



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

05/16/01

**CERTIFIED MAIL**

**RE: Final Title V Chapter 3745-77  
permit**

07-01-00-0007

DP&L, J.M. Stuart Generating Station  
Dave Moore  
P.O. Box 468  
Aberdeen, OH 45101

Dear Dave Moore:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging 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 Portsmouth Air Pollution Group.

Very truly yours,

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

cc: Portsmouth Air Pollution Group  
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: <b>05/16/01</b>	Effective Date: <b>05/16/01</b>	Expiration Date: <b>05/16/06</b>
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This document constitutes issuance of a Title V permit for Facility ID: 07-01-00-0007 to:  
 DP&L, J.M. Stuart Generating Station  
 U.S. Route 52  
 Aberdeen, OH 45101

**Emissions Unit ID (Company ID)/Emissions Unit Activity Description**

B001 (Boiler No.1) Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input	B005 (Auxiliary Boiler) No.2 fuel oil-fired back-up boiler (Babcock and Wilcox, Model CPB-7); 285 MMBtu/h maximum heat input	B009 (Generator No. 4) Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input
B002 (Boiler No. 2) Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input	B006 (Generator No. 1) Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input	F001 (Plant Grounds, Roadways and Parking Areas) General vehicular traffic on paved/unpaved roads and areas, vehicular traffic associated with ash handling
B003 (Boiler No. 3) Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input	B007 (Generator No. 2) Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input	F002 (Coal Storage Pile) Outside storage of coal and yard traffic
B004 (Boiler No. 4) Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with low NOx cell burner technology; 5,649 MMBtu/h maximum heat input	B008 (Generator No. 3) Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input	F003 (Coal and Ash Handling) Coal unloading, transfer, and crushing operations, includes ash handling operations

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Portsmouth Air Pollution Group  
 740 Second Street  
 Portsmouth, OH 45662  
 (614) 353-5156

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## **4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

## **5. Severability Clause**

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

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

## **7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

## **8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

## **9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

## **10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than

the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

## **11. Federal and State Enforceability**

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

## **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement.

Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed

therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

## **15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

## **16. Off Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

**17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

**18. Insignificant Activity**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

## **B. State Only Enforceable Section**

### **1. 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.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## **Part II - Specific Facility Terms and Conditions**

### **A. State and Federally Enforceable Section**

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

### **B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

Z001 - gasoline storage tank and dispensing facility;  
Z002 - gasoline storage tank and dispensing facility;  
Z003 - fire protection pump; and  
T005 - light oil storage tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler No.1 (B001)

**Activity Description:** Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

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

- 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.10 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

- The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.
- The permittee shall operate the ESP during any operation of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

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

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

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

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: the average daily and rolling, 30-day average emission rates of sulfur dioxide in lb/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. In addition, the permittee shall maintain daily records of the total actual heat input values as determined through the F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content in accordance with the following:

The permittee shall collect daily composite samples of the coal received for this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

### III. Monitoring and/or Record Keeping Requirements (continued)

4. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

5. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:
  - a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
  - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and
  - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

The permittee shall record the following information for each day:

- a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation; and
- b. the duration of any downtime for the ESP monitoring equipment for secondary voltage and current specified above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### **IV. Reporting Requirements (continued)**

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of sulfur dioxide values in excess of the applicable rolling, 30-day average sulfur dioxide emission rate (lb/mmBtu). These reports shall also contain the average daily sulfur dioxide emission rates (lb/mmBtu) which are greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1.

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide limitation, the permittee shall submit deviation (excursion) reports that document any average daily sulfur dioxide emission rate which was greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1 and any 30-day rolling, weighted average sulfur dioxide emission rate greater than the sulfur dioxide emission limitation specified in Section A.1. These reports shall be submitted in accordance with Section A.1.c.ii of the General Terms and Conditions.
4. The permittee shall submit quarterly deviation (excursion) reports which identify:
  - a. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i); and
  - b. all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in Section A.II of this permit.

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

5. The permittee shall submit quarterly reports which identify the sections of the ESP that were out of service along with the time period(s) involved. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the information obtained during the previous calendar quarter.

## V. Testing Requirements

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted on an annual basis during the term of this permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC 3745-17-03(B)(9).

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

2. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
3. Compliance with the sulfur dioxide emission limitation shall be based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the USEPA's policy entitled "Enforcement Policy for Sulfur Dioxide Emission Limitations in Ohio" dated February 11, 1980 (45 FR 9101). The daily and rolling 30-day sulfur dioxide emission rates shall be determined and reported in accordance with the applicable requirements of paragraphs A.III.2 or A.III.3 and A.IV.2 or A.IV.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted by the USEPA's enforcement policy. In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-18-07(B)(2)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Compliance with the sulfur dioxide emission limitation shall be determined in accordance with the procedures and records required pursuant to Section A.V.3.

**VI. Miscellaneous Requirements**

1. A logbook documenting activities relating to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
2. A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler No. 2 (B002)

**Activity Description:** Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

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

- 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.10 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

None

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

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

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

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: the average daily and rolling, 30-day average emission rates of sulfur dioxide in lb/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. In addition, the permittee shall maintain daily records of the total actual heat input values as determined through the F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content in accordance with the following:

The permittee shall collect daily composite samples of the coal received for this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Iso-peribol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

### III. Monitoring and/or Record Keeping Requirements (continued)

4. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

### IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of sulfur dioxide values in excess of the applicable rolling, 30-day average sulfur dioxide emission rate (lb/mmBtu). These reports shall also contain the average daily sulfur dioxide emission rates (lb/mmBtu) which are greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1.

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### **IV. Reporting Requirements (continued)**

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide limitation, the permittee shall submit deviation (excursion) reports that document any average daily sulfur dioxide emission rate which was greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1 and any 30-day rolling, weighted average sulfur dioxide emission rate greater than the sulfur dioxide emission limitation specified in Section A.1. These reports shall be submitted in accordance with Section A.1.c.ii of the General Terms and Conditions.

#### **V. Testing Requirements**

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC 3745-17-03(B)(9).

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

2. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
3. Compliance with the sulfur dioxide emission limitation shall be based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the USEPA's policy entitled "Enforcement Policy for Sulfur Dioxide Emission Limitations in Ohio" dated February 11, 1980 (45 FR 9101). The daily and rolling 30-day sulfur dioxide emission rates shall be determined and reported in accordance with the applicable requirements of paragraphs A.III.2 or A.III.3 and A.IV.2 or A.IV.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted by the USEPA's enforcement policy. In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-18-07(B)(2)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

1. Compliance with the sulfur dioxide emission limitation shall be determined in accordance with the procedures and records required pursuant to Section A.V.3.

**VI. Miscellaneous Requirements**

1. A logbook documenting activities relating to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
2. A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler No. 3 (B003)

**Activity Description:** Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with cell burner technology; 5,649 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

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

- 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.10 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

None

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

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

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

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: the average daily and rolling, 30-day average emission rates of sulfur dioxide in lb/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. In addition, the permittee shall maintain daily records of the total actual heat input values as determined through the F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content in accordance with the following:

The permittee shall collect daily composite samples of the coal received for this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

### III. Monitoring and/or Record Keeping Requirements (continued)

4. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

### IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of sulfur dioxide values in excess of the applicable rolling, 30-day average sulfur dioxide emission rate (lb/mmBtu). These reports shall also contain the average daily sulfur dioxide emission rates (lb/mmBtu) which are greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1.

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### **IV. Reporting Requirements (continued)**

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide limitation, the permittee shall submit deviation (excursion) reports that document any average daily sulfur dioxide emission rate which was greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1 and any 30-day rolling, weighted average sulfur dioxide emission rate greater than the sulfur dioxide emission limitation specified in Section A.1. These reports shall be submitted in accordance with Section A.1.c.ii of the General Terms and Conditions.

#### **V. Testing Requirements**

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC 3745-17-03(B)(9).

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

2. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
3. Compliance with the sulfur dioxide emission limitation shall be based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the USEPA's policy entitled "Enforcement Policy for Sulfur Dioxide Emission Limitations in Ohio" dated February 11, 1980 (45 FR 9101). The daily and rolling 30-day sulfur dioxide emission rates shall be determined and reported in accordance with the applicable requirements of paragraphs A.III.2 or A.III.3 and A.IV.2 or A.IV.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted by the USEPA's enforcement policy. In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-18-07(B)(2)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Compliance with the sulfur dioxide emission limitation shall be determined in accordance with the procedures and records required pursuant to Section A.V.3.

**VI. Miscellaneous Requirements**

1. A logbook documenting activities relating to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
2. A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler No. 4 (B004)

**Activity Description:** Dry bottom, wall fired, pulverized coal utility boiler (Babcock and Wilcox, Model UP) with low NOx cell burner technology; 5,649 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

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

- 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(C)(1)	Particulate emissions shall not exceed 0.10 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

None

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

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

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

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall operate and maintain equipment to continuously monitor and record sulfur dioxide emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

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

The permittee shall maintain documentation from the USEPA or the Ohio EPA that the continuous sulfur dioxide monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous sulfur dioxide monitoring system: the average daily and rolling, 30-day average emission rates of sulfur dioxide in lb/mmBtu actual heat input, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. In addition, the permittee shall maintain daily records of the total actual heat input values as determined through the F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content in accordance with the following:

The permittee shall collect daily composite samples of the coal received for this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be the most recent version of: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Portsmouth Local Air Agency.

### III. Monitoring and/or Record Keeping Requirements (continued)

4. To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP during (a) all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

### IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. If the continuous sulfur dioxide monitoring system is used to demonstrate compliance with the sulfur dioxide emission limitation, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Portsmouth Local Air Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of sulfur dioxide values in excess of the applicable rolling, 30-day average sulfur dioxide emission rate (lb/mmBtu). These reports shall also contain the average daily sulfur dioxide emission rates (lb/mmBtu) which are greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1.

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

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### **IV. Reporting Requirements (continued)**

3. If coal sampling and analysis is used to demonstrate compliance with the sulfur dioxide limitation, the permittee shall submit deviation (excursion) reports that document any average daily sulfur dioxide emission rate which was greater than 1.5 times the sulfur dioxide emission limitation specified in Section A.1 and any 30-day rolling, weighted average sulfur dioxide emission rate greater than the sulfur dioxide emission limitation specified in Section A.1. These reports shall be submitted in accordance with Section A.1.c.ii of the General Terms and Conditions.

#### **V. Testing Requirements**

1. The permittee shall conduct, or have conducted, particulate emission testing for this emissions unit to demonstrate compliance with the allowable mass emission rate of 0.10 lb/mmBtu actual heat input in accordance with the following requirements:

The particulate emission testing shall be conducted twice during the term of this permit. Once between years 2 and 3, and once during the last year of the permit.

Compliance with the allowable mass emission rate for particulates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC 3745-17-03(B)(9).

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

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

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

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

2. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
3. Compliance with the sulfur dioxide emission limitation shall be based upon a rolling, 30-day average of the daily sulfur dioxide emission rates, in accordance with the USEPA's policy entitled "Enforcement Policy for Sulfur Dioxide Emission Limitations in Ohio" dated February 11, 1980 (45 FR 9101). The daily and rolling 30-day sulfur dioxide emission rates shall be determined and reported in accordance with the applicable requirements of paragraphs A.III.2 or A.III.3 and A.IV.2 or A.IV.3 of this permit. The permittee may be required to perform sulfur dioxide emission tests if warranted by the USEPA's enforcement policy. In such cases, the methods and procedures specified in 40 CFR Part 60.46 shall be employed.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
Babcock and Wilcox pulverized coal-fired, dry-bottom, wall-fired utility boiler, with cell burner technology, having a nominal capacity of 5649 mmBtu/hr, and controlled by an electrostatic precipitator (ESP).	OAC rule 3745-18-07(B)(2)	Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Compliance with the sulfur dioxide emission limitation shall be determined in accordance with the procedures and records required pursuant to Section A.V.3.

**VI. Miscellaneous Requirements**

1. A logbook documenting activities relating to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.
2. A logbook documenting activities relating to the continuous sulfur dioxide monitoring system must be kept on site and available for inspection during regular office hours.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Auxiliary Boiler (B005)

**Activity Description:** No.2 fuel oil-fired back-up boiler (Babcock and Wilcox, Model CPB-7); 285 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

##### I. 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>
Babcock and Wilcox number two fuel oil-fired auxiliary boiler, having a nominal capacity of 285 mmBtu/hr.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed .020 lb/mmBtu actual heat input.
	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

**None**

##### II. Operational Restrictions

1. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I above.
2. The permittee shall burn only number two fuel oil in this emissions unit.

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

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

- a. Alternative 1:

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

- b. Alternative 2:

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

2. (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the daily samples during a calendar month.
3. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
4. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation specified in Section A.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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).

## V. Testing Requirements (continued)

2. Emission Limitation -  
Particulate emissions shall not exceed .020 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance with the allowable mass emission rate for particulates shall be determined by multiplying an emission factor of 2.0 lbs of particulate per 1000 gallons of oil combusted by the heat content of the oil as determined through the fuel analysis required in Section A.III above. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

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)(9).

3. Emission Limitation -  
Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

- 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>
Babcock and Wilcox number two fuel oil-fired auxiliary boiler, having a nominal capacity of 285 mmBtu/hr.	OAC rule 3745-18-07(B)(1)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

- The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section B.I above.

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

- The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation specified in Section B.I.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

**V. Testing Requirements**

- Emission Limitation - Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Generator No. 1 (B006)

**Activity Description:** Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

##### I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 1.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(b)	See Section A.I.2.a below. Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	See Section A.I.2.b below. Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

##### II. Operational Restrictions

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I above.
2. The permittee shall burn only number two fuel oil in this emissions unit.

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

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

- a. Alternative 1:

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

- b. Alternative 2:

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

(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the daily samples during a calendar month.

2. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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).

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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.c** Emission Limitation -  
Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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 -  
Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 1.	OAC rule 3745-18-07(B)(1)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section B.I above.

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section B.I.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation in Section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation - Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

Facility Name: **DP&L, J.M. Stuart Generating Station**

Facility ID: **07-01-00-0007**

Emissions Unit: **Generator No. 1 (B006)**

## **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Generator No. 2 (B007)

**Activity Description:** Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input

**A. State and Federally Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 2.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(b)	See Section A.I.2.a below. Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	See Section A.I.2.b below. Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I above.
2. The permittee shall burn only number two fuel oil in this emissions unit.

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

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

- a. Alternative 1:

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

- b. Alternative 2:

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

(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the daily samples during a calendar month.

2. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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).

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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.c** Emission Limitation -  
Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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 -  
Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 2.	OAC rule 3745-18-07(B)(1)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section B.I above.

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section B.I.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation in Section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation - Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**Applicable Compliance Method -**

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

Facility Name: **DP&L, J.M. Stuart Generating Station**  
Facility ID: **07-01-00-0007**  
Emissions Unit: **Generator No. 2 (B007)**

## **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Generator No. 3 (B008)

**Activity Description:** Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input

#### A. State and Federally Enforceable Section

##### I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 3.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(b)	See Section A.I.2.a below. Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	See Section A.I.2.b below. Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

##### 2. Additional Terms and Conditions

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

##### II. Operational Restrictions

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I above.
2. The permittee shall burn only number two fuel oil in this emissions unit.

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

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

- a. Alternative 1:

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

- b. Alternative 2:

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

(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the daily samples during a calendar month.

2. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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).

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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.c** Emission Limitation -  
Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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 -  
Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 3.	OAC rule 3745-18-07(B)(1)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section B.I above.

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section B.I.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation in Section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation - Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

Facility Name: **DP&L, J.M. Stuart Generating Station**

Facility ID: **07-01-00-0007**

Emissions Unit: **Generator No. 3 (B008)**

## **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Generator No. 4 (B009)

**Activity Description:** Stationary internal combustion engine, large bore no. 2 fuel oil-fired electric generator (General Motors, Model MU-20E); 33 MMBtu/h maximum heat input

**A. State and Federally Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 4.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.
	OAC rule 3745-17-11(B)(5)(b)	See Section A.I.2.a below. Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.
	40 CFR Part 52.1881(b)(11)(i)	See Section A.I.2.b below. Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

**2. Additional Terms and Conditions**

- 2.a The requirement to comply with this particulate emission limitation shall terminate on the date the U.S. EPA approves the 0.062 lb/mmBtu actual heat input emission limitation as a revision to the Ohio SIP for particulate matter.
- 2.b This particulate emission limitation shall be effective and federally enforceable on the date the U.S. EPA approves this particulate emission limitation as a revision to the Ohio SIP for particulate matter.

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I above.
2. The permittee shall burn only number two fuel oil in this emissions unit.

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

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

- a. Alternative 1:

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

- b. Alternative 2:

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

(The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) Also, if necessary, the permittee shall maintain monthly records of the calculated sulfur dioxide emission rate based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the daily samples during a calendar month.

2. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section A.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation -  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method -

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).

## **V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
Particulate emissions shall not exceed 0.35 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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.c** Emission Limitation -  
Particulate emissions shall not exceed 0.062 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

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 -  
Sulfur dioxide emissions shall not exceed 3.16 lbs/mmBtu actual heat input.

Applicable Compliance Method -

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. 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>
General Motors large bore, number two fuel oil-fired, stationary internal combustion engine, having a nominal heat input capacity of 33 mmBtu/hr. Generator No. 4.	OAC rule 3745-18-07(B)(1)	Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

1. The quality of oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section B.I above.

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

1. The permittee shall notify the Portsmouth Local Air Agency in writing of any record which shows a deviation of the allowable sulfur dioxide limitation specified in Section B.I.1 based upon a volume-weighted average of the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 45 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation in Section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 1.a Emission Limitation - Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

**Applicable Compliance Method -**

Except as provided below, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation.

If the sulfur content of each shipment of oil received during a calendar month does not comply with the allowable emission limitation on an "as-received" basis or if the sulfur content of each daily sample collected during a calendar month does not comply with the allowable emission limitation on an "as-burned" basis, compliance with the allowable sulfur dioxide emission limitation shall be based upon a volume-weighted average of the calculated sulfur dioxide emission rates for all of the shipments or daily samples of oil during the calendar month.

Facility Name: **DP&L, J.M. Stuart Generating Station**

Facility ID: **07-01-00-0007**

Emissions Unit: **Generator No. 4 (B009)**

## **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Plant Grounds, Roadways and Parking Areas (F001)

**Activity Description:** General vehicular traffic on paved/unpaved roads and areas, vehicular traffic associated with ash handling

**A. State and Federally Enforceable Section**

**I. 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>
Paved and unpaved plant roadways and parking areas	None	None

**2. Additional Terms and Conditions**

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**B. State Enforceable Section**

**I. 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Coal Storage Pile (F002)  
**Activity Description:** Outside storage of coal and yard traffic

**A. State and Federally Enforceable Section**

**I. 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>
Coal storage pile	None	None

**2. Additional Terms and Conditions**

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**B. State Enforceable Section**

**I. 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Coal and Ash Handling (F003)

**Activity Description:** Coal unloading, transfer, and crushing operations, includes ash handling operations

**A. State and Federally Enforceable Section**

**I. 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>
Coal unloading, transfer, and crushing and ash handling operations	None	None

**2. Additional Terms and Conditions**

- 2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07 and 3745-17-08 do not apply to this fugitive emissions unit.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**B. State Enforceable Section**

**I. 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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