



State of Ohio Environmental Protection Agency

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P.O. Box 1049  
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**RE: FINAL PERMIT TO INSTALL**

**MEIGS COUNTY**

**Application No: 06-08138**

**Fac ID: 0653000069**

**DATE: 2/7/2008**

American Municipal Power Gen. Station  
Randy Meyer  
2600 Airport Drive  
Columbus, OH 43219

**CERTIFIED MAIL**

Y	TOXIC REVIEW
Y	PSD
Y	SYNTHETIC MINOR
Y	CEMS
	MACT
Da,Db,Y,PP,OOO	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

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

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

You are hereby notified that this action 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

SEDO



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**Permit To Install  
Terms and Conditions**

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**Issue Date: 2/7/2008  
Effective Date: 2/7/2008**

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**FINAL PERMIT TO INSTALL 06-08138**

Application Number: 06-08138  
Facility ID: 0653000069  
Permit Fee: **\$19950**  
Name of Facility: American Municipal Power Gen. Station  
Person to Contact: Randy Meyer  
Address: 2600 Airport Drive  
Columbus, OH 43219

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**State Route 124  
Letart Falls, Ohio**

Description of proposed emissions unit(s):  
**Power generating facility.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Chris Korleski  
Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

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

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

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - iv. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

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

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

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

## **3. Risk Management Plans**

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

**4. Title IV Provisions**

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

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition 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 re-issuance, or modification
- 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, 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**8. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

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

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

#### 10. Permit-To-Operate Application

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

#### 11. Best Available Technology

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

#### 12. Air Pollution Nuisance

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

### **13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

## **B. State Only Enforceable Permit-To-Install General Terms and Conditions**

### **1. Compliance Requirements**

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

### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

### **3. Permit Transfers**

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

**4. Authorization To Install or Modify**

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

**5. Construction of New Sources(s)**

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

**6. Public Disclosure**

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

**7. Applicability**

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

**8. Construction Compliance Certification**

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

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

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

**C. Permit-To-Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PM10	1182
Sulfur Dioxide	6820
Nitrogen Oxides	3194
Carbon Monoxide	7009.2
Volatile Organic Compounds	166.87
Lead	0.44
Mercury	0.086
Sulfuric Acid Mist	343

## Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. This facility is required to develop and register a risk management plan pursuant to section 112(r) of the Act and is required to comply with the requirements of section 112(r) and the regulations adopted thereunder.

2. Nitrogen Oxides (NOx) Budget Trading Program OAC Chapter 3745-14

a. Facility Code - 0653000069

b. The following regulated emissions units are subject to the applicable requirements specified in OAC Chapter 3745-14 pursuant to OAC rule 3745-14-01(C)(1)(a):

B001 - 5,191 million Btu/hour pulverized coal-fired boiler; and

B002 - 5,191 million Btu/hour pulverized coal-fired boiler.

3. Clean Air Mercury Rule - OAC Chapter 3745-108

The permittee shall ensure that any mercury budget unit complies with the requirements of OAC Chapter 3745-108, which includes submitting timely permit applications. The requirements of this rule will be specified in the Title V permit issued to this facility.

4. Clean Air Interstate Rule - OAC Chapter 3745-109

The permittee shall ensure that any CAIR NOx, SO2, or NOx ozone season units complies with the requirements of OAC Chapter 3745-109, which includes submitting timely permit applications. The requirements of this rule will be specified in the Title V permit issued to this facility

5. Acid Rain Permits and Compliance - OAC Chapter 3745-103

The permittee shall ensure that any affected unit complies with the requirements of OAC Chapter 3745-103, which includes submitting timely permit applications. Emissions exceeding any allowances that are lawfully held pursuant to this rule are prohibited. The requirements of this rule will be specified in the Title V permit issued to this facility.

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

1. Construction and/or operation of this facility shall not commence until all required permits/written authorizations are received from Ohio EPA. Authorizations must be received at a minimum from the Division of Solid and Infectious Waste Management, Division of Surface Water, and Division of Hazardous Waste Management.

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (B001) - Boiler 1 - 5,191 million Btu/hour pulverized coal-fired boiler controlled with good combustion practices, selective catalytic reduction(SCR), baghouse, limestone-based or ammonia-based flue gas desulfurization(FGD) and wet electrostatic precipitator(WESP)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20, 40 CFR Part 60 Subpart Da and OAC Chapter 3745-14.
OAC rules 3745-31-10 through 20	<p>Particulate matter less than ten microns (PM-10) emissions (filterable only) shall not exceed 0.015 pound per million Btu(as a 3-hour average).</p> <p>PM-10(filterable and condensible) emissions shall not exceed: 0.025 pound per million Btu heat input(as a 3-hour average); 129 pounds per hour(as a 3-hour average); and 566 tons per rolling,12-month period.</p> <p>Sulfur dioxide(SO<sub>2</sub>) emissions shall not exceed: 0.24 pound per million Btu heat input(as a 3-hour average), 1,246 pounds per hour(as a 3-hour average), 0.184 pound per million Btu heat input(as a 24-hour rolling average), 0.15 pound per million Btu heat input(as a 30-day rolling average); and 3,410 tons per rolling,12-month period.</p> <p>Nitrogen oxides(NO<sub>x</sub>) emissions shall not exceed: 0.10 pound per million Btu heat input(as a 24-hour rolling average), 519 pounds per hour(as a 24-hour average), 0.07 pound per million Btu heat input(as a 30-day rolling average); and 1,592 tons per rolling,12-month period.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>Carbon monoxide(CO) emissions shall not exceed: 0.154 pound per million Btu heat input(as a 3-hour average), 799 pounds per hour(as a 3-hour average); and 3,501 tons per rolling,12-month period.</p> <p>Volatile organic compound(VOC) emissions shall not exceed: 0.0037 pound per million Btu heat input(as a 3-hour average); 19.2 pounds per hour(as a 3-hour average); and 83.2 tons per rolling,12-month period.</p> <p>Lead(Pb) emissions shall not exceed: 0.00000982 pound per million Btu heat input(as a 3-hour average); 0.051 pound per hour(as a 3-hour average); and 0.22 tons per rolling,12-month period.</p> <p>Sulfuric acid(H<sub>2</sub>SO<sub>4</sub>) emissions shall not exceed 0.0075 pound per million Btu heat input(as a 3-hour average); 38.9 pounds per hour(as a 3-hour average); and 170.5 tons per rolling,12-month period.</p> <p>Also see Section A.I.2.b below.</p>
<p>40 CFR Part 60, Subpart Da</p>	<p>No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.</p> <p>The particulate matter emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>The SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>The NO<sub>x</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks ( <i>i.e.</i> , bituminous coal, subbituminous coal, lignite) or a blend of coal and coal refuse, you must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	specific Hg emission limitation established according to paragraph (a)(5)(i) of 40 CFR Part 60, Subpart Da, Section 60.45Da.
OAC rule 3745-17-10	The particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-07	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Da.
OAC rule 3745-18-59	The SO <sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-21-08	<p>The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to OAC rules 3745-31-10 through 20 in this permit to install.</p> <p>On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the state regulations. This rule revision was submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.</p>
OAC Chapter 3745-14	See Part II, Section A.2 above.

## 2. Additional Terms and Conditions

- 2.a** The permittee shall prepare and submit to the Ohio EPA Southeast District Office a unit-specific monitoring plan for each monitoring system (PM, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> or O<sub>2</sub> and Hg) at least 45 days before commencing certification testing of the monitoring systems. The plan must address the requirements in 40 CFR 75 and paragraphs (s)(1) through (s)(6) of 40 CFR 60.49Da.

[40 CFR 60.13]; [40 CFR Part 60, Appendix F]; and [40 CFR Part 75]

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of good combustion practices, SCR, a baghouse, limestone-based or ammonia-based FGD, WESP and the emissions limitations

listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit.

## **II. Operational Restrictions**

None

## **III. Monitoring and/or Recordkeeping Requirements**

1. Prior to the installation of the continuous SO<sub>2</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO<sub>2</sub> monitoring system meets the requirements of Performance Specification 2; and the U.S. EPA shall certify that the continuous SO<sub>2</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintained on-site and made available to the director (and the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

2. The permittee shall install, operate, and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

- 3. Prior to the installation of the continuous NO<sub>x</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO<sub>x</sub> monitoring system meets the requirements of Performance Specification 2; and the U.S. EPA shall certify that the continuous NO<sub>x</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintain on-site and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

- 4. The permittee shall install, operate, and maintain equipment to continuously monitor and record NO<sub>x</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

The permittee shall maintain records of data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to:

- a. emissions of NO<sub>x</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NO<sub>x</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NO<sub>x</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO<sub>x</sub> monitoring system;

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO<sub>x</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

5. Prior to the installation of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system meets the requirements of Performance Specification 3; and the U.S. EPA shall certify that the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintain on-site and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

6. The permittee shall operate and maintain equipment to continuously monitor and record CO<sub>2</sub> or O<sub>2</sub> emitted from this emissions unit in percent. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and Part 75.

The permittee shall maintain records of data obtained by the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system including, but not limited to:

- a. percent on an instantaneous (one-minute) basis;
- b. results of quarterly cylinder gas audits or linearity checks;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);
- e. hours of operation of the emissions unit, continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system; as well as,

- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

- 7. The permittee shall install the PM CEMS in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 11. The Ohio EPA, Central Office shall certify the continuous PM monitoring system meets the requirements of Performance Specification 11 upon satisfactory completion of initial certification testing. Once received, the letter(s)/document(s) of certification under Part 60 and certification and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

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

The permittee shall maintain records of data obtained by the continuous PM monitoring system including, but not limited to:

- a. emissions of PM in all units of the applicable standard(s) in the appropriate averaging period (40 CFR Part 60, Subpart Da requires a 24-hour (block) averages calculated using U.S. EPA reference Method 19);
- b. results of quarterly accuracy test audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. hours of operation of the emissions unit, continuous PM monitoring system, and control equipment;
- e. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous PM monitoring system;
- f. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous PM monitoring system; as well as,
- g. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

At a minimum, valid continuous monitoring system hourly averages shall be obtained for 90 percent of all operating hours on a 30-day rolling average basis.

The 1-hour arithmetic averages required shall be expressed in ng/J, MMBtu/h, or lb/MWh and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under Section 60.13(e)(2) of Subpart A of 40 CFR Part 60.

All valid continuous monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission monitoring system data requirements are not met.

When PM emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by U.S. EPA or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of all operating hours per 30-day rolling average.

The permittee shall conduct a performance evaluation of the continuous monitoring system according to the applicable requirements of Section 60.13, Performance Specification 11 in Appendix B of 40 CFR Part 60, and Procedure 2 in Appendix F of 40 CFR Part 60. During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 11 in Appendix B of 40 CFR Part 60, PM and O<sub>2</sub> (or CO<sub>2</sub>) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and conducting performance tests using the following test methods:

- a. For PM, EPA Reference Method 5, 5B, or 17 shall be used.
  - b. For O<sub>2</sub> (or CO<sub>2</sub>), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
8. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall properly install, operate, and maintain equipment to continuously monitor and record the secondary voltage, in kilovolts, and the current, in milliamps, for each of the fields within the ESP during operation of this emissions unit, including periods of start-up and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the secondary voltage, in kilovolts, and the current, in milliamps, for each of the fields within the ESP on an hourly basis.

Whenever the monitored value for the voltage and/or current within a field deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the voltage and current readings for the field immediately after the corrective action, and the names of

the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

Acceptable ranges for the secondary voltage and current for each field within the ESP shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

9. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of start-up and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on an hourly basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

10. The permittee shall install and operate a continuous emissions monitoring system (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack according to the requirements below:
  - a. For an affected facility that is also subject to the requirements of Subpart I of 40 CFR Part 75, the permittee may install, certify, maintain, operate and quality-assure the data from an Hg CEMS according to 40 CFR Part 75.10 and Appendices A and B to 40 CFR Part 75.
  - b. As an alternative to the CEMS requirements above, the permittee may use a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to monitor Hg concentration, according to the procedures described in 40 CFR Part 75.15 and Appendix K to 40 CFR Part 75.
  - c. The permittee shall calculate the Hg emission rate (lb/MWh, lbs/trillion Btu, and lbs/year) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of 40 CFR Part 60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of 40 CFR Part 60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in 40 CFR Part 60.49Da(k). Compliance with the applicable standards under 40 CFR Part 60.45Da and OAC rule 3734-31-05(A)(3) are determined on a 12-month rolling average basis.
11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month period emission limitations.

#### **IV. Reporting Requirements**

1. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA,

Southeast District Office, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, 40 CFR Part 75, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
  - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
  - iii. the location of the continuous SO<sub>2</sub> monitor;
  - iv. the exceedance report as detailed in (a) above;
  - v. the total SO<sub>2</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits or linearity checks;
  - ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

2. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO<sub>x</sub> monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of NO<sub>x</sub> emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, 40 CFR Parts 75 and 76, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous NO<sub>x</sub> and other associated monitors;
  - iii. the location of the continuous NO<sub>x</sub> monitor;
  - iv. the exceedance report as detailed in (a) above;
  - v. the total NO<sub>x</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous NO<sub>x</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits or linearity checks;
  - ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. the results of any relative accuracy test audit showing the continuous NO<sub>x</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\* of the continuous NO<sub>x</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\* of the continuous NO<sub>x</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

3. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system downtime and malfunction while the emissions unit was on line.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous CO<sub>2</sub> or O<sub>2</sub> and other associated monitors;
    - iii. the location of the continuous CO<sub>2</sub> or O<sub>2</sub> monitor;
    - iv. the total operating time (hours) of the emissions unit;
    - v. the total operating time of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation;
    - vi. results and dates of quarterly cylinder gas audits or linearity checks;
    - vii. results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
    - viii. the results of any relative accuracy test audit showing the continuous CO<sub>2</sub> or O<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
    - ix. the date, time, and duration of any/each malfunction\* of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation;
    - x. the date, time, and duration of any downtime\* of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation; and
    - xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

4. The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems,

electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by 40 CFR Part 75.

[40 CFR Part 75]

5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and
  - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
50 West Town Street, Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA  
Division of Air Pollution Control  
2195 Front Street  
Logan, Ohio 43138.

6. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the secondary voltage and current for each field within the ESP was outside of the range specified by the manufacturer or established during a complying emissions test;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the field into compliance with the acceptable ranges for voltage and current, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

7. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer or established during a complying emissions test;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

8. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous PM monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of PM emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, OAC Chapter 3745-17, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

- i. the facility name and address;
- ii. the manufacturer and model number of the continuous PM and other associated monitors;
- iii. the location of the continuous PM monitor;
- iv. the exceedance report as detailed in (a) above;
- v. the total PM emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous PM monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits or linearity checks;
- ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. the results of any relative accuracy test audit showing the continuous PM monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction\* of the continuous PM monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\* of the continuous PM monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

9. For Hg, the permittee shall submit quarterly reports, which contain the following information, to the Ohio EPA, Southeast District Office:
  - a. company name and address;
  - b. date of report and beginning and ending dates of the reporting period;
  - c. the applicable Hg emission limitation (lb/MWh); and
  - d. for each month in the reporting period:
    - i. the number of unit operating hours;
    - ii. the number of unit operating hours with valid data for Hg concentration, stack gas flow rate, moisture (if required), and electrical output;
    - iii. the monthly Hg emission rate (lb/MWh);

- iv. the number of hours of valid data excluded from the calculation of the monthly Hg emission rate, due to unit start-up, shutdown and malfunction; and
  - v. the 12-month rolling average Hg emission rate (lb/MWh, lbs/trillion Btu and lbs/year); and
  - e. the data assessment report (DAR) required by Appendix F to 40 CFR Part 60, or an equivalent summary of QA test results if the QA of 40 CFR Part 75 are implemented.
10. The permittee shall submit a signed statement with each required quarterly report indicating whether:
- a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
  - b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 (and/or 40 CFR Part 75) and is representative of plant performance.
  - c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.
  - d. Compliance with the standards has or has not been achieved during the reporting period.

## **V. Testing Requirements**

1. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO<sub>2</sub> monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous SO<sub>2</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are reported in units of the applicable standard(s) and approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous SO<sub>2</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60,

Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

2. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO<sub>x</sub> monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous NO<sub>x</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are reported in units of the applicable standard(s) and approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous NO<sub>x</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the NO<sub>x</sub> emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

3. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the

continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the CO<sub>2</sub> or O<sub>2</sub> monitoring requirements contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

4. The permittee shall determine compliance with the Hg emission limitation in 40 CFR Part 60.45Da according to the procedures in a through c below.
  - a. The initial performance test shall be commenced by the applicable date specified in 40 CFR Part 60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit start-up, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to (b) or (c) below, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in 40 CFR Part 60.49Da(p)(4)(i) is not met, the permittee shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the permittee shall demonstrate

compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during start-up, shutdown, or malfunction.

- b. If a CEMS is used to demonstrate compliance, follow the procedures in paragraphs (i) through (iii) of this section to determine the 12-month rolling average.
- i. Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either Equation 2 in paragraph (h)(2)(i)(A) of this section or Equation 3 in paragraph (2) below, in conjunction with Equation 4 in paragraph (3) below.
- (1) If the Hg CEMS measures Hg concentration on a wet basis, use Equation 2 below to calculate the Hg mass emissions for each valid hour:

$$E_h = K C_h Q_h t_h \quad (\text{Eq. 2})$$

Where:

$E_h$  = Hg mass emissions for the hour, (lb)

$K$  = Units conversion constant,  $6.24 \times 10^{-11}$  lb-scm/ $\mu$ gm-scf

$C_h$  = Hourly Hg concentration, wet basis, ( $\mu$ gm/scm)

$Q_h$  = Hourly stack gas volumetric flow rate, (scfh)

$t_h$  = Unit operating time, i.e., the fraction of the hour for which the unit operated. For example,  $t_h = 0.50$  for a half-hour of unit operation and 1.00 for a full hour of operation.

- (2) If the Hg CEMS measures Hg concentration on a dry basis, use Equation 3 below to calculate the Hg mass emissions for each valid hour:

$$E_h = K C_h Q_h t_h (1 - B_{ws}) \quad (\text{Eq. 3})$$

Where:

$E_h$  = Hg mass emissions for the hour, (lb)

$K$  = Units conversion constant,  $6.24 \times 10^{-11}$  lb-scm/ $\mu$ gm-scf

$C_h$  = Hourly Hg concentration, dry basis, ( $\mu$ gm/dscm)

$Q_h$  = Hourly stack gas volumetric flow rate, (scfh)

$t_h$  = Unit operating time, i.e. , the fraction of the hour for which the unit operated

$B_{ws}$  = Stack gas moisture content, expressed as a decimal fraction ( e.g. , for 8 percent  $H_2O$ ,  $B_{ws} = 0.08$ )

- (3) Use Equation 4, below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived from Equation 2 or 3 (as applicable):

$$M = \sum_{k=1}^n E_k \quad (\text{Eq. 4})$$

Where:

M = Total Hg mass emissions for the month, (lb)

$E_h$  = Hg mass emissions for hour “h”, from Equation 2 or 3 of this section, (lb)

n = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

- ii. Calculate the monthly Hg emission rate on an output basis (lb/MWh) using Equation 5, below. For a cogeneration unit, use Equation 1 above.

$$ER = \frac{M}{P} \quad (\text{Eq. 5})$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, from Equation 4, above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

- iii. Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use Equation 6 below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the

Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i n_i}{\sum_{i=1}^{12} n_i} \quad (\text{Eq. 6})$$

Where:

$E_{avg}$  = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

$(ER)_i$  = Monthly Hg emission rate, for month "i", (lb/MWh)

$n$  = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit start-up, shutdown, and malfunction

- c. If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in 40 CFR Part 75.15 and in Appendix K to 40 CFR Part 75, calculate the monthly Hg emission rates using Equations 3 through 5 above, except that for a particular pair of sorbent traps,  $C_h$  in Equation 3 shall be the flow-proportional average Hg concentration measured over the data collection period.
- i. Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to 40 CFR Part 60. For the CD assessments, you may use either elemental Hg or mercuric chloride ( $Hg^0$  or  $HgCl_2$ ) standards. The four quarterly accuracy determinations shall consist of one RATA and three measurement error (ME) tests using  $HgCl_2$  standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to 40 CFR Part 60 (note:  $Hg^0$  standards may be used if the Hg monitor does not have a converter). Alternatively, the permittee may implement the applicable daily, weekly, quarterly, and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to 40 CFR Part 75, in lieu of the QA procedures in Appendices B and F to 40 CFR Part 60. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to 40 CFR Part 75, and all other quality assurance requirements specified in Appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

5. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee

shall conduct certification tests of the continuous PM monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 11 and ORC section 3704.03(I).

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous PM monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 11 and ORC section 3704.03(I).

Ongoing compliance with the PM emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

- a. Emission Limitations:

Particulate matter less than ten microns (PM-10) emissions (filterable only) shall not exceed 0.015 pound per million Btu(as a 3-hour average).

PM-10(filterable and condensible) emissions shall not exceed 0.025 pound per million Btu heat input(as a 3-hour average),129 pounds per hour(as a 3-hour average) and 566 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour PM-10 emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

b. Emission Limitation:

Sulfur dioxide(SO<sub>2</sub>) emissions shall not exceed 0.24 pound per million Btu heat input(as a 3-hour rolling average), 1,246 pounds per hour(as a 3-hour average), 0.184 pound per million Btu heat input(as a 24-hour rolling average), 0.15 pound per million Btu heat input(as a 30-day rolling average) and 3,410 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per million Btu and pound per hour SO<sub>2</sub> emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

c. Emission Limitations:

Nitrogen oxides(NO<sub>x</sub>) emissions shall not exceed 0.10 pound per million Btu heat input(as a 24-hour average), 519 pounds per hour(as a 24-hour average), 0.07 pound per million Btu heat input(30-day rolling average) and 1,592 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour NO<sub>x</sub> emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

d. Emission Limitations:

Carbon monoxide(CO) emissions shall not exceed 0.154 pound per million Btu heat input(as a 3-hour average), 799 pounds per hour(as a 3-hour average), and 3,501 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour CO emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

e. Emission Limitations:

Volatile organic compound(VOC) emissions shall not exceed 0.0037 pound per million Btu heat input(as a 3-hour average), 19.2 pounds per hour(as a 3-hour average) and 83.2 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour VOC emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

f. Emission Limitations:

Lead(Pb) emissions shall not exceed 0.00000982 pound per million Btu heat input(as a 3-hour average), 0.051 pound per hour(as a 3-hour average), and 0.22 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour Pb emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

g. Emission Limitations:

For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks ( *i.e.* , bituminous coal, subbituminous coal, lignite) or a blend of coal and coal refuse, you must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of

the monthly unit-specific Hg emission limitation established according to paragraph (a)(5)(i) of 40 CFR Part 60, Subpart Da, Section 60.45Da.

Applicable Compliance Method:

Compliance with the Section 60.45Da Hg emission limitations shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the reporting requirements in Part III, Section A.IV.

h. Emission Limitations:

Sulfuric Acid( $H_2SO_4$ ) mist emissions shall not exceed 0.0075 pound per million Btu heat input(as a 3-hour average), 38.9 pounds per hour(as a 3-hour average), and 170.5 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour  $H_2SO_4$  emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

i. Emission Limitation:

No owner or operator subject to the provisions of Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

7. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

- b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for PM-10, NO<sub>x</sub>, SO<sub>2</sub>, VOC, CO, Pb, H<sub>2</sub>SO<sub>4</sub> and opacity, in the appropriate averaging period(s).
- c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO <sub>2</sub>	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NO <sub>x</sub>	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A
H <sub>2</sub> SO <sub>4</sub>	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
Opacity	Method 9 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by the Ohio EPA Southeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in Ohio EPA, Southeast District Office's refusal to accept the results of the emission test(s).

- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (B001) - Boiler 1 - 5,191 million Btu/hour pulverized coal-fired boiler controlled with good combustion practices, selective catalytic reduction(SCR), baghouse, limestone-based or ammonia-based wet flue gas desulfurization(FGD) scrubber and wet electrostatic precipitator(WESP)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Mercury (Hg) emissions shall not exceed 1.9 pounds per trillion Btu heat input as a 12-month rolling average and 86 pounds per rolling, 12-month period.

**2. Additional Terms and Conditions**

- 2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the

merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

- i. The facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits.
- ii. In the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units.
- iii. An evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party.
- iv. The additional emissions will not result in the violation of non Hg emission limitations.
- v. The facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit.
- vi. The emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. Refer to Part III, Section A.III.10.

**IV. Reporting Requirements**

1. Refer to Part III, Section A.IV.9.

## V. Testing Requirements

1. Compliance with the emission limitations in Section B.I.1. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitations:

Mercury (Hg) emissions shall not exceed 1.9 pounds per trillion Btu heat input as a 12-month rolling average and 86 pounds per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pounds per trillion Btu on 12-month rolling average and pounds per rolling, 12-month period Hg emission limitations shall be demonstrated by the record keeping required pursuant to Section B. III. and the reporting requirements in Section B.IV.
2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.
  - b. The emissions testing shall be conducted to measure the 3-hour average Hg emission rate during the test period.
  - c. The following test method shall be employed:

Hg	ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
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Alternative test methods may be used with prior approval from Ohio EPA.
  - d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by the Ohio EPA Southeast District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in Ohio EPA, Southeast District Office's refusal to accept the results of the emission test(s).

- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (B002) - Boiler 2 - 5,191 million Btu/hour pulverized coal-fired boiler controlled with good combustion practices, selective catalytic reduction(SCR), baghouse, limestone-based or ammonia-based flue gas desulfurization(FGD) and wet electrostatic precipitator(WESP)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20, 40 CFR Part 60 Subpart Da and OAC Chapter 3745-14.
OAC rules 3745-31-10 through 20	<p>Particulate matter less than ten microns (PM-10) emissions (filterable only) shall not exceed 0.015 pound per million Btu(as a 3-hour average).</p> <p>PM-10(filterable and condensible) emissions shall not exceed: 0.025 pound per million Btu heat input(as a 3-hour average); 129 pounds per hour(as a 3-hour average); and 566 tons per rolling,12-month period.</p> <p>Sulfur dioxide(SO<sub>2</sub>) emissions shall not exceed: 0.24 pound per million Btu heat input(as a 3-hour average), 1,246 pounds per hour(as a 3-hour average), 0.184 pound per million Btu heat input(as a 24-hour rolling average), 0.15 pound per million Btu heat input(as a 30-day rolling average); and 3,410 tons per rolling,12-month period.</p> <p>Nitrogen oxides(NO<sub>x</sub>) emissions shall not exceed: 0.10 pound per million Btu heat input(as a 24-hour rolling average), 519 pounds per hour(as a 24-hour average), 0.07 pound per million Btu heat input(as a 30-day rolling average); and 1,592 tons per rolling,12-month period.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>Carbon monoxide(CO) emissions shall not exceed: 0.154 pound per million Btu heat input(as a 3-hour average), 799 pounds per hour(as a 3-hour average); and 3,501 tons per rolling,12-month period.</p> <p>Volatile organic compound(VOC) emissions shall not exceed: 0.0037 pound per million Btu heat input(as a 3-hour average); 19.2 pounds per hour(as a 3-hour average); and 83.2 tons per rolling,12-month period.</p> <p>Lead(Pb) emissions shall not exceed: 0.00000982 pound per million Btu heat input(as a 3-hour average); 0.051 pound per hour(as a 3-hour average); and 0.22 tons per rolling,12-month period.</p> <p>Sulfuric acid(H<sub>2</sub>SO<sub>4</sub>) emissions shall not exceed 0.0075 pound per million Btu heat input(as a 3-hour average); 38.9 pounds per hour(as a 3-hour average); and 170.5 tons per rolling,12-month period.</p> <p>Also see Section A.I.2.b below.</p>
<p>40 CFR Part 60, Subpart Da</p>	<p>No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.</p> <p>The particulate matter emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>The SO<sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>The NO<sub>x</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.</p> <p>For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks ( <i>i.e.</i> , bituminous coal, subbituminous coal, lignite) or a blend of coal and coal refuse, you must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	specific Hg emission limitation established according to paragraph (a)(5)(i) of 40 CFR Part 60, Subpart Da, Section 60.45Da.
OAC rule 3745-17-10	The particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-07	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Da.
OAC rule 3745-18-59	The SO <sub>2</sub> emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-21-08	<p>The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to OAC rules 3745-31-10 through 20 in this permit to install.</p> <p>On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the state regulations. This rule revision was submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.</p>
OAC Chapter 3745-14	See Part II, Section A.2 above.

## 2. Additional Terms and Conditions

- 2.a** The permittee shall prepare and submit to the Ohio EPA Southeast District Office a unit-specific monitoring plan for each monitoring system (PM, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> or O<sub>2</sub> and Hg) at least 45 days before commencing certification testing of the monitoring systems. The plan must address the requirements in 40 CFR 75 and paragraphs (s)(1) through (s)(6) of 40 CFR 60.49Da.

[40 CFR 60.13]; [40 CFR Part 60, Appendix F]; and [40 CFR Part 75]

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of good combustion practices, SCR, a baghouse, limestone-based or ammonia-based FGD, WESP and the emissions limitations

listed under OAC rules 3745-31-10 through 20 above constitutes BACT for this emissions unit.

## **II. Operational Restrictions**

None

## **III. Monitoring and/or Recordkeeping Requirements**

1. Prior to the installation of the continuous SO<sub>2</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO<sub>2</sub> monitoring system meets the requirements of Performance Specification 2; and the U.S. EPA shall certify that the continuous SO<sub>2</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintained on-site and made available to the director (and the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

2. The permittee shall install, operate, and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

- 3. Prior to the installation of the continuous NO<sub>x</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO<sub>x</sub> monitoring system meets the requirements of Performance Specification 2; and the U.S. EPA shall certify that the continuous NO<sub>x</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintain on-site and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

- 4. The permittee shall install, operate, and maintain equipment to continuously monitor and record NO<sub>x</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

The permittee shall maintain records of data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to:

- a. emissions of NO<sub>x</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of NO<sub>x</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous NO<sub>x</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO<sub>x</sub> monitoring system;

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO<sub>x</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

5. Prior to the installation of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system meets the requirements of Performance Specification 3; and the U.S. EPA shall certify that the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system meets the requirements under 40 CFR Part 75, which may be approved through the recommendation for certification by Ohio EPA to U.S. EPA. Once received, the letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be maintain on-site and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13]; [40 CFR Part 60, Appendix B]; and [40 CFR Part 75]

6. The permittee shall operate and maintain equipment to continuously monitor and record CO<sub>2</sub> or O<sub>2</sub> emitted from this emissions unit in percent. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and Part 75.

The permittee shall maintain records of data obtained by the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system including, but not limited to:

- a. percent on an instantaneous (one-minute) basis;
- b. results of quarterly cylinder gas audits or linearity checks;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);
- e. hours of operation of the emissions unit, continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system; as well as,

- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

- 7. The permittee shall install the PM CEMS in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 11. The Ohio EPA, Central Office shall certify the continuous PM monitoring system meets the requirements of Performance Specification 11 upon satisfactory completion of initial certification testing. Once received, the letter(s)/document(s) of certification under Part 60 and certification and made available to the director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

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

The permittee shall maintain records of data obtained by the continuous PM monitoring system including, but not limited to:

- a. emissions of PM in all units of the applicable standard(s) in the appropriate averaging period (40 CFR Part 60, Subpart Da requires a 24-hour (block) averages calculated using U.S. EPA reference Method 19);
- b. results of quarterly accuracy test audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. hours of operation of the emissions unit, continuous PM monitoring system, and control equipment;
- e. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous PM monitoring system;
- f. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous PM monitoring system; as well as,
- g. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

At a minimum, valid continuous monitoring system hourly averages shall be obtained for 90 percent of all operating hours on a 30-day rolling average basis.

The 1-hour arithmetic averages required shall be expressed in ng/J, MMBtu/h, or lb/MWh and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under Section 60.13(e)(2) of Subpart A of 40 CFR Part 60.

All valid continuous monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission monitoring system data requirements are not met.

When PM emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by U.S. EPA or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of all operating hours per 30-day rolling average.

The permittee shall conduct a performance evaluation of the continuous monitoring system according to the applicable requirements of Section 60.13, Performance Specification 11 in Appendix B of 40 CFR Part 60, and Procedure 2 in Appendix F of 40 CFR Part 60. During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 11 in Appendix B of 40 CFR Part 60, PM and O<sub>2</sub> (or CO<sub>2</sub>) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and conducting performance tests using the following test methods:

- a. For PM, EPA Reference Method 5, 5B, or 17 shall be used.
  - b. For O<sub>2</sub> (or CO<sub>2</sub>), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
8. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall properly install, operate, and maintain equipment to continuously monitor and record the secondary voltage, in kilovolts, and the current, in milliamps, for each of the fields within the ESP during operation of this emissions unit, including periods of start-up and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the secondary voltage, in kilovolts, and the current, in milliamps, for each of the fields within the ESP on an hourly basis.

Whenever the monitored value for the voltage and/or current within a field deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable ranges specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the voltage and current readings for the field immediately after the corrective action, and the names of

the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

Acceptable ranges for the secondary voltage and current for each field within the ESP shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the ranges based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

9. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of start-up and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on an hourly basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a permit modification.

10. The permittee shall install and operate a continuous emissions monitoring system (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack according to the requirements below:
  - a. For an affected facility that is also subject to the requirements of Subpart I of 40 CFR Part 75, the permittee may install, certify, maintain, operate and quality-assure the data from an Hg CEMS according to 40 CFR Part 75.10 and Appendices A and B to 40 CFR Part 75.
  - b. As an alternative to the CEMS requirements above, the permittee may use a sorbent trap monitoring system (as defined in 40 CFR Part 72.2) to monitor Hg concentration, according to the procedures described in 40 CFR Part 75.15 and Appendix K to 40 CFR Part 75.
  - c. The permittee shall calculate the Hg emission rate (lb/MWh, lbs/trillion Btu, and lbs/year) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of 40 CFR Part 60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of 40 CFR Part 60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in 40 CFR Part 60.49Da(k). Compliance with the applicable standards under 40 CFR Part 60.45Da and OAC rule 3734-31-05(A)(3) are determined on a 12-month rolling average basis.
11. The permittee shall record the monthly hours of operation of this emissions unit for the purpose of determining compliance with the rolling, 12-month period emission limitations.

#### **IV. Reporting Requirements**

1. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA,

Southeast District Office, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, 40 CFR Part 75, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
  - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
  - iii. the location of the continuous SO<sub>2</sub> monitor;
  - iv. the exceedance report as detailed in (a) above;
  - v. the total SO<sub>2</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits or linearity checks;
  - ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

2. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO<sub>x</sub> monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of NO<sub>x</sub> emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, 40 CFR Parts 75 and 76, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous NO<sub>x</sub> and other associated monitors;
  - iii. the location of the continuous NO<sub>x</sub> monitor;
  - iv. the exceedance report as detailed in (a) above;
  - v. the total NO<sub>x</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous NO<sub>x</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits or linearity checks;
  - ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. the results of any relative accuracy test audit showing the continuous NO<sub>x</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\* of the continuous NO<sub>x</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\* of the continuous NO<sub>x</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

3. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system downtime and malfunction while the emissions unit was on line.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous CO<sub>2</sub> or O<sub>2</sub> and other associated monitors;
    - iii. the location of the continuous CO<sub>2</sub> or O<sub>2</sub> monitor;
    - iv. the total operating time (hours) of the emissions unit;
    - v. the total operating time of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation;
    - vi. results and dates of quarterly cylinder gas audits or linearity checks;
    - vii. results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
    - viii. the results of any relative accuracy test audit showing the continuous CO<sub>2</sub> or O<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
    - ix. the date, time, and duration of any/each malfunction\* of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation;
    - x. the date, time, and duration of any downtime\* of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system while the emissions unit was in operation; and
    - xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

[40 CFR 60.7] and [40 CFR Part 75]

4. The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems,

electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by 40 CFR Part 75.

[40 CFR Part 75]

5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and
  - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
50 West Town Street, Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA  
Division of Air Pollution Control  
2195 Front Street  
Logan, Ohio 43138.

6. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the secondary voltage and current for each field within the ESP was outside of the range specified by the manufacturer or established during a complying emissions test;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the field into compliance with the acceptable ranges for voltage and current, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

7. If the permittee elects to discontinue the use of the PM CEMs, the permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer or established during a complying emissions test;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

8. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous PM monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office, documenting all instances of PM emissions in excess of any applicable limitation specified in this permit, 40 CFR Part 60, OAC Chapter 3745-17, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

- i. the facility name and address;
- ii. the manufacturer and model number of the continuous PM and other associated monitors;
- iii. the location of the continuous PM monitor;
- iv. the exceedance report as detailed in (a) above;
- v. the total PM emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous PM monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits or linearity checks;
- ix. results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. the results of any relative accuracy test audit showing the continuous PM monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction\* of the continuous PM monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\* of the continuous PM monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* Each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limitation.

9. For Hg, the permittee shall submit quarterly reports, which contain the following information, to the Ohio EPA, Southeast District Office:
  - a. company name and address;
  - b. date of report and beginning and ending dates of the reporting period;
  - c. the applicable Hg emission limitation (lb/MWh); and
  - d. for each month in the reporting period:
    - i. the number of unit operating hours;
    - ii. the number of unit operating hours with valid data for Hg concentration, stack gas flow rate, moisture (if required), and electrical output;
    - iii. the monthly Hg emission rate (lb/MWh);

- iv. the number of hours of valid data excluded from the calculation of the monthly Hg emission rate, due to unit start-up, shutdown and malfunction; and
    - v. the 12-month rolling average Hg emission rate (lb/MWh, lbs/trillion Btu and lbs/year); and
  - e. the data assessment report (DAR) required by Appendix F to 40 CFR Part 60, or an equivalent summary of QA test results if the QA of 40 CFR Part 75 are implemented.
- 10. The permittee shall submit a signed statement with each required quarterly report indicating whether:
  - a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
  - b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR Part 60 (and/or 40 CFR Part 75) and is representative of plant performance.
  - c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met due to errors that were unavoidable.
  - d. Compliance with the standards has or has not been achieved during the reporting period.

## **V. Testing Requirements**

- 1. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous SO<sub>2</sub> monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous SO<sub>2</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are reported in units of the applicable standard(s) and approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous SO<sub>2</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60,

Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

2. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous NO<sub>x</sub> monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the continuous NO<sub>x</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are reported in units of the applicable standard(s) and approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous NO<sub>x</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the NO<sub>x</sub> emission limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

3. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee shall conduct certification tests of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75. The permittee may test the

continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system in accordance with requirements for monitoring systems subject to 40 CFR Part 75, Appendix B, if the test results are approved by Ohio EPA.

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous CO<sub>2</sub> or O<sub>2</sub> monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; ORC section 3704.03(I); and 40 CFR Part 75.

Ongoing compliance with the CO<sub>2</sub> or O<sub>2</sub> monitoring requirements contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13]; [40 CFR Part 60, Appendices B & F]; and [40 CFR Part 75]

4. The permittee shall determine compliance with the Hg emission limitation in 40 CFR Part 60.45Da according to the procedures in a through c below.
  - a. The initial performance test shall be commenced by the applicable date specified in 40 CFR Part 60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit start-up, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to (b) or (c) below, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in 40 CFR Part 60.49Da(p)(4)(i) is not met, the permittee shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the permittee shall demonstrate

compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during start-up, shutdown, or malfunction.

- b. If a CEMS is used to demonstrate compliance, follow the procedures in paragraphs (i) through (iii) of this section to determine the 12-month rolling average.
- i. Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either Equation 2 in paragraph (h)(2)(i)(A) of this section or Equation 3 in paragraph (2) below, in conjunction with Equation 4 in paragraph (3) below.
- (1) If the Hg CEMS measures Hg concentration on a wet basis, use Equation 2 below to calculate the Hg mass emissions for each valid hour:

$$E_h = K C_h Q_h t_h \quad (\text{Eq. 2})$$

Where:

$E_h$  = Hg mass emissions for the hour, (lb)

$K$  = Units conversion constant,  $6.24 \times 10^{-11}$  lb-scm/ $\mu$ gm-scf

$C_h$  = Hourly Hg concentration, wet basis, ( $\mu$ gm/scm)

$Q_h$  = Hourly stack gas volumetric flow rate, (scfh)

$t_h$  = Unit operating time, i.e., the fraction of the hour for which the unit operated. For example,  $t_h = 0.50$  for a half-hour of unit operation and 1.00 for a full hour of operation.

- (2) If the Hg CEMS measures Hg concentration on a dry basis, use Equation 3 below to calculate the Hg mass emissions for each valid hour:

$$E_h = K C_h Q_h t_h (1 - B_{ws}) \quad (\text{Eq. 3})$$

Where:

$E_h$  = Hg mass emissions for the hour, (lb)

$K$  = Units conversion constant,  $6.24 \times 10^{-11}$  lb-scm/ $\mu$ gm-scf

$C_h$  = Hourly Hg concentration, dry basis, ( $\mu$ gm/dscm)

$Q_h$  = Hourly stack gas volumetric flow rate, (scfh)

$t_h$  = Unit operating time, i.e. , the fraction of the hour for which the unit operated

$B_{ws}$  = Stack gas moisture content, expressed as a decimal fraction ( e.g. , for 8 percent  $H_2O$ ,  $B_{ws} = 0.08$ )

- (3) Use Equation 4, below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived from Equation 2 or 3 (as applicable):

$$M = \sum_{k=1}^n E_k \quad (\text{Eq. 4})$$

Where:

M = Total Hg mass emissions for the month, (lb)

$E_h$  = Hg mass emissions for hour "h", from Equation 2 or 3 of this section, (lb)

n = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction

- ii. Calculate the monthly Hg emission rate on an output basis (lb/MWh) using Equation 5, below. For a cogeneration unit, use Equation 1 above.

$$ER = \frac{M}{P} \quad (\text{Eq. 5})$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, from Equation 4, above, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)

- iii. Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use Equation 6 below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the

Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i n_i}{\sum_{i=1}^{12} n_i} \quad (\text{Eq. 6})$$

Where:

$E_{avg}$  = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

$(ER)_i$  = Monthly Hg emission rate, for month "i", (lb/MWh)

$n$  = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit start-up, shutdown, and malfunction

- c. If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in 40 CFR Part 75.15 and in Appendix K to 40 CFR Part 75, calculate the monthly Hg emission rates using Equations 3 through 5 above, except that for a particular pair of sorbent traps,  $C_h$  in Equation 3 shall be the flow-proportional average Hg concentration measured over the data collection period.
- i. Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to 40 CFR Part 60. For the CD assessments, you may use either elemental Hg or mercuric chloride ( $Hg^0$  or  $HgCl_2$ ) standards. The four quarterly accuracy determinations shall consist of one RATA and three measurement error (ME) tests using  $HgCl_2$  standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to 40 CFR Part 60 (note:  $Hg^0$  standards may be used if the Hg monitor does not have a converter). Alternatively, the permittee may implement the applicable daily, weekly, quarterly, and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to 40 CFR Part 75, in lieu of the QA procedures in Appendices B and F to 40 CFR Part 60. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to 40 CFR Part 75, and all other quality assurance requirements specified in Appendix K to 40 CFR Part 75 shall be met for sorbent trap monitoring systems.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

5. Within 60 days after achieving the maximum production rate at which the facility will be operated, but no later than 180 days after initial start-up at the facility, the permittee

shall conduct certification tests of the continuous PM monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 11 and ORC section 3704.03(I).

Personnel from the Ohio EPA, Central Office and the Ohio EPA, Southeast District Office shall be notified 45 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Central Office and one copy to the Ohio EPA, Southeast District Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification, or recommendation for certification by Ohio EPA to U.S. EPA, of the continuous PM monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 11 and ORC section 3704.03(I).

Ongoing compliance with the PM emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Recordkeeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

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

- a. Emission Limitations:

Particulate matter less than ten microns (PM-10) emissions (filterable only) shall not exceed 0.015 pound per million Btu(as a 3-hour average).

PM-10(filterable and condensible) emissions shall not exceed 0.025 pound per million Btu heat input(as a 3-hour average),129 pounds per hour(as a 3-hour average) and 566 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour PM-10 emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

b. Emission Limitation:

Sulfur dioxide(SO<sub>2</sub>) emissions shall not exceed 0.24 pound per million Btu heat input(as a 3-hour rolling average), 1,246 pounds per hour(as a 3-hour average), 0.184 pound per million Btu heat input(as a 24-hour rolling average), 0.15 pound per million Btu heat input(as a 30-day rolling average) and 3,410 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per million Btu and pound per hour SO<sub>2</sub> emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

c. Emission Limitations:

Nitrogen oxides(NO<sub>x</sub>) emissions shall not exceed 0.10 pound per million Btu heat input(as a 24-hour average), 519 pounds per hour(as a 24-hour average), 0.07 pound per million Btu heat input(30-day rolling average) and 1,592 tons per rolling 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour NO<sub>x</sub> emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7, the monitoring and record keeping requirements in Section A.III and the reporting requirements in Section A.IV.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

d. Emission Limitations:

Carbon monoxide(CO) emissions shall not exceed 0.154 pound per million Btu heat input(as a 3-hour average), 799 pounds per hour(as a 3-hour average), and 3,501 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour CO emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

e. Emission Limitations:

Volatile organic compound(VOC) emissions shall not exceed 0.0037 pound per million Btu heat input(as a 3-hour average), 19.2 pounds per hour(as a 3-hour average) and 83.2 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour VOC emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

f. Emission Limitations:

Lead(Pb) emissions shall not exceed 0.00000982 pound per million Btu heat input(as a 3-hour average), 0.051 pound per hour(as a 3-hour average), and 0.22 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour Pb emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

g. Emission Limitations:

For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks ( *i.e.* , bituminous coal, subbituminous coal, lignite) or a blend of coal and coal refuse, you must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of

the monthly unit-specific Hg emission limitation established according to paragraph (a)(5)(i) of 40 CFR Part 60, Subpart Da, Section 60.45Da.

Applicable Compliance Method:

Compliance with the Section 60.45Da Hg emission limitations shall be demonstrated by the record keeping required pursuant to Part III, Section A. III and the reporting requirements in Part III, Section A.IV.

h. Emission Limitations:

Sulfuric Acid( $H_2SO_4$ ) mist emissions shall not exceed 0.0075 pound per million Btu heat input(as a 3-hour average), 38.9 pounds per hour(as a 3-hour average), and 170.5 tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the pound per million Btu and pound per hour  $H_2SO_4$  emissions limitations shall be demonstrated based upon the applicable emissions tests specified in Section A.V.7.

Compliance with the tons per rolling, 12-month period emission limitation shall be demonstrated by the associated emission factors derived from emissions testing as specified in Part III, Section A.V.7.

i. Emission Limitation:

No owner or operator subject to the provisions of Subpart Da shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (as a 6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

7. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.

- b. The emissions testing shall be conducted to demonstrate compliance with the applicable emissions limitations for PM-10, NO<sub>x</sub>, SO<sub>2</sub>, VOC, CO, Pb, H<sub>2</sub>SO<sub>4</sub> and opacity, in the appropriate averaging period(s).
- c. The following test methods shall be employed to demonstrate compliance with the applicable emissions limitations:

PM-10	Method 201(40 CFR Part 51, Appendix M) Method 202(40 CFR Part 51, Appendix M)
SO <sub>2</sub>	Methods 1 through 4 and 6C of 40 CFR Part 60, Appendix A
NO <sub>x</sub>	Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A
CO	Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A
VOC	Methods 1 through 4 and 25, or Methods 1 through 4 and 25A (as appropriate), of 40 CFR Part 60, Appendix A
Pb	Methods 1 through 4 and 12 of 40 CFR Part 60, Appendix A
H <sub>2</sub> SO <sub>4</sub>	Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A
Opacity	Method 9 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by the Ohio EPA Southeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in Ohio EPA, Southeast District Office's refusal to accept the results of the emission test(s).

- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Southeast District Office.

**VI. Miscellaneous Requirements**

None

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

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

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

**Operations, Property, and/or Equipment - (B002) - Boiler 2 - 5,191 million Btu/hour pulverized coal-fired boiler controlled with good combustion practices, selective catalytic reduction(SCR), baghouse, limestone-based or ammonia-based flue gas desulfurization(FGD) and wet electrostatic precipitator(WESP)**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Mercury (Hg) emissions shall not exceed 1.9 pounds per trillion Btu heat input as a 12-month rolling average and 86 pounds per rolling, 12-month period.

### **2. Additional Terms and Conditions**

- 2.a During the review of this permit to install (PTI), Ohio EPA determined that there are significant uncertainties concerning the expected mercury emissions from the proposed facility. These uncertainties include, but are not limited to (1) the fact that limited mercury testing has been done on this type of facility with this type of control devices, (2) that limited information is available concerning the effectiveness of the various control devices on this emissions unit for mercury control, (3) that there are limitations to the data concerning the amount of mercury in the coal that is expected to be used, and (4) that the form of mercury (elemental, oxidized, and particle-bound) produced by this emissions unit is not fully understood.

The Hg BAT limitations that have been established for this emissions unit were established utilizing the best estimation methods and information available at the time the permit was prepared. Beginning 18 months prior to commencing operation of this emissions unit and until 12 months after beginning operation, the permittee may perform a technical re-evaluation of BAT to determine whether compliance with the emission limitations specified in this permit is technically feasible. Because of a lack of emissions data demonstrating the level of control required by this permit, the possibility exists that further analysis and testing will show the data used to establish the emission limitations as inappropriate. In that case, the Hg emission limitations may be re-evaluated utilizing the results of the site-specific emissions testing and a permit modification may be necessary to revise the limitations. In order for a revision to occur the permittee shall submit a PTI modification application for the director to consider. The director may grant or deny the modification request based on the

merits of the BAT analysis submitted with the application. Under this scenario, for a period from start-up of the emissions unit to 2 months after completion of performing the analysis, it shall not be determined to be a violation of the Hg emission limitations if actual emissions are greater than the Hg emission limitations if:

- i. The facility has submitted a PTI modification request to modify the Hg emission limitations utilizing the results of the Hg emissions testing as a basis for proposed alternative limits.
- ii. In the director's judgement, the equipment installed was designed to meet typical Hg BAT for similar size and type emissions units.
- iii. An evaluation was done to verify the additional Hg emissions are not likely to result in adverse health and welfare conditions to any impacted party.
- iv. The additional emissions will not result in the violation of non Hg emission limitations.
- v. The facility has evaluated the emissions unit and the associated control equipment and determined that the equipment was operating as designed and was not capable of demonstrating compliance with the emission limitations contained in this permit.
- vi. The emissions unit and associated control equipment was operated utilizing the equipment supplier's procedures, recommendations and best practices.

If the above conditions are true, and the permittee has submitted a PTI modification request to modify the Hg emission limitations prior to two months after the completion of BAT analysis, then the Hg emission limitations proposed in the modification application shall apply and any Hg emissions above the original Hg emission limitations shall not be determined to be a violation. The director shall review the PTI modification application and evaluate it utilizing normal review procedures. The director is not obligated to accept the permittee's recommended BAT Hg emission limitations.

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. Refer to Part III, Section A.III.10.

**IV. Reporting Requirements**

1. Refer to Part III, Section A.IV.9.

## V. Testing Requirements

1. Compliance with the emission limitations in Section B.I.1. of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitations:

Mercury (Hg) emissions shall not exceed 1.9 pounds per trillion Btu heat input as a 12-month rolling average and 86 pounds per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pounds per trillion Btu on 12-month rolling average and pounds per rolling, 12-month period Hg emission limitations shall be demonstrated by the record keeping required pursuant to Section B. III. and the reporting requirements in Section B.IV.
2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial start-up of the emissions unit.
  - b. The emissions testing shall be conducted to measure the 3-hour average Hg emission rate during the test period.
  - c. The following test method shall be employed:

Hg	ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound, and Total Hg in Flue Gas Generated from Coal-Fired Stationary Sources (also known as the Ontario Hydro Method)
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Alternative test methods may be used with prior approval from Ohio EPA.
  - d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by the Ohio EPA Southeast District Office.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in Ohio EPA, Southeast District Office's refusal to accept the results of the emission test(s).

- f. Personnel from the Ohio EPA, Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (B003) - Auxiliary Boiler - 150 million Btu/hour natural gas-fired boiler.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See Sections A.I.2.b and A.I.2.c below.
OAC rule 3745-31-05(C)	See Sections A.I.2.a and A.II.1 below.
OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation for particulate emissions established pursuant to OAC rule 3745-31-10 through 20.
OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-10 through 20.
OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A).
OAC rule 3745-21-08	<p>The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to OAC rules 3745-31-10 through 20 in this permit to install.</p> <p>On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the state regulations. This rule revision was submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
40 CFR Part 60, Subpart Db	<p>See Section A.IV.3 below.</p> <p>This emissions unit is exempt from the nitrogen oxide (NO<sub>x</sub>) emission limitation in 40 CFR 60.44b(a) in accordance with 40 CFR 60.44b(k).</p>
OAC rules 3745-31-10 through 20	<p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.6 pound per million cubic feet of natural gas fired, 0.09 pounds per hour, or 0.04 tons per rolling, 12-month period.</p> <p>NO<sub>x</sub> emissions shall not exceed 140 pounds per million cubic feet of natural gas fired, 21.0 pounds per hour, or 9.20 tons per rolling, 12-month period.</p> <p>Carbon monoxide(CO) emissions shall not exceed 400 parts per million(ppm) by volume on a dry basis corrected to 3% oxygen (3 run average), 12.6 pounds per hour, or 5.52 tons per rolling, 12-month period.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 5.5 pounds per million cubic feet of natural gas fired, 0.83 pounds per hour, or 0.36 tons per rolling, 12-month period.</p> <p>Particulate matter less than ten microns (PM-10) emissions shall not exceed 7.6 pounds per million cubic feet of natural gas fired, 1.14 pounds per hour, or 0.50 tons per rolling, 12-month period.</p> <p>Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>See Section A.I.2.d below.</p>
OAC rule 3745-31-28	<p>The CO emission limitation specified by this rule is equivalent to the emission limitation for ppm of CO established pursuant to OAC rules 3745-31-10 through 20.</p> <p>See Section A.I.2.a below.</p>

## 2. Additional Terms and Conditions

- 2.a** The operating capacity of B003 is being restricted per OAC rule 3745-31-05(C) with federally enforceable requirements as part of the OAC rule 3745-31-28 determination.
- 2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO<sub>x</sub> emissions from this air contaminant source

since the calculated controlled restricted annual emission rate for NOx emissions is less than ten tons per year taking into account the federally enforceable "Best Available Control Technology" (BACT) limit of 140 pounds per million cubic feet of natural gas fired under OAC rule 3745-31-10 through 20.

- 2.c** The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled restricted CO, VOC, PM-10, and SO2 emissions from this air contaminant source since the potential to emit for CO, VOC, PM-10, and SO2 is less than ten tons per year.
- 2.d** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of BACT, it has been determined that the use of low NOx burners constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rule 3745-31-10 through 20 above.

## II. Operational Restrictions

1. The maximum annual heat input for this emissions unit shall not exceed 131,400 million Btu, based upon a rolling, 12-month summation of the monthly heat input values.

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

Month(s)	Maximum Allowable Cumulative Heat Input
1	21,900 million Btu
1-2	43,800 million Btu
1-3	65,700 million Btu
1-4	87,400 million Btu
1-5	109,300 million Btu
1-6	131,490 million Btu
1-7	131,400 million Btu
1-8	131,400 million Btu
1-9	131,400 million Btu
1-10	131,400 million Btu
1-11	131,400 million Btu
1-12	131,400 million Btu

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual heat input limitation shall be based upon a rolling, 12-month summation of the monthly heat input values.

### III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. Beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of heat input (million Btu).
  - b. During the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative heat input (million Btu) for each calendar month.
  - c. The rolling, 12-month emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM-10, CO, and VOC, in tons.
2. For each day during which the permittee burns a prohibited fuel (i.e., one other than natural gas), 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 submit deviation (excursion) reports which identify all exceedances of the following limitations and restrictions:
  - a. the rolling, 12-month heat input limitation;
  - b. for the first 12 calendar months of operation, the maximum allowable monthly cumulative heat input limitation; and
  - c. the rolling, 12-month mass emissions limitations for SO<sub>2</sub>, NO<sub>x</sub>, PM-10, CO, and VOC.

These reports are due by the dates described in Part 1 - General Terms and Conditions of this permit under section (A)(2).

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Southeast District Office within 30 days after the deviation occurs.
3. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and
  - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
50 West Town Street, Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA  
Division of Air Pollution Control  
2195 Front Street  
Logan, Ohio 43138.

## **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:

- a. Emission Limitation:

Particulate matter less than ten microns (PM-10) emissions shall not exceed 7.6 pounds per million cubic feet of natural gas fired, 1.14 pounds per hour, or 0.50 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per million cubic feet and pounds per hour emissions limitations shall be demonstrated based upon the applicable emission tests for these emission limitations specified in Part III Section A.V. 2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon record keeping requirements contained in Section III.1.c above.

- b. Emission Limitation:

Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.6 pound per million cubic feet of natural gas fired, 0.09 pounds per hour, or 0.04 tons per rolling, 12-month period.

Applicable Compliance Method:

If required, compliance with the pound per million cubic feet and pounds per hour emissions limitations shall be demonstrated based upon emission testing per 40

CFR Part 60, Appendix A, Methods 1 through 4, and 6 for these emission limitations.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon record keeping requirements contained in Section III.1.c above.

c. Emission Limitation:

Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 140 pounds per million cubic feet of natural gas fired, 21.0 pounds per hour, or 9.20 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per million cubic feet and pounds per hour emissions limitations shall be demonstrated based upon the applicable emission tests for these emission limitations specified in Part III Section A.V. 2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon record keeping requirements contained in Section III.1.c above.

d. Emission Limitation:

Carbon monoxide emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3% oxygen (3 run average), 12.6 pounds per hour, or 5.52 tons per rolling, 12-month period.

Applicable Compliance Method:

Initial compliance with the pound per million cubic feet and compliance with pounds per hour emissions limitations shall be demonstrated based upon the applicable emission tests for these emission limitations specified in Part III Section A.V. 2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon record keeping requirements contained in Section III.1.c above.

e. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 5.5 pounds per million cubic feet of natural gas fired, 0.83 pounds per hour, or 0.36 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per million cubic feet and pounds per hour emissions limitations shall be demonstrated based upon the applicable emission tests for these emission limitations specified in Part III Section A.V.2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon record keeping requirements contained in Section III.1.c above.

f. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, the requirements contained in 40 CFR Part 60 Subpart A Section 60.8 and the requirements contained in Part III Section A.V.2 of this permit to install.

2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.
  - b. The emissions testing shall be conducted to demonstrate compliance with the allowable emission rate for particulate emissions, visible particulate emissions, nitrogen oxide, volatile organic compounds and carbon monoxide.
  - c. The emission testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, and Methods 201 or 201A and 202 for PM-10 emissions; Method 7E for nitrogen oxide; Method 9 for visible particulate emissions; Method 10 for carbon monoxide; and Method 25 or 25A for volatile organic compounds.

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

- d. The test(s) shall be conducted while the emissions unit is operating at greater than 90% of the boiler heat input rating, unless otherwise specified or approved by Ohio EPA Southeast District Office.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 emission tests shall be submitted to the Ohio EPA Southeast District Office within one month following completion of the tests. The permittee may obtain additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (B003) - Auxiliary Boiler - 150 million Btu/hour natural gas-fired boiler.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F001) - FGD Landfill Operation w/ Gypsum, Flyash and Bottom Ash Unloading, Spreading and Compaction**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) (Synthetic minor to avoid BAT)	Particulate emissions shall not exceed 3.9 tons per rolling, 12-month period.  See Section A.I.2.a below.
OAC rules 3745-31-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.84 tons per rolling, 12-month period.  Fugitive particulate matter emissions shall not exceed 3.9 tons per rolling, 12-month period.  There shall be no visible particulate emissions except for a period of time not to exceed three minutes in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Section A.I.2.b below.

**2. Additional Terms and Conditions**

- 2.a Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):
  - i. handling wet materials, compacting the materials, using cover/vegetation to reduce wind erosion; and

- ii. a 807,291 tons per rolling, 12-month period gypsum, flyash and bottom ash throughput limitation.

**2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the handling of wet materials, compacting the materials and using cover/vegetation to reduce wind erosion for control constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance with the visible emissions limitation.

**II. Operational Restrictions**

- 1. The maximum throughput for this emissions unit shall not exceed 807,291 tons of gypsum, flyash and bottom ash, based upon a rolling, 12-month summation of the throughput rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the gypsum, flyash and bottom ash throughput specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Throughput, Tons</u>
1	100,000
1-2	150,000
1-3	200,000
1-4	250,000
1-5	300,000
1-6	400,000
1-7	500,000
1-8	600,000
1-9	700,000
1-10	750,000
1-11	800,000
1-12	807,291

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the gypsum, flyash and bottom ash throughput.

### **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month; and
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
2. The permittee shall perform daily checks, when the emissions unit is in operation, for any visible emissions of fugitive dust from this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to minimize or eliminate the visible emissions.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

### **V. Testing Requirements**

1. Compliance with the emission limitations in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed three minutes in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

b. Emission Limitation:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.84 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 3.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter emissions and PM10 limitations shall be determined by the monitoring and record keeping requirements specified in Section A.III.1 and by using the emission factor equations in Section 13.2.4, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for material handling and storage piles. These emission limits were based on a windspeed of 8.7 miles per hour and a moisture content of 10 - 15% and the information contained in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006.

c. Emission Limitation:

Particulate emissions shall not exceed 3.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the particulate emissions limitation shall be determined by the record keeping requirements specified in Section A.III.1 and by using the emission factor equations in Section 13.2.4, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for material handling and storage piles. These emission limits were based on a windspeed of 8.7 miles per hour and a moisture content of 10 - 15% and the information contained in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F001) - FGD Landfill Operation w/ Gypsum, Flyash and Bottom Ash Unloading, Spreading and Compaction**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F002) - Paved roadways**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-10 through 20.</p> <p>See Section A.1.2.e below.</p>
OAC rules 3745-31-10 through 20	<p>Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 2.94 tons per rolling, 12-month period.</p> <p>Fugitive particulate matter emissions shall not exceed 15.1 tons per rolling, 12-month period.</p> <p>There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.</p> <p>See Sections A.1.2.a through A.1.2.d.</p>

**2. Additional Terms and Conditions**

- 2.a Based on the "Prevention of Significant Deterioration"(PSD) analysis conducted to ensure the application of "Best Available Control Technology"(BACT), it has been determined that the use of reduced speed limits, sweeping, watering and good housekeeping for control measures constitutes BACT for this emissions unit The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.b The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of

this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- 2.c** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.d** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.e** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all paved roads and parking areas	daily

- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3. The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented;
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information required in 3.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

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

1. Compliance with the emission limitations in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 2.94 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 15.1 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. These emission limits were based on 130,293 vehicle miles traveled per year, and a 90 % control efficiency for particulate emissions and PM10.

b. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F002) - Paved roadways**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F003) - Unpaved roadways**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 9.1 tons per rolling, 12-month period.  See Section A.1.2.f below.
OAC rules 3745-31-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.0 tons per rolling, 12-month period.  Fugitive particulate matter emissions shall not exceed 9.1 tons per rolling, 12-month period.  There shall be no visible particulate emissions except for a period of time not to exceed three minutes in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Sections A.1.2.a through A.1.2.e.

**2. Additional Terms and Conditions**

- 2.a Based on the "Prevention of Significant Deterioration"(PSD) analysis conducted to ensure the application of "Best Available Control Technology"(BACT), it has been determined that the use of reduced speed limits, chemical stabilization/dust suppressants, surface improvements, watering and/or good housekeeping for control measures constitutes BACT for this emissions unit The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.b** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.c** Any unpaved roadway or parking area, which is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using reduced speed limits, sweeping, watering and good housekeeping. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- 2.d** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.e** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.f** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

  - i. use of chemical stabilization/dust suppressants, reduced speeds, and/or watering to ensure controlled potential particulate emissions are less than 10.0 tons per year.

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

unpaved roadways and parking areas

minimum inspection frequency

all unpaved roads and parking areas

daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented;
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
  - e. the time of day of each inspection.

The information required in 3.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## V. Testing Requirements

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

- a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 1.0 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 9.1 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. These emission limits were based on 70,800 vehicle miles traveled per year, and a 95 % control efficiency for particulate emissions and PM10.

- b. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed three minutes in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

- c. Emission Limitation:

Particulate emissions shall not exceed 9.1 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with particulate emissions limitation shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits were based on 70,800 vehicle miles traveled per year, and a 95 % control efficiency for particulate emissions and PM10.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F003) - Unpaved roadways**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F004) - Coal storage piles**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 1.3 tons per rolling, 12-month period.  See Sections A.1.2.c and II.1 below.
OAC rules 3745-31-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.62 tons per rolling, 12-month period.  Fugitive particulate matter emissions shall not exceed 1.31 tons per rolling, 12-month period.  There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Sections A.1.2.a through A.1.2.b below.

**2. Additional Terms and Conditions**

- 2.a Based on the "Prevention of Significant Deterioration"(PSD) analysis conducted to ensure the application of "Best Available Control Technology"(BACT), it has been determined that the use of chemical stabilization/dust suppressants, reduced drop height, watering and/or good housekeeping for control measures constitutes BACT for this emissions unit The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.b The above-mentioned control measure(s) shall be employed for each load-in and load-out operation and for wind erosion at each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
  
- 2.c Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):
  - a. use of chemical stabilization/dust suppressants, reduced drop height, and/or watering; and
  - b. a 5,553,840 tons per year coal throughput limitation.

**II. Operational Restrictions**

- 1. The maximum annual throughput for the emissions unit shall not exceed 5,553,840 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Coal Throughput, Tons</u>
1	1,000,000
1-2	2,000,000
1-3	3,000,000
1-4	4,000,000
1-5	5,000,000
1-6	5,553,840
1-7	5,553,840
1-8	5,553,840
1-9	5,553,840
1-10	5,553,840
1-11	5,553,840
1-12	5,553,840

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

### III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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all	daily
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2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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all	daily
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3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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all	daily
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4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

6. The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented;
- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s); and
- e. the time of day of each inspection.

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 7. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the rolling, 12-month summation of the material throughput.
- 8. The permittee shall maintain monthly records of the following information for this emissions unit in order to demonstrate compliance with the rolling, 12-month summation emission limitations:
  - a. the total emissions, in tons, for particulate emissions for each month; and
  - b. the updated rolling, 12-month summation emissions total, in tons, for particulate emissions (the total amount of emissions for the current month plus the total amount of emissions for previous eleven calendar months).

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
    - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
    - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate emissions.
  3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
  4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

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

- a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.62 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 1.31 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter emissions and PM10 emissions limitations shall be determined by the monitoring and record keeping requirements in Section A.III and by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum

throughput of 5,553,840 tons per year, an average moisture content of 6%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate emissions and PM10.

b. Emission Limitation:

Particulate emissions shall not exceed 1.3 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with particulate emissions limitation shall be determined by the monitoring and record keeping requirements in Section A.III and by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum throughput of 5,553,840 tons per year, an average moisture content of 6%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate emissions.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F004) - Coal storage piles**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F005) - Limestone/Urea barge unloading**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 0.60 tons per rolling, 12-month period.  See Sections A.1.2.e and II.1 below.
OAC rules 3745-31-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.27 tons per rolling, 12-month period.  Fugitive particulate matter emissions shall not exceed 0.60 tons per rolling, 12-month period.  There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Sections A.1.2.a through A.1.2.d below.

**2. Additional Terms and Conditions**

- 2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Crane Unloading to Hopper  
 Hopper to Belt Feeder  
 Belt Feeder to L-1

- 2.b Based on the "Prevention of Significant Deterioration"(PSD) analysis conducted to ensure the application of "Best Available Control Technology"(BACT), it has been determined that the use of reduced drop height, watering and/or

enclosures for control measures constitutes BACT for this emissions unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The permittee shall employ control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
Limestone	wet suppression
All	enclosure
All	reduced drop height

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.e** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of reduced drop height, enclosures and/or watering;
- b. a 299,300 tons per year limestone throughput limitation; and
- c. a 200,000 tons per year urea throughput limitation.

**II. Operational Restrictions**

- 1. The maximum annual throughput for the emissions unit shall not exceed 299,300 tons of limestone, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Limestone Throughput, Tons</u>
1	100,000
1-2	150,000
1-3	200,000
1-4	250,000
1-5	299,300
1-6	299,300
1-7	299,300
1-8	299,300
1-9	299,300
1-10	299,300
1-11	299,300
1-12	299,300

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the limestone throughput.

- The maximum annual throughput for the emissions unit shall not exceed 200,000 tons of urea, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Urea Throughput, Tons</u>
1	50,000
1-2	100,000
1-3	150,000
1-4	200,000
1-5	200,000
1-6	200,000
1-7	200,000
1-8	200,000
1-9	200,000
1-10	200,000
1-11	200,000
1-12	200,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the urea throughput.

### III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measure(s) was (were) implemented;
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
  - e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the limestone throughput for each month;
  - b. the urea throughput for each month;
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the limestone throughput. Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative limestone throughput for each calendar month; and
  - d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the urea throughput. Also during the first 12 calendar months of operation following the issuance of this

permit, the permittee shall record the cumulative urea throughput for each calendar month.

#### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restrictions, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate emissions.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

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

1. Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:
  - a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.27 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 0.60 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter emissions and PM10 emissions limitations shall be determined by the monitoring and record keeping requirements specified in Section A.III.4 and by using the emission factor equations in Sections 13.2.4, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for material handling operations. These emission limits were based on a maximum throughput of 299,300 tons of limestone per year and 200,000 tons of urea per year, an average moisture content of 3% in limestone and 0.5% in urea, an average wind speed of 8.7 miles per hour and a control efficiency as specified below:

1. 90% control efficiency for particulate emissions with limestone material handling operations; and
2. 85% control efficiency for particulate emissions with urea material handling operations.

b Emissions Limitations:

Particulate emissions shall not exceed 0.60 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions limitations shall be determined by the monitoring and record keeping requirements specified in Section A.III.4 and using the emission factor equations in Sections 13.2.4, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for material handling operations. These emission limits were based on a maximum throughput of 299,300 tons of limestone per year and 200,000 tons of urea per year, an average moisture content of 3% in limestone and 0.5% in urea, an average wind speed of 8.7 miles per hour and a control efficiencies for limestone material handling operations of 90% control of particulate emissions and for urea material handling operations of 85% control of particulate emissions.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F005) - Limestone/Urea barge unloading**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F006) - Limestone/Urea storage piles**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 1.02 tons per rolling, 12-month period.  See Sections A.1.2.c and II.1 below.
OAC rules 3745-31-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.48 tons per rolling, 12-month period.  Fugitive particulate matter emissions shall not exceed 1.02 tons per rolling, 12-month period.  There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Sections A.1.2.a through A.1.2.b below.

**2. Additional Terms and Conditions**

- 2.a Based on the "Prevention of Significant Deterioration"(PSD) analysis conducted to ensure the application of "Best Available Control Technology"(BACT), it has been determined that the use of under pile feeders, chemical stabilization/dust suppressants, reduced drop height, enclosures, watering(for limestone only) and/or good housekeeping for control measures constitutes BACT for this emissions unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.b** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation and for wind erosion at each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.c** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):
- i. use of under pile feeders, chemical stabilization/dust suppressants, reduced drop height, enclosures, and/or watering;
  - ii. a 299,300 tons per year limestone throughput limitation; and
  - iii. a 200,000 tons per year urea throughput limitation.

## II. Operational Restrictions

1. The maximum annual throughput for the emissions unit shall not exceed 299,300 tons of limestone, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Limestone Throughput, Tons</u>
1	100,000
1-2	150,000
1-3	200,000
1-4	250,000
1-5	299,300
1-6	299,300
1-7	299,300
1-8	299,300
1-9	299,300
1-10	299,300
1-11	299,300
1-12	299,300

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the limestone throughput.

2. The maximum annual throughput for the emissions unit shall not exceed 200,000 tons of urea, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Urea Throughput, Tons</u>
1	50,000
1-2	100,000
1-3	150,000
1-4	200,000
1-5	200,000
1-6	200,000
1-7	200,000
1-8	200,000
1-9	200,000
1-10	200,000
1-11	200,000
1-12	200,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the urea throughput.

**III. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
all	daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented;
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s); and
  - e. the time of day of each inspection.

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

7. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the limestone throughput for each month;
  - b. the urea throughput for each month;

- c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the limestone throughput. Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative limestone throughput for each calendar month; and
  - d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the urea throughput. Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative urea throughput for each calendar month.
8. The permittee shall maintain monthly records of the following information for this emissions unit in order to demonstrate compliance with the rolling, 12-month summation emission limitations:
  - a. the total emissions, in tons, for particulate emissions for each month; and
  - b. the updated rolling, 12-month summation emissions total, in tons, for particulate emissions (the total amount of emissions for the current month plus the total amount of emissions for previous eleven calendar months).

#### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restrictions, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate emissions.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **V. Testing Requirements**

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

- a. Emissions Limitations:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.48 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 1.02 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate matter emissions and PM10 emissions limitations shall be determined by the monitoring and record keeping requirements specified in Section A.III.7 and by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum throughput of 299,300 tons of limestone per year and 200,000 tons of urea per year, an average moisture content of 3% in limestone and 0.5% in urea, an average wind speed of 8.7 miles per hour and a control efficiency for limestone and urea material handling operations of 90% overall control efficiency for particulate emissions and PM10.

- b. Emissions Limitation:

Particulate emissions shall not exceed 1.02 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with particulate emissions limitation shall be determined by the monitoring and record keeping requirements specified in Section A.III.7 and by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum throughput of 299,300 tons of limestone per year and 200,000 tons of urea per year, an average moisture content of 3% in limestone and 0.5% in urea, an average wind speed of 8.7 miles per hour and a control efficiency for limestone and urea material handling operations of 90% control of particulate emissions.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (F006) - Limestone/Urea storage piles**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P001) - Cooling cells for Boiler 1**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 through 20	Particulate matter less than ten microns (PM-10) emissions shall not exceed 0.18 pounds per hour, or 0.77 tons per rolling, 12-month period.  See Sections A.I.2.a and A.II.1. below.
OAC rule 3745-31-05(A)(3)(b)	See Section A.I.2.b below.

**2. Additional Terms and Conditions**

**2.a** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of mist eliminators achieving a maximum 0.00086% drift loss (i.e., 60 gal/hr drift loss 6,971,880 gal/hr) constitutes BACT for this emission unit. The emissions limit based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above.

**2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled PM-10 emissions from this air contaminant source since the potential to emit for PM-10 is less than ten tons per year.

**II. Operational Restrictions**

1. The permittee shall maintain an average total dissolved solids (TDS) content of 350 mg/L or less in the circulating cooling water.

### **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall monitor the TDS content of the circulating cooling water on a daily basis.
2. The permittee shall maintain daily records of the following information for this emissions unit:
  - a. The daily TDS content of the circulating cooling water, in mg/L.
  - b. Beginning after the first 12 calendar months of operation, the rolling, 12-month average TDS content of the circulating cooling water, in mg/L.

### **IV. Reporting Requirements**

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the rolling, 12-month average TDS content limitation.

### **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:

- a. Emissions Limitations:

Particulate matter less than ten microns (PM-10) emissions shall not exceed 0.18 pounds per hour, or 0.77 tons per rolling, 12 month period.

Applicable Compliance Method:

Compliance with the PM-10 emission limitation shall be demonstrated by multiplying the drift loss factor of 0.0000086 multiplied by the water circulated in the cooling cells (6,971,880 gallons per hour was used as a maximum in this permit) then multiplied by the TDS concentration recorded in A.III.1 (3.50 mg/L was used as a maximum in this permit) and then converted from milligrams per minute to pounds per hour. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 8,760 hours and dividing by 2,000 lbs/ton.

If requested by Ohio EPA, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed 0.00086 percent.

### **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P001) - Cooling cells for Boiler 1**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P002) - Cooling cells for Boiler 2**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 through 20	Particulate matter less than ten microns (PM-10) emissions shall not exceed 0.18 pounds per hour, or 0.77 tons per rolling, 12-month period.  See Sections A.I.2.a and A.II.1. below.
OAC rule 3745-31-05(A)(3)(b)	See Section A.I.2.b below.

**2. Additional Terms and Conditions**

- 2.a Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of mist eliminators achieving a maximum 0.00086% drift loss (i.e., 60 gal/hr drift loss 6,971,880 gal/hr) constitutes BACT for this emission unit. The emissions limit based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above.
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled PM-10 emissions from this air contaminant source since the potential to emit for PM-10 is less than ten tons per year.

**II. Operational Restrictions**

1. The permittee shall maintain an average total dissolved solids (TDS) content of 350 mg/L or less in the circulating cooling water.

**III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall monitor the TDS content of the circulating cooling water on a daily basis.

2. The permittee shall maintain daily records of the following information for this emissions unit:
  - a. The daily TDS content of the circulating cooling water, in mg/L.
  - b. Beginning after the first 12 calendar months of operation, the rolling, 12-month average TDS content of the circulating cooling water, in mg/L.

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the rolling, 12-month average TDS content limitation.

#### **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:

- a. Emissions Limitations:

Particulate matter less than ten microns (PM-10) emissions shall not exceed 0.18 pounds per hour, or 0.77 tons per rolling, 12 month period.

Applicable Compliance Method:

Compliance with the PM-10 emission limitation shall be demonstrated by multiplying the drift loss factor of 0.0000086 multiplied by the water circulated in the cooling cells (6,971,880 gallons per hour was used as a maximum in this permit) then multiplied by the TDS concentration recorded in A.III.1 (3.50 mg/L was used as a maximum in this permit) and then converted from milligrams per minute to pounds per hour. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 8,760 hours and dividing by 2,000 lbs/ton.

If requested by Ohio EPA, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed 0.00086 percent.

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

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P002) - Cooling cells for Boiler 2**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P003) - Ammonium sulfate crystallization process that includes the following equipment venting to 2 cyclones and wet scrubbers: liquid filtration vessels, a crystallizer feed tank, crystallizer cyclone, centrifuge, rotary dryer and rotary cooler.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>The requirements of this rule for particulate matter less than ten microns(PM-10) also include compliance with the requirements of OAC rules 3745-31-10 through 20 and OAC rule 3745-17-07.</p> <p>See Section A.I.2.c.</p>
OAC rules 3745-31-10 through 20	<p>For the wet scrubber serving the liquid filtration vessels, the crystallizer feed tank, crystallizer cyclone, centrifuge, and rotary dryer (scrubber 1) the following requirements apply:</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.6 pound per million cubic feet of natural gas-fired, 0.003 pound per hour, or 0.01 ton per rolling, 12-month period.</p> <p>Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 0.05 pound per million BTU, 0.23 pound per hour, or 1.0 ton per rolling, 12-month period.</p> <p>Carbon monoxide(CO) emissions shall not exceed 84 pounds per million cubic feet of natural gas-fired, 0.38 pound per hour, or 1.66 tons per rolling, 12-month period.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 5.5 pounds per million cubic feet of natural gas-fired, 0.02 pound per hour, or 0.11 ton per rolling, 12-month period.</p> <p>Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.25 pound per hour, or 1.1 tons per rolling, 12-month</p>

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>period.</p> <p>See Sections A.I.2.a and A.I.2.b.</p>
OAC rules 3745-31-10 through 20	<p>For the wet scrubber serving the rotary cooler (scrubber 2) the following requirements apply:</p> <p>PM-10 emissions shall not exceed 3.60 pounds per hour, or 15.76 tons per rolling, 12-month period.</p> <p>See Section A.I.2.a.</p>
OAC rule 3745-31-05(A)(3)(b)	See Section A.I.2.c.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-07	Visible particulate emissions from each scrubber stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
OAC rule 3745-18-06	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A).
OAC rule 3745-21-08	See Section A.I.2.d.

## 2. Additional Terms and Conditions

- 2.a** The cyclones and wet scrubbers shall reduce the total PM-10 emissions in P003 by 99 percent.
- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of BACT, it has been determined that the use of scrubbers, natural gas, and low NO<sub>x</sub> burners constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rule 3745-31-10 through 20 above.
- 2.c** The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled restricted CO, NO<sub>x</sub>, VOC, and SO<sub>2</sub> emissions from this air contaminant source since the potential to emit for CO, NO<sub>x</sub>, VOC, and SO<sub>2</sub> is less than ten tons per year.
- 2.d** The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply

with the best available control technology requirements established pursuant to OAC rules 3745-31-10 through 20 in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the state regulations. This rule revision was submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

## **II. Operational Restrictions**

None

## **III. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the water flow rate, in gallons per minute, and the pressure drop across each scrubber, in inches of water, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the water flow rate, in gallons per minute, and the pressure drop across each scrubber, in inches of water on a once per day basis.

Whenever the monitored value for the water flow rate and/or pressure drop deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the pressure drop across each scrubber is the minimum scrubber pressure drop established during the most recent emission test that

demonstrated the emissions unit to be in compliance or the minimum scrubber pressure drop recommended by the scrubbers manufacturer until such testing is completed.

The acceptable value for the water flow rate is the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubbers manufacturer until such testing is completed.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to minimize or eliminate abnormal visible emissions.

The presence of water vapor in the scrubber plume does not constitute visible emissions.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the scrubber water flow rate and/or pressure drop was not greater than the acceptable values;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

- c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the identified scrubber water flow rate and pressure drop into compliance with the acceptable values, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## **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:
  - a. Emission Limitation:

PM-10 emissions from scrubber 1 shall not exceed 0.25 pound per hour, or 1.1 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per hour emissions limitation shall be demonstrated based upon the applicable emission tests for this emissions limitation specified in Part III Section A.V.2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.
  - b. Emission Limitation:

PM-10 emissions from scrubber 2 shall not exceed 3.60 pounds per hour, or 15.76 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pounds per hour emissions limitation shall be demonstrated based upon the applicable emission tests for this emissions limitation specified in Part III Section A.V.2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

c. Emission Limitation:

SO<sub>2</sub> emissions from scrubber 1 shall not exceed 0.6 pound per million cubic feet of natural gas-fired, 0.003 pound per hour, or 0.01 tons per rolling, 12-month period.

Applicable Compliance Method:

If required, compliance with the pound per million cubic feet and pound per hour emissions limitations shall be demonstrated based upon emission testing per 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 for these emissions limitations.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

d. Emission Limitation:

NO<sub>x</sub> emissions from scrubber 1 shall not exceed 0.05 pound per million BTU, 0.23 pound per hour, or 1.0 ton per rolling, 12-month period.

Applicable Compliance Method:

If required, compliance with the pound per million cubic feet and pound per hour emissions limitation shall be demonstrated based upon emission testing per 40 CFR Part 60, Appendix A, Methods 1 through 4, and 7 for these emissions limitations.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

e. Emission Limitation:

CO emissions from scrubber 1 shall not exceed 84 pounds per million cubic feet of natural gas-fired, 0.38 pound per hour, or 1.66 tons per rolling, 12-month period.

Applicable Compliance Method:

If required, compliance with the pounds per million cubic feet and the pound per hour emissions limitations shall be demonstrated based upon emission testing per 40 CFR Part 60, Appendix A, Methods 1 through 4, and 10 for these emissions limitations.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

f. Emission Limitation:

VOC emissions from scrubber 1 shall not exceed 5.5 pounds per million cubic feet of natural gas-fired, 0.02 pound per hour, or 0.11 tons per rolling, 12-month period.

Applicable Compliance Method:

If required, compliance with the pound per million cubic feet and pound per hour emissions limitations shall be demonstrated based upon emission testing per 40 CFR Part 60, Appendix A, Methods 1 through 4, and 25 or 25A for these emissions limitations.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

g. Emission Limitation:

Visible particulate emissions from each stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**Note** - The presence of water vapor in the scrubber plume does not constitute visible emissions.

h. Emission Limitation:

The cyclones and wet scrubbers shall reduce the total PM-10 emissions in P003 by 99 percent.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the applicable emission tests for control efficiency specified in Part III Section A.V.2 of this permit to install.

2. The permittee shall conduct, or have conducted, emissions testing for scrubber 1 and scrubber 2 of this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 90 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than one year after initial startup of such emissions unit.
- b. The emissions testing shall be conducted to demonstrate compliance with the allowable emission rate for PM-10 emissions and PM-10 control efficiency.
- c. The emission testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 5 and 202 for PM-10 emissions.

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

- d. the emissions testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.
- e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods specified above.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 emission tests shall be submitted to the Ohio EPA Southeast District Office within one month following completion of the tests. The permittee may obtain additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

**VI. Miscellaneous Requirements**

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None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P003) - Ammonium sulfate crystallization process that includes the following equipment venting to 2 cyclones and wet scrubbers: liquid filtration vessels, a crystallizer feed tank, crystallizer cyclone, centrifuge, rotary dryer and rotary cooler.**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - P004 - Dry Fertilizer Material Handling, including Coating, Storage, Sizing and Truck Loading, vented to a Baghouse**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-31-10 through 20	Particulate matter less than ten microns(PM-10) emissions shall not exceed 0.36 pound per hour, or 1.59 tons per rolling, 12-month period.  See Sections A.I.2.a and A.I.2.b below.
OAC rule 3745-31-05(A)(3)(b)	See Section A.I.2.c below.
OAC rule 3745-17-11	The emissions limitation specified by this applicable rule is less stringent than the emissions limitation established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-07	Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

**2. Additional Terms and Conditions**

- 2.a The baghouse shall reduce the total PM-10 emissions in this emissions unit by 99 percent.
- 2.b Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of Best Available Control Technology (BACT), it has been determined that the use of a baghouse with a control efficiency of at least 99% constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above.
- 2.c The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM-10 emissions from this air contaminant source since the calculated controlled restricted annual emission rate for PM-10 emissions is less than ten tons per year taking into account the federally

enforceable BACT limit of 99% removal of total PM-10 emissions under OAC rules 3745-31-10 through 20.

## II. Operational Restrictions

1. A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications until such time as any required emission testing is conducted.

2. The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the baghouse was outside of the range specified by the manufacturer;
  - b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;
  - c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **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:

- a. Emission Limitation:

Particulate matter less than ten microns(PM-10) emissions shall not exceed 0.36 pound per hour, or 1.59 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per hour emissions limitation shall be demonstrated based upon the applicable emissions test for this emissions limitation specified in Part III Section A.V.2 of this permit to install.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based upon compliance with the hourly limitation.

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

c. Emission Limitation:

The baghouse shall reduce the total PM-10 emissions from this emissions unit by 99 percent.

Applicable Compliance Method:

Compliance shall be demonstrated through the applicable emission tests for control efficiency specified in Part III Section A.V.2 of this permit to install.

2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

- a. The emissions testing shall be conducted within 90 days after achieving the normal production rate at which the emissions unit will be operated, but not later than one year after initial startup of such emissions unit.
- b. The emissions testing shall be conducted to demonstrate compliance with the allowable emission rate for PM-10 emissions and PM-10 control efficiency.
- c. The emission testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 201A and 202 for PM-10 emissions. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.
- d. The emissions testing shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

- e. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods specified above.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the tests, 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 emission tests shall be submitted to the Ohio EPA Southeast District Office within one month following completion of the tests. The permittee may obtain additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - P004 - Fertilizer Plant Rotary Cooler vented to a Scrubber**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P901) - Coal barge unloading**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 1.6 tons per rolling, 12-month period.  See Sections A.I.2.d and A.II.1 below.
OAC rules 3745-10 through 20	Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.75 tons per rolling, 12 month-period.  Fugitive particulate matter emissions shall not exceed 1.60 tons per rolling, 12 month-period.  There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.  The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See Sections A.I.2.a through A.I.2.c below.

**2. Additional Terms and Conditions**

- 2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Crane Unloading to Hopper

Hopper to Belt Feeder

Belt Feeder to C -1

C-1 to C-2

C-1 to C-4

C-2 to C-3

C-2 to Standpipe A

C-3 to Standpipe B

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of reduced drop height, enclosures, and/or watering for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):
- a. use of reduced drop height, enclosures, and/or watering, and;
  - b. a 5,553,840 tons per year coal throughput limitation.

## II. Operational Restrictions

1. The maximum throughput for this emissions unit shall not exceed 5,553,840 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Coal Throughput, Tons</u>
1	500,000
1-2	1,000,000
1-3	1,500,000
1-4	2,000,000
1-5	2,500,000
1-6	3,000,000
1-7	3,500,000
1-8	4,500,000
1-9	5,553,840
1-10	5,553,840
1-11	5,553,840
1-12	5,553,840

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

### III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month; and
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- 2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and

- b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 1.6 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006.

- b. Emission Limitation:

Emissions of fugitive particulate matter of 10 microns or less (PM10) shall not exceed 0.75 tons per rolling, 12-month period.

Fugitive particulate matter emissions shall not exceed 1.60 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions and PM10 limitations shall be determined by using the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006

and updated on November 14, 2006. These emission limits were based on a maximum through-put of 5,553,840 tons of coal per year, an average moisture content of 6%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate matter emissions and PM10.

c. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P901) - Coal barge unloading**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P902) - Coal Conveying, Handling and Crushing**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 9.8 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Emissions of particulate matter of 10 microns or less (PM10) shall not exceed 9.0 tons per rolling, 12-month period.</p> <p>Particulate matter emissions shall not exceed 9.8 tons per rolling, 12-month period.</p> <p>There shall be no visible fugitive particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>There shall be no visible particulate emissions from the baghouse exhaust stacks.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-11(A)	Total combined particulate emissions from the baghouse exhausts shall not exceed 77.6 pounds per hour.
OAC rule 3745-17-07(A)	The emissions limit specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
40 CFR Part 60 Subpart Y	The emissions limit specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.

## 2. Additional Terms and Conditions

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

All coal conveying, crushing and /or storage equipment from the load-out of the coal storage piles to the tripper house feed points on both Boiler #1(B001) and Boiler #2(B002).

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of baghouses, enclosures, fogging and/or wet suppression for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of baghouses, enclosures, fogging and/or wet suppression, and;
- b. a 5,553,840 tons per year coal throughput limitation.

## II. Operational Restrictions

1. The maximum throughput for this emissions unit shall not exceed 5,553,840 tons of coal, based upon a rolling, 12-month summation of the throughput rates.

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**PTI Application: 06-08138**  
**Issued: 2/7/2008**

**Facility ID: 0653000069**  
**Emissions Unit ID: P902**

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

<u>Month(s)</u>	<u>Maximum Allowable Coal Throughput, Tons</u>
1	500,000
1-2	1,000,000
1-3	1,500,000
1-4	2,000,000
1-5	2,500,000
1-6	3,000,000
1-7	3,500,000
1-8	4,500,000
1-9	5,553,840
1-10	5,553,840
1-11	5,553,840
1-12	5,553,840

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput.

2. A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded.

### **III. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
  - e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
5. The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

#### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and

- b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and
  - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
50 West Town Street, Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA  
Division of Air Pollution Control  
2195 Front Street  
Logan, Ohio 43138.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 9.8 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on November 14, 2006.

- b. Emission Limitation:

Emissions of particulate matter of 10 microns or less (PM10) shall not exceed 9.0 tons per rolling, 12-month period.

Particulate matter emissions shall not exceed 9.8 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with particulate matter emissions limitations shall be determined by using the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and emission factors in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006. These emission limits were based on a maximum throughput of 5,553,840 tons of coal per year, an average moisture content of 6%, an average wind speed of 8.7 miles per hour and a 95% to 99% overall control efficiency for particulate matter emissions and PM10.

c. Emission Limitation:

There shall be no visible fugitive particulate emissions except for a period of time not to exceed one minute in any 60-minute observation period.

There shall be no visible particulate emissions from the baghouse exhaust stacks.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

d. Emission Limitation:

Total combined particulate emissions from the baghouse exhausts shall not exceed 77.6 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P902) - Coal Conveying, Handling and Crushing**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P903) - Limestone/Urea preparation building**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 1.22 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Particulate matter emissions shall not exceed 0.50 pound per hour, or 1.22 tons per rolling, 12-month period.</p> <p>Particulate matter less than ten microns (PM-10) emissions shall not exceed 0.35 pound per hour, or 1.16 tons per rolling, 12-month period.</p> <p>Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.</p> <p>There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-07(A)(1)	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
40 CFR Part 60 Subpart OOO	The emissions limit specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 20.

## 2. Additional Terms and Conditions

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Hopper to Belt Feeder

Belt Feeder to L-2

L-2 to Day Bin #1

L-2 to L-3

L-3 to Day Bin #2

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of enclosures, baghouses, and/or wet suppression for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of enclosures, baghouses, and/or wet suppression;
- b. a 299,300 tons per year limestone throughput limitation; and
- c. a 200,000 tons per year urea throughput limitation.

## II. Operational Restrictions

1. The maximum annual throughput for the emissions unit shall not exceed 299,300 tons of limestone, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Limestone Throughput, Tons</u>
1	100,000
1-2	150,000
1-3	200,000
1-4	250,000
1-5	299,300
1-6	299,300
1-7	299,300
1-8	299,300
1-9	299,300
1-10	299,300
1-11	299,300
1-12	299,300

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the limestone throughput.

2. The maximum annual throughput for the emissions unit shall not exceed 200,000 tons of urea, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Urea Throughput, Tons</u>
1	50,000
1-2	100,000
1-3	150,000

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1-4	200,000
1-5	200,000
1-6	200,000
1-7	200,000
1-8	200,000
1-9	200,000
1-10	200,000
1-11	200,000
1-12	200,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the urea throughput.

3. A bag leak detector shall be properly installed, calibrated, operated and maintained on the control equipment serving this emissions unit. An audible alarm shall be installed to sound should emissions above the percent saturation, determined during the calibration testing, be exceeded.

**III. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the limestone throughput for each month;
  - b. the urea throughput for each month;
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the limestone throughput. Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative limestone throughput for each calendar month; and
  - d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the urea throughput. Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative urea throughput for each calendar month.
- 5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and the fugitive emissions points associated with this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
- 6. The permittee shall maintain records of the details of each event where an audible alarm sounds on the bag leak detector. These records shall include the date, time, duration, cause, and the action taken in response to the alarm.

#### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restrictions, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month periods.
6. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. actual start-up date (within 15 days after such date); and

- c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Permit Management Unit  
50 West Town Street, Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA  
Division of Air Pollution Control  
2195 Front Street  
Logan, Ohio 43138.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 1.22 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006.

- b. Emission Limitation:

Particulate matter emissions shall not exceed 0.50 pounds per hour, or 1.22 tons per rolling, 12-month period.

Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.35 pounds per hour, or 1.16 tons per rolling, 12-month period.

Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.

Applicable Compliance Method:

Compliance with fugitive particulate emissions limitations shall be determined by the record keeping requirements specified in Section A.III.1 and the emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006. These emission limits were based on maximum throughput of 299,300 tons of limestone per year and 200,000 tons of urea per year, an average moisture content of 3% in limestone and 0.5% in urea, an average wind speed of 8.7 miles per hour and a control efficiency for limestone and urea material handling operations of 90% control of particulate emissions.

If required, the permittee shall demonstrate compliance with the 0.005 grains per dry standard cubic foot emissions limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P903) - Limestone/Urea preparation building**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P904) - Gypsum conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 0.55 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Particulate matter emissions shall not exceed 0.13 pounds per hour, or 0.55 tons per rolling, 12-month period.</p> <p>Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.06 pounds per hour, or 0.23 tons per rolling, 12-month period.</p> <p>There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-07(A)(1)	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.

**2. Additional Terms and Conditions**

- 2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Gypsum Dewatering Building  
G-2 to Emergency Storage Pile  
Storage Pile Wind Erosion  
Storage Pile Unloading  
G-1 to G-3  
G-3 to Gypsum Storage Pile  
Bulldozer to Hopper  
Hopper to G4A  
G-4A to G-4  
G-4 to Hopper  
Hopper to Barge

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of telescopic chutes, enclosures, and handling wet material for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):
- a. use of telescopic chutes, enclosures, handling wet material; and
  - b. a 500,000 tons per year gypsum throughput limitation.

## **II. Operational Restrictions**

1. The maximum throughput for this emissions unit shall not exceed 500,000 tons of gypsum, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Gypsum Throughput, Tons</u>
1	100,000
1-2	200,000
1-3	300,000
1-4	400,000
1-5	500,000
1-6	500,000
1-7	500,000
1-8	500,000
1-9	500,000
1-10	500,000
1-11	500,000
1-12	500,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the throughput limitation shall be based upon a rolling, 12-month summation of the gypsum throughput.

**III. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
All	Daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;

- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
- c. the dates the control measures were implemented;
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
- 5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and the fugitive emissions points associated with this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:

- a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
    - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
    - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
  3. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
  4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
  5. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **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:
  - a. Emission Limitation:

Particulate emissions shall not exceed 0.55 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the

equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006.

b. Emissions Limitations:

Particulate matter emissions shall not exceed 0.13 pounds per hour, or 0.55 tons per rolling, 12-month period.

Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.06 pounds per hour, or 0.23 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with fugitive particulate emissions limitations shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006), emissions factors contained in AP-42 Chapter 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, dated 8/2004) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006. These emission limits were based on a maximum through-put of 500,000 tons of gypsum per year, an average moisture content of 15%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate matter emissions and PM10.

c. Emission Limitation:

There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - P904 - Gypsum conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P905) - Unit 1 Flyash conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 0.75 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Particulate matter emissions shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.</p> <p>Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.</p> <p>Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.</p> <p>There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-07(A)(1)	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.

## 2. Additional Terms and Conditions

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Flyash Filter Separator

Storage Silo

Truck Loading

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of wet suppression, enclosures, and baghouses for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of enclosures, baghouses, and wet suppression; and
- b. a 124,311 tons per year flyash throughput limitation.

## II. Operational Restrictions

1. The maximum annual throughput for the emissions unit shall not exceed 124,311 tons of flyash, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Flyash Throughput, Tons</u>
1	20,000
1-2	30,000
1-3	40,000
1-4	50,000
1-5	60,000
1-6	70,000
1-7	100,000
1-8	120,000
1-9	124,311
1-10	124,311
1-11	124,311
1-12	124,311

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the flyash throughput.

**III. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
- 5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and the fugitive emissions points associated with this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and

- b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate emissions.
3. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
5. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 0.75 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application

06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006.

b. Emission Limitation:

Particulate matter emissions shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.

Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.

Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.

Applicable Compliance Method:

Compliance with particulate emissions and PM10 limitations shall be determined by using the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006. These emission limits were based on a maximum through-put of 299,300 tons of limestone per year, an average moisture content of 3%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate matter emissions and PM10.

If required, the permittee shall demonstrate compliance with the 0.005 grains per dry standard cubic foot emissions limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P905) - Unit 1 Flyash conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P906) - Unit 2 Flyash conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 0.75 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Particulate matter emissions shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.</p> <p>Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.</p> <p>Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.</p> <p>There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-07(A)(1)	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.

## 2. Additional Terms and Conditions

- 2.a** The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Flyash Filter Separator

Storage Silo

Truck Loading

- 2.b** Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of wet suppression, enclosures, and baghouses for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d** Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of enclosures, baghouses, and wet suppression; and
- b. a 124,311 tons per year flyash throughput limitation.

## II. Operational Restrictions

1. The maximum annual throughput for the emissions unit shall not exceed 124,311 tons of flyash, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Flyash Throughput, Tons</u>
1	20,000
1-2	30,000
1-3	40,000
1-4	50,000
1-5	60,000
1-6	70,000
1-7	100,000
1-8	120,000
1-9	124,311
1-10	124,311
1-11	124,311
1-12	124,311

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the flyash throughput.

### III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
- 5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and the fugitive emissions points associated with this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and

- b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
3. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
5. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 0.75 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application

06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on November 14, 2006.

b. Emission Limitation:

Particulate matter emissions shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.

Emissions of particulate matter less than ten microns (PM-10) shall not exceed 0.17 pounds per hour, or 0.75 tons per rolling, 12-month period.

Particulate matter emissions from the dust collectors shall not exceed 0.005 grains per dry standard cubic foot.

Applicable Compliance Method:

Compliance with particulate emissions and PM10 limitations shall be determined by using the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in Permit to Install application 06-08138, which was submitted to Ohio EPA on May 15, 2006 and updated on november 14, 2006. These emission limits were based on a maximum through-put of 124,311 tons of flyash per year, an average moisture content of 3%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate matter emissions and PM10.

If required, the permittee shall demonstrate compliance with the 0.005 grains per dry standard cubic foot emissions limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - (P906) - Unit 2 Flyash conveying, handling and storage**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - P907 - Dry Fertilizer Barge Loading Vented to Dust Collectors**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	<p>Particulate emissions shall not exceed 1.60 tons per rolling, 12-month period.</p> <p>See Sections A.I.2.d and A.II.1 below.</p>
OAC rules 3745-31-10 through 20	<p>Particulate matter emissions shall not exceed 4.32 pounds per hour, or 1.60 tons per rolling, 12-month period.</p> <p>Emissions of particulate matter less than ten microns (PM-10) shall not exceed 2.09 pounds per hour, or 0.95 tons per rolling, 12-month period.</p> <p>Particulate matter emissions from each dust collector shall not exceed 0.005 grains per dry standard cubic foot.</p> <p>There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.</p> <p>See Sections A.I.2.a through A.I.2.c below.</p>
OAC rule 3745-17-07	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.
OAC rule 3745-17-11	The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rules 3745-31-10 through 20.

## 2. Additional Terms and Conditions

- 2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Transfer from Emissions Unit P004  
Enclosed Dry Fertilizer Conveyors/Transfer Points  
Barge Loading

- 2.b Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that the use of enclosures, dust collectors and a telescopic barge loading chute for control measures constitutes BACT for this emission unit. The emissions limits based on the BACT requirements are listed under OAC rules 3745-31-10 through 20 above. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

- 2.d Permit to Install 06-08138 for this air contaminant source takes into account the following voluntary restrictions(including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology requirements under OAC rule 3745-31-05(A)(3):

- a. use of enclosures, dust collectors and a telescopic barge loading chute;  
and
- b. a 289,080 tons per year dry fertilizer throughput limitation.

## II. Operational Restrictions

1. The maximum annual throughput for the emissions unit shall not exceed 289,080 tons of dry fertilizer, based upon a rolling, 12-month summation of the throughput rates.

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

<u>Month(s)</u>	<u>Maximum Allowable Dry Fertilizer Throughput, Tons</u>
1	20,000
1-2	40,000
1-3	80,000
1-4	160,000
1-5	200,000
1-6	230,000
1-7	260,000
1-8	280,000
1-9	289,080
1-10	289,080
1-11	289,080
1-12	289,080

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the dry fertilizer throughput.

### III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
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All	Daily
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2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measures were implemented;

- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures; and
- e. the time of day of each inspection.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- 4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
  - a. the material throughput for each month;
  - b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.
- 5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and the fugitive emissions points associated with this emissions unit. The time of the inspection as well as the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semi-annual deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and

- b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
  - b. an identification of all exceedances of the rolling, 12-month emission limitations for particulate.
3. The permittee shall submit semi-annual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack and/or fugitive emissions points associated with this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
5. The permittee shall submit annual reports that specify the total particulate emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

## **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:

- a. Emission Limitation:

Particulate emissions shall not exceed 1.60 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limitation specified above shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in the supplemental information

to Permit to Install application 06-08138, which was submitted to Ohio EPA on May 17, 2007.

b. Emission Limitation:

Particulate matter emissions shall not exceed 4.32 pounds per hour, or 1.60 tons per rolling, 12-month period.

Emissions of particulate matter less than ten microns (PM-10) shall not exceed 2.09 pounds per hour, or 0.95 tons per rolling, 12-month period.

Particulate matter emissions from each dust collector shall not exceed 0.005 grains per dry standard cubic foot.

Applicable Compliance Method:

Compliance with particulate emissions and PM10 limitations shall be determined by the record keeping requirements specified in Section A.III.1 and the equations contained in AP-42 Chapter 13.2.4 (Aggregate Handling and Storage Piles, dated 11/2006) and the parameters as listed in the supplemental information to Permit to Install application 06-08138, which was submitted to Ohio EPA on May 17, 2007. These emission limits were based on a maximum throughput of 289,080 tons of dry fertilizer per year, an average moisture content of 0.5%, an average wind speed of 8.7 miles per hour and a 90% overall control efficiency for particulate matter emissions and PM10.

If required, the permittee shall demonstrate compliance with the 0.005 grains per dry standard cubic foot emissions limitation by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

There shall be no visible particulate emissions from stack and fugitive emission points except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible particulate emissions limitation shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

**Operations, Property, and/or Equipment - P907 - Dry Fertilizer Barge Loading Vented to Dust Collectors**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None