



State of Ohio Environmental Protection Agency

Street Address:

1800 WaterMark Drive  
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

P.O. Box 1049  
Columbus, OH 43216-1049

09/10/98

CERTIFIED MAIL

08-19-02-0226

RE: Final Chapter 3745-35 Permit To Operate

Arcanum Water and Light Department  
Michael A. Clark  
19 Water Street  
Arcanum, OH 45304

Dear Michael A. Clark:

The enclosed Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated in the Permit(s). Because each permit contains several terms and conditions, I urge you to read them 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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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 with the Environmental Review Appeals Commission within thirty (30) days after 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. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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

If you have any questions, please contact the RAPCA at (937) 225-4435

Very truly yours,

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

cc: RAPCA

Jim Orlemann, DAPC Engineering  
Becky Castle, DAPC PMU



## PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date: 09/10/98

Facility ID: 08-19-02-0226

Expiration Date: 09/10/03

FINAL ISSUE

This document constitutes issuance for:

Arcanum Water and Light Department  
104 W. South Street  
Arcanum, OH 45304

of a permit to operate for:

B002 (3.9 MMBTU/hr Stand-by Generator)

AR-2; diesel engine used to generate 550 KW (597 KW peak stand by) of electricity for peak shaving and emergency standby purposes.

### PART I General Terms & Conditions

#### 1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

#### 2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

#### 3. 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.)

**4. 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 three 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 the permit. Such records may be maintained in computerized form.

**5. 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 and federal 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.

**6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

**Permit Transfers**

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

**8. 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.

**9. Permit Renewal**

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

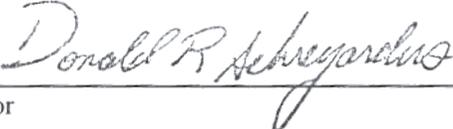
The following Ohio EPA District Office or local air agency has jurisdiction in the area in which the facility is located:

RAPCA  
451 West Third Street  
PO Box 972  
Dayton, OH 45422  
(937) 225-4435

You will be contacted approximately six months prior to expiration date regarding the renewal of this permit. If you are not contacted, please contact the RAPCA.

10. The permittee is also subject to the attached special terms and conditions.

OHIO ENVIRONMENTAL PROTECTION AGENCY

  
\_\_\_\_\_  
Director

**Part II: Special Terms and Conditions**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
3.9 mmBtu/hr Stand-by Generator (800 brake horsepower)	OAC rule 3745-17-11(B)(5)(b) OAC rule 3745-17-07(A)(1)  OAC rule 3745-35-07	0.062 lb particulate/mmBtu  Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule. NOx: 21.16 lbs/hr; 32.80 TPY  The above tons/yr limitation is a rolling, 12-month summation.

**2. Additional Terms and Conditions**

- 2.a The lbs/hr allowable emission rate was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

**B. Operational Restrictions**

1. The maximum diesel fuel usage for this emissions unit shall not exceed 28 gallons of diesel fuel per hour and 86,800 gallons per year based upon a rolling, 12-month summation of the fuel usage.
2. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the following diesel fuel usages for this emissions unit:

Months	Maximum, Cumulative Diesel Fuel Usage, in gallons
1	7,234
1-2	14,468
1-3	21,702
1-4	28,936
1-5	36,170
1-6	43,404
1-7	50,638
1-8	57,872
1-9	65,106
1-10	72,340
1-11	79,574
1-12	86,800

After the first 12 calendar months of operation following the effective date of this permit, the permittee shall comply with the annual diesel fuel usage limitation based upon rolling, 12-month summations.

**C Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records of the following information:
  - a. The number of gallons of diesel fuel burned for the calendar month.
  - b. During the first 12 months of operation following the issuance of this permit, the cumulative number of gallons of diesel fuel burned.
  - b. The number of gallons of diesel fuel burned for the rolling, 12-month summation period (beginning the 13th calendar month after the final issuance of this permit).

#### D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing an exceedance of the rolling, 12-month diesel fuel usage limitation, or for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative diesel fuel usage limitation. The notification should include a copy of such record and shall be sent to the Director within 30 days following the end of the month.

#### E. Testing Requirements

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

- 1.a Emission Limitation-  
21.16 lbs/hr NOx

**Applicable Compliance Method-**

Compliance shall be based upon the reported manufacturer's emission rate of 12 grams per brake horsepower-hour, multiplied by the brake horsepower rating for the unit of 800, divided by 453.6 grams per pound. It can also be based upon a maximum hourly fuel usage of 28 gallons (determined by dividing the maximum Btu/hr heat input of 3.9 mmBtu/hr by a heat content of 0.140 mmBtu/gallon), multiplied by an emission factor, derived from manufacturer's data, of 0.76 pound per gallon.

- 1.b Emission limitation-  
32.80 TPY NOx

**Applicable Compliance Method-**

Compliance shall be determined by multiplying each 12-month summation of the recorded fuel usages by the emission factor, 0.76 pound per gallon, as determined in section E.1.a., and dividing by 2000 lbs/ton.

- 1.c Emission Limitation-  
0.062 lb particulate/mmBtu

**Applicable Compliance Method-**

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu as specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- 1.d Emission Limitation-  
20% opacity, as a six-minute average

**Applicable Compliance Method-**

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

#### F. Miscellaneous Requirements

1. The permittee is hereby notified that this permit and all agency records concerning the operation of this permitted emissions unit are subject to public disclosure in accordance with OAC rule 3745-49-03.
2. The terms and conditions in Sections A-F of this permit are federally enforceable, pursuant to OAC rule 3745-35-07.



## PERMIT TO OPERATE AN EMISSIONS UNIT

Effective Date 09/10/98

Facility ID: 08-19-02-0226

Expiration Date: 09/10/03

FINAL ISSUE

This document constitutes issuance for

Arcanum Water and Light Department  
104 W. South Street  
Arcanum, OH 45304

of a permit to operate for:

B001 (4.9 MMBTU/hr Stand-by Generator)

AR-1; diesel engine used to generate 750 KW (806 KW peak standby) of electricity for peak shaving and emergency standby purposes.

### PART I General Terms & Conditions

#### 1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

#### 2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

#### 3. 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.)

#### **4. 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 three 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 the permit. Such records may be maintained in computerized form.

#### **5. 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 and federal 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.

#### **6. 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 unit 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 this emissions unit(s) that is (are) served by such control system(s).

#### **7. Permit Transfers**

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

#### **8. 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.

#### **9. Permit Renewal**

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency. It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

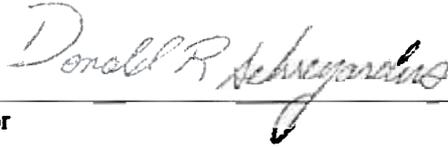
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**10. The permittee is also subject to the attached special terms and conditions.**

**OHIO ENVIRONMENTAL PROTECTION AGENCY**



Director

## Part II: Special Terms and Conditions

### A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
4.9 mmBtu/hr Stand-by Generator (1080 brake horsepower)	OAC rule 3745-17-11(B)(5)(b)	0.062 lb particulate/mmBtu
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-35-07	NOx: 28.57 lbs/hr, 57.14 TPY  The above tons/yr limitation is a rolling, 12-month summation.

### 2. Additional Terms and Conditions

- 2.a The lbs/hr allowable emission rate was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

### B. Operational Restrictions

1. The maximum diesel fuel usage for this emissions unit shall not exceed 35 gallons of diesel fuel per hour and 140,000 gallons per year based upon a rolling, 12-month summation of the fuel usage.
2. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the following diesel fuel usages for this emissions unit:

Months	Maximum, Cumulative Diesel Fuel Usage, in gallons
1	11,667
1-2	23,334
1-3	35,001
1-4	46,668
1-5	58,335
1-6	70,002
1-7	81,669
1-8	93,336
1-9	105,003
1-10	116,670
1-11	128,337
1-12	140,000

After the first 12 calendar months of operation following the effective date of this permit, the permittee shall comply with the annual diesel fuel usage limitation based upon rolling, 12-month summations.

### C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information:
  - a. The number of gallons of diesel fuel burned for the calendar month.
  - b. During the first 12 months of operation following the issuance of this permit, the cumulative number of gallons of diesel fuel burned.
  - c. The number of gallons of diesel fuel burned for the rolling, 12-month summation period (beginning the 13th calendar month after the final issuance of this permit).

#### D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing an exceedance of the rolling, 12-month diesel fuel usage limitation, or for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative diesel fuel usage limitation. The notification should include a copy of such record and shall be sent to the Director within 30 days following the end of the month.

#### E. Testing Requirements

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

- 1.a Emission Limitation-  
28.57 lbs/hr NO<sub>x</sub>

**Applicable Compliance Method-**

Compliance shall be based upon the reported manufacturer's emission rate of 12 grams per brake horsepower-hour, multiplied by the brake horsepower rating for the unit of 1080, divided by 453.6 grams per pound. It can also be based upon a maximum hourly fuel usage of 35 gallons (determined by dividing the maximum Btu/hr heat input of 4.9 mmBtu/hr by a heat content of 0.140 MMBtu/gallon), multiplied by an emission factor, derived from manufacturer's data, of 0.82 pound per gallon.

- 1.b Emission limitation-  
57.14 TPY NO<sub>x</sub>

**Applicable Compliance Method-**

Compliance shall be determined by multiplying each 12-month summation of the recorded fuel usages by the emission factor, 0.82 pound per gallon, as determined in section E.1.a., and dividing by 2000 lbs/ton.

- 1.c Emission Limitation-  
0.062 lb particulate/mmBtu

**Applicable Compliance Method-**

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu as specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- 1.d Emission Limitation-  
20% opacity, as a six-minute average

**Applicable Compliance Method-**

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

#### F. Miscellaneous Requirements

1. The permittee is hereby notified that this permit and all agency records concerning the operation of this permitted emissions unit are subject to public disclosure in accordance with OAC rule 3745-49-03.
2. The terms and conditions in Sections A-F of this permit are federally enforceable, pursuant to OAC rule 3745-35-07.