr	0.32
Nitrogen Oxides	Attainment	47.69 lbs/hr	14.3	47.69 lbs/hr	14.3
Carbon Monoxide	Attainment	3.67 lbs/hr	1.10	3.67 lbs/hr	1.10
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT=Use of Caterpillar Low NOx Combustion Control Module (for reduction of NOx emissions) and use of low sulfur (less than 0.05% by weight) diesel fuel in engine.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X** NO

IDENTIFY THE AIR CONTAMINANTS: **Note: PSD modeling performed by applicant for NOx; data on file at NEDO shows compliance with OEPA air modeling policy.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

SIC CODE 4911 SCC CODE 20200401 EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.

DATE INSTALLED 03/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.72 lb/hr	0.33	1.09 lbs/hr	0.33
PM ₁₀					
Sulfur Dioxide	Attainment	0.89 lb/hr	0.27	0.89 lb/hr	0.27
Organic Compounds	Attainment	1.06 lbs/hr	0.32	1.06 lbs/hr	0.32
Nitrogen Oxides	Attainment	47.69 lbs/hr	14.3	47.69 lbs/hr	14.3
Carbon Monoxide	Attainment	3.67 lbs/hr	1.10	3.67 lbs/hr	1.10
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT=Use of Caterpillar Low NOx Combustion Control Module (for reduction of NOx emissions) and use of low sulfur (less than 0.05% by weight) diesel fuel in engine.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

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TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X** NO

IDENTIFY THE AIR CONTAMINANTS:

**Note: PSD modeling performed by applicant for NOx; data on file at NEDO shows compliance with OEPA air modeling policy.

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FACILITY

Emissions Unit ID: **P006**

FACILITY DESCRIPTION Electric power distribution station w/ 6
Caterpillar Model 3516B Packaged 2628
BHP (17.53 MMBtu/hr input;1825 KWe
output)diesel generator units.

CITY/TWP Cleveland

SIC CODE 4911 SCC CODE 20200401 EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION 17.53 MMBtu/hr Diesel Generator. Caterpillar Model 3516B/2628 BHP.

DATE INSTALLED 03/2000

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.72 lb/hr	0.33	1.09 lbs/hr	0.33
PM ₁₀					
Sulfur Dioxide	Attainment	0.89 lb/hr	0.27	0.89 lb/hr	0.27
Organic Compounds	Attainment	1.06 lbs/hr	0.32	1.06 lbs/hr	0.32
Nitrogen Oxides	Attainment	47.69 lbs/hr	14.3	47.69 lbs/hr	14.3
Carbon Monoxide	Attainment	3.67 lbs/hr	1.10	3.67 lbs/hr	1.10
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

BAT=Use of Caterpillar Low NOx Combustion Control Module (for reduction of NOx emissions) and use of low sulfur (less than 0.05% by weight) diesel fuel in engine.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES X** NO

IDENTIFY THE AIR CONTAMINANTS: **Note: PSD modeling performed by applicant for NOx; data on file at NEDO shows compliance with OEPA air modeling policy.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

Modeling Nox (1) hardcopy submitted.

Please provide any additional permit specific notes as you deem necessary:

Premise No.13-18-00-8238 Source No. P001-6PTI No.13-3653

City of Cleveland Division of Air Pollution Control
BES - EES - Emissions Calculation Form

1. Facility Name :AMP-OH Cleveland.

2. Source Description :6 Diesel Engine Generators.

3. Source Inspection : yes [] no [x] Source Operating : yes [] no [x]

4. Calculations :

***** Given Data *****

- 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input; 1825 Kwe output) Diesel Generator Unit.
 - Max. Operational Hours per Generator = 600 hrs/yr
 - Type of fuel fired = #2 Oil.
- Heat Content = 136,500 Btu/gal, %Sulfur=0.03 , Fuel Usage 128.4 gal/hr.

***** ENGINE PERFORMANCE DATA *****

Emission factors supplied by company and based on identical generators that have been permitted all around the state of Ohio.

Emissions

NOx = 47.69 lb/hr

SOx = 0.89 lb/hr

PM = 1.09 lb/hr

CO =3.67 lb/hr

Total OC = 1.06 lb/hr

*******P001*******

60 NEW SC

PTI Num

FACILITY

Emissions Unit ID: P006

FACILITY DESCRIPTION

Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input;1825 KWe output)diesel generator units.

CITY/TWP Cleveland

***** UNCONTROLLED EMISSIONS *****

-----HOURLY EMISSIONS-----

Nox = 47.69 lb/hr
SOx = 0.89 lb/hr
PM = 1.09 lb/hr
CO =3.67 lb/hr
Total OC = 1.06 lb/hr

-----YEARLY EMISSIONS-----

Max. Operational Hours per Generator = 600 hrs/yr

Nox = 47.69 lb/hr x 600 hrs/yr x 1/2000 ton/lb = 14.31 TPY
SOx = 0.89 lb/hr x 600 hrs/yr x 1/2000 ton/lb = 0.27 TPY
PM = 1.09 lb/hr x 600 hrs/yr x 1/2000 ton/lb = 0.33 TPY
CO =3.67 lb/hr x 600 hrs/yr x 1/2000 ton/lb = 1.1 TPY
Total OC = 1.06 lb/hr x 600 hrs/yr x 1/2000 ton/lb = 0.32 TPY

***** ACTUAL EMISSIONS *****

NO CONTROL USED THEREFORE ACTUAL = UNCONTROLLED

***** POTENTIAL EMISSIONS *****

Nox = 47.69 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 208.9 TPY
SOx = 0.89 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 3.9 TPY
PM = 1.09 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 4.8 TPY
CO =3.67 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 16.07 TPY
Total OC = 1.06 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 4.6 TPY

***** ALLOWABLE EMISSIONS *****

AMP-Ohio has requested Operational Limitation for Emission Units P001,P002,P003,P004,P005, and P006. Pursuant to rule OAC 3745-35-07 AMP-Ohio seeks an annual fuel restriction of 77,040 gallons per unit per rolling 12-month period. The 77,040 gallons per unit is equivalent to 600 hours at full load.

6 NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

**PM - OAC 3745-17-11 (B)(5)(b) -same as 3745-31-05(A)(3)
- OAC 3745-31-05(A)(3)- 0.33 TPY**

**Sox- OAC 3745-18-06 (G)- less stringent than 3745-31-05(A)(3)
- OAC 3745-31-05(A)(3)- 0.27 TPY**

**CO- OAC 3745-31-05(A)(3)- 1.1 TPY
NOx- OAC 3745-31-05(A)(3)- 14.31 TPY
TOC- OAC 3745-31-05(A)(3)- 0.32 TPY**

Calculations for P002,P003,P004,P005,P006 are the same as P001.

5. Total Emission for **P001** (TPY) :

<u>POLLUTANT</u>	<u>UNCONTROLLED</u>	<u>ACTUAL</u>	<u>POTENTIAL</u>	<u>ALLOWABLE</u>
		*	*	**
PM	0.33	0.33	4.8	0.33
SOx	0.27	0.27	3.9	0.27
CO	1.11	1.11	116.07	1.1
NOx	14.3	14.3	208.0	14.3
TOC	0.32	0.32	4.6	0.32

6. Total Emissions **P001- P006** (TPY) :

62 NEW SC

PTI Num

FACILITY

FACILITY DESCRIPTION

Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input;1825 KWe output)diesel generator units.

Emissions Unit ID: P006
CITY/TWP Cleveland

<u>POLLUTANT</u>	<u>UNCONTROLLED</u>	<u>ACTUAL</u>	<u>POTENTIAL</u>	<u>ALLOWABLE</u>
		*	*	**
PM	1.98	1.98	28.8	1.98
SOx	1.62	1.62	23.4	1.62
CO	6.66	6.66	696.46	6.66
NOx	85.8	85.8	1252.8	85.8
TOC	1.92	1.92	27.6	1.92

Source Class :Major [x]Minor []Other []

Recommendation :T-Status []Approve [x]Deny [] Revoke []

Examiner : Zaki Amer Date :

Application No.13-18-__-__

* Based on actual operating hours** Based on 24 hr/day, 365 days/year

Permit To Install Synthetic Minor Write-Up

SYNTHETIC MINOR DETERMINATION
AMP-OHIO
13-18-00-3653
P001-P006

A.SOURCE DESCRIPTION.

Electric power distribution station w/ 6
Caterpillar Model 3516B Packaged 2628
BHP (17.53 MMBtu/hr input; 1825 KWe
output) diesel generator units.

Emissions Unit ID: **P006** _____
CITY/TWP Cleveland

6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input; 1825 Kwe output) Diesel Generator Units ;

P001

P002

P003

P004

P005

P006

The company has requested a Federally Enforceable State Permit to Install
(Synthetic Minor) for its facility.

B.FACILITY EMISSIONS.

The source is located in Cleveland, in Cuyahoga County.

C.SOURCE EMISSIONS

Based upon calculated potential to emit AMP-Ohio is a Title V source for NOx. The company is volunteering to **restrict** the following emissions units: P001, P002, P003, P004, P005, P006 to 77,040 gallons per unit per rolling 12-month year. By this restriction their potential to emit will drop below the Title V threshold limit for NOx of 100 TPY. Therefore the company has restricted themselves to an annual emission limitation of **85.8 TPY** of Nox for emissions units: P001, P002, P003, P004, P005, P006.

PTE : NOx without restrictions	Synthetic minor limitation	PTE : NOx with restrictions
1252.8 TPY	Gallons of #2 oil per year per unit = 77,040 (=600 hrs per unit per year at full load)	85.8 TPY

D.CONCLUSION.

Limiting the operational hours to **77,040** gallons per year per unit of #2 oil will decrease the potential emissions of the sources below the 100 TPY Title V threshold and Prevention of Significant Deterioration (PSD), thereby avoiding both Title V and PSD air permitting requirements.

FACILITY DESCRIPTION

Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input;1825 KWe output)diesel generator units.

CITY/TWP Cleveland

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	1.98
SOx	1.62
CO	6.6
NOx	85.8
TOC	1.92

Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):

Modeling Nox (1) hardcopy submitted.

Please provide any additional permit specific notes as you deem necessary:

Premise No.13-18-00-8238 Source No. P001-6PTI No.13-3653

City of Cleveland Division of Air Pollution Control
BES - EES - Emissions Calculation Form

1. Facility Name :AMP-OH Cleveland.

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4. Calculations :

***** Given Data *****

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- Max. Operational Hours per Generator = 600 hrs/yr
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Heat Content = 136,500 Btu/gal, %Sulfur=0.03 , Fuel Usage 128.4 gal/hr.

NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

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Emission factors supplied by company and based on identical generators that have been permitted all around the state of Ohio.

Emissions

NOx = 47.69 lb/hr
SOx = 0.89 lb/hr
PM = 1.09 lb/hr
CO = 3.67 lb/hr
Total OC = 1.06 lb/hr

***** **P001** *****

***** **UNCONTROLLED EMISSIONS** *****

-----HOURLY EMISSIONS-----

Nox = 47.69 lb/hr
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-----YEARLY EMISSIONS-----

Max. Operational Hours per Generator = 600 hrs/yr

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***** **ACTUAL EMISSIONS** *****

NO CONTROL USED THEREFORE ACTUAL = UNCONTROLLED

***** **POTENTIAL EMISSIONS** *****

Nox = 47.69 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 208.9 TPY

PTI Num

FACILITY

Emissions Unit ID: P006

FACILITY DESCRIPTION

Electric power distribution station w/ 6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input;1825 KWe output)diesel generator units.

CITY/TWP

Cleveland

SOx = 0.89 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 3.9 TPY
PM = 1.09 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 4.8 TPY
CO =3.67 lb/hr x 8760 hrs/yr x 1/2000 ton/lb = 16.07 TPY
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PM - OAC 3745-17-11 (B)(5)(b) -same as 3745-31-05(A)(3)
- OAC 3745-31-05(A)(3)- 0.33 TPY

Sox- OAC 3745-18-06 (G)- less stringent than 3745-31-05(A)(3)
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CO- OAC 3745-31-05(A)(3)- 1.1 TPY
NOx- OAC 3745-31-05(A)(3)- 14.31 TPY
TOC- OAC 3745-31-05(A)(3)- 0.32 TPY

Calculations for P002,P003,P004,P005,P006 are the same as P001.

5. Total Emission for P001 (TPY) :

6 **NEW SC**

PTI Num

FACILITY

FACILITY DESCRIPTION

Electric power distribution station w/ 6
Caterpillar Model 3516B Packaged 2628
BHP (17.53 MMBtu/hr input;1825 KWe
output)diesel generator units.

Emissions Unit ID: **P006** _____
CITY/TWP Cleveland

<i>POLLUTANT</i>	<i>UNCONTROLLED</i>	<i>ACTUAL</i>	<i>POTENTIAL</i>	<i>ALLOWABLE</i>
PM 0.330.33	4.8	0.33		
SOx0.270.27	3.9	0.27		
CO 1.11.116.071.1				
NOx 14.3 14.3 208.0 14.3				
TOC0.320.32 4.6 0.32				

6. Total Emissions **P001- P006** (TPY) :

<i>POLLUTANT</i>	<i>UNCONTROLLED</i>	<i>ACTUAL</i>	<i>POTENTIAL</i>	<i>ALLOWABLE</i>
PM 1.981.98	28.8	1.98		
SOx1.621.62	23.4	1.62		
CO 6.66.696.46.6				
NOx 85.8 85.8 1252.8 85.8				

TOC1.921.92 27.6 1.92

Source Class :Major Minor Other

Recommendation :T-Status Approve Deny Revoke

Examiner : Zaki Amer Date : _____

Application No.13-18-__-__

68 NEW SOURCE REVIEW FORM B

PTI Number: 13-03653

Facility ID: 1318008238

FACILITY NAME AMP-OH

FACILITY DESCRIPTION Electric power distribution station w/ 6 CITY/TWP Cleveland

Emissions Unit ID: **P006**

* Based on actual operating hours** Based on 24 hr/day, 365 days/year

Permit To Install Synthetic Minor Write-Up

SYNTHETIC MINOR DETERMINATION

AMP-OHIO

13-18-00-3653

P001-P006

A.SOURCE DESCRIPTION.

6 Caterpillar Model 3516B Packaged 2628 BHP (17.53 MMBtu/hr input; 1825 Kwe output) Diesel Generator Units ;

- P001
- P002
- P003
- P004
- P005
- P006

The company has requested a Federally Enforceable State Permit to Install (Synthetic Minor) for its facility.

B.FACILITY EMISSIONS.

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C.SOURCE EMISSIONS

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Electric power distribution station w/ 6
Caterpillar Model 3516B Packaged 2628
BHP (17.53 MMBtu/hr input;1825 KWe
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PTE : NOx without restrictions	Synthetic minor limitation	PTE : NOx with restrictions
1252.8 TPY	Gallons of #2 oil per year per unit = 77,040 (=600 hrs per unit per year at full load)	85.8 TPY

D.CONCLUSION.

Limiting the operational hours to **77,040** gallons per year per unit of #2 oil will decrease the potential emissions of the sources below the 100 TPY Title V threshold and Prevention of Significant Deterioration (PSD), thereby avoiding both Title V and PSD air permitting requirements.

Please fill in the following for this permit:

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**Pollutant****Tons Per Year**

PM	1.98
SOx	1.62
CO	6.6
NOx	85.8
TOC	1.92