TITLE V PERMIT RENEWAL APPLICATION MORGANTOWN ENERGY FACILITY PLANT ID NO. 061-00027

Prepared for:

Morgantown Energy Associates

555 Beechurst Avenue Morgantown, West Virginia 26505

Prepared by:

Potesta & Associates, Inc.

7012 MacCorkle Avenue, SE Charleston, West Virginia 25304 Phone: (304) 342-1400 Fax: (304) 343-9031

Email: potesta@potesta.com

Project No. 0101-18-0097

July 2018



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^{*}Note that Attachment H, the Compliance Assurance Monitoring (CAM) Plan Form, is not included with this application. CAM Plan conditions are contained in the unit specific conditions within Attachment E.

SECTION I - VI GENERAL FORMS



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL **PROTECTION**

DIVISION OF AIR QUALITY

601 57th Street SE Charleston, WV 25304 Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

| Section 1: General Information | |
|---|---|
| 1. Name of Applicant (As registered with the WV Secretary of State's Office): | 2. Facility Name or Location: |
| Morgantown Energy Associates | Morgantown Energy Facility |
| | |
| 3. DAQ Plant ID No.: | 4. Federal Employer ID No. (FEIN): |
| 0 6 1 — 0 0 0 2 7 | 5 5 0 6 8 8 0 1 1 |
| 5. Permit Application Type: | |
| ☐ Initial Permit When did o | operations commence? 05/18/1989* |
| | expiration date of the existing permit? 01/24/2019 |
| ☐ Update to Initial/Renewal Permit Application | *Issuance of initial Permit R13-0185B/R14-7B |
| 6. Type of Business Entity: | 7. Is the Applicant the: |
| ☐ Corporation ☐ Governmental Agency ☐ LLC ☐ Partnership ☐ Limited Partnership | ☐ Owner ☐ Operator ☒ Both |
| 8. Number of onsite employees: | If the Applicant is not both the owner and operator, please provide the name and address of the other |
| 47 | party. |
| | |
| | |
| | |
| 9. Governmental Code: | |
| □ Privately owned and operated; 0 □ | County government owned and operated; 3 |
| | Municipality government owned and operated; 4 |
| ☐ State government owned and operated; 2 ☐ | District government owned and operated; 5 |
| 10. Business Confidentiality Claims | |
| Does this application include confidential information | on (per 45CSR31)? |
| If yes, identify each segment of information on each justification for each segment claimed confidential, accordance with the DAQ's "PRECAUTIONARY NO | |

| 11. Mailing Address | | | | | |
|--|---------------------------------|-------------------------------|--------------------|-------------------------------|--|
| Street or P.O. Box: 555 Beechurst Avenue | | | | | |
| City: Morgantown | | State: WV | | Zip: 26505- | |
| Telephone Number: (304) 284-2500 |) | Fax Number: (304) 2 | 284-2509 | | |
| | | | | | |
| 12. Facility Location | | | | | |
| Street: 555 Beechurst Avenue | City: Morganto | own | County: Monongalia | | |
| UTM Easting: 589.20 km | UTM Northin | ag: 4,388.10 km | Zone: | ☑ 17 or ☐ 18 | |
| Directions: From Charleston, take Interstate 79 North to Exit 152. Bear right onto Fairmont Road (US-19) approximately 1.9 miles. Turn right onto Holland Avenue (US-19) approximately 1.4 miles to University Avenue. Turn left on Beechurst Avenue. Facility is located on the left, approximately 0.8 miles. | | | | | |
| Portable Source? ☐ Yes | No | | | | |
| Is facility located within a nonattainment area? ☐ Yes ☒ No ☐ If yes, for what air pollutants? | | | | | |
| Is facility located within 50 miles of | If yes, n Marylan Pennsyl | | | | |
| Is facility located within 100 km of a Class I Area ¹ ? Yes No If yes, name the area(s | | | | | |
| If no, do emissions impact a Class I Area¹? ☐ Yes ☒ No | | | | | |
| ¹ Class I areas include Dolly Sods and Otter Face Wilderness Area in Virginia. | Creek Wilderness A | reas in West Virginia, and Sh | nenandoah 1 | National Park and James River | |

| 13. Contact Information | | | |
|---|-----------------------------------|---------------------------------|--|
| Responsible Official: Dean Motl | Title: Asset Manager | | |
| Street or P.O. Box: 555 Beechurst Avenue | | I | |
| City: Morgantown | State: WV | Zip: 26505- | |
| Telephone Number: (602) 459-1012 | Fax Number: (304 | 2) 284-2509 | |
| E-mail address: dmotl@purenergyllc.com | | | |
| Environmental Contact: Josh Manley | | Title: Environmental Specialist | |
| Street or P.O. Box: 555 Beechurst Avenue | | 1 | |
| City: Morgantown | State: WV | Zip: 26505- | |
| Fax Number: (304) 284-2518 Fax Number: (304) 284-2509 | | | |
| E-mail address: josh.manley@nrg.com | | | |
| Application Preparer: Patrick Ward Title: Manager of Air Permitt | | | |
| Company: Potesta & Associates, Inc. | | I | |
| Street or P.O. Box: 7012 MacCorkle Avenue | e, SE | | |
| City: Charleston | State: WV | Zip: 25304- | |
| Telephone Number: (304) 342-1400 | Fax Number: (304) 342-1400 | | |
| E-mail address: peward@potesta.com | | | |

| 14. Facility Description | | | | | | | |
|---|-------------------|--------|------|--|--|--|--|
| List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation. | | | | | | | |
| Process | Products | NAICS | SIC | | | | |
| Fossil Fuel Fired Cogeneration Facility | Electricity/Steam | 221112 | 4911 | | | | |
| | | | | | | | |
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| Provide a general description of operations. | | | | | | | |
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| | | | | | | | |
| 15. Provide an Area Map showing plant location as ATTACHMENT A . | | | | | | | |

- 16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan Guidelines."
- 17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT** C. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

| 18. Applicable Requirements Summary | | | | | | |
|--|--|--|--|--|--|--|
| Instructions: Mark all applicable requirements. | | | | | | |
| ⊠ SIP | ☐ FIP | | | | | |
| ☑ Minor source NSR (45CSR13) | | | | | | |
| NESHAP (45CSR34) | ☐ Nonattainment NSR (45CSR19) | | | | | |
| ⊠ Section 111 NSPS | ☐ Section 112(d) MACT standards | | | | | |
| ☐ Section 112(g) Case-by-case MACT | ☐ 112(r) RMP | | | | | |
| Section 112(i) Early reduction of HAP | Consumer/commercial prod. reqts., section 183(e) | | | | | |
| Section 129 Standards/Reqts. | | | | | | |
| ☐ Tank vessel reqt., section 183(f) | ☐ Emissions cap 45CSR§30-2.6.1 | | | | | |
| ☐ NAAQS, increments or visibility (temp. sources) | ☐ 45CSR27 State enforceable only rule | | | | | |
| □ 45CSR4 State enforceable only rule | ☐ Acid Rain (Title IV, 45CSR33) | | | | | |
| ☐ Emissions Trading and Banking (45CSR28) | ☐ Compliance Assurance Monitoring (40CFR64) | | | | | |
| □ CSAPR NO _x Annual Trading Program (40CFR97 Subpar AAAAA) | □ CSAPR NO _x Ozone Season Trading Program (40CFR97 Subpart BBBBB) | | | | | |
| □ CSAPR SO ₂ Trading Program (40CFR97 Subpart CCCCC) | | | | | | |
| | | | | | | |
| 19. Non Applicability Determinations | | | | | | |
| List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies. | | | | | | |
| □ Permit Shield | | | | | | |

19. Non Applicability Determinations (Continued) - Attach additional pages as necessary.

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

- e. <u>40 CFR 60 Subpart OOO</u> *Standards of Performance for Nonmetallic Mineral Processing Plants*: The facility utilizes limestone, a nonmetallic mineral, but it does not meet the definition of a "nonmetallic mineral processing plant" in §60.671 because the limestone is not crushed or ground onsite. [Not applicable per 40 CFR 60.670(a)(1)]
- f. 40 CFR 60 Subpart CCCC Standards of Performance for Commercial and Industrial Solid Waste Incineration Units: The CFB Boilers are not commercial and industrial solid waste incineration (CISWI) units as defined in §60.2265. This is due the fact that they are fired by a blend of virgin bituminous coal and coal refuse as well as natural gas for startup purposes. All of these fuels meet the definition of "traditional fuels" in 40 CFR §241.2 and hence are not considered solid wastes.
- g. 40 CFR 63 Subpart Q National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers: Facility does not include an "industrial process cooling tower" as defined in §63.401. [Not applicable per 40 CFR 63.400(a)]
- h. 40 CFR 63 Subpart T National Emission Standards for Halogenated Solvent Cleaning: The batch cold solvent cleaning machine at the facility does not utilize any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. [Not applicable per 40 CFR 63.460(a)]
- i. 40 CFR 63 Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources: The facility is not an area source of HAP emissions. [Not applicable per 40 CFR 63.11193]
- j. 40 CFR 72, Permits Regulation & 45CSR33, Acid Rain Provisions and Permits: The facility 1) meets the definition of a "Qualifying Facility" in 40 CFR §72.2; 2) has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and
 - 3) consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of the total planned net output capacity. [Exempt per 40 CFR 72.6(b)(5)]
- k. <u>40 CFR 98 Subpart D</u> *Electricity Generation*: Facility is not subject to the Acid Rain Program and is not required to monitor and report CO₂ mass emissions year-round according to 40 CFR 75. [Not applicable per § 98.40(a)]
- 1. <u>45CSR5</u> To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas: The facility does not meet the definition of "coal preparation plant" in 45CSR§5-2.4 because it is subject to 45CSR2. [Exempt per 45CSR§5-2.4b]
- m. <u>45CSR7</u> To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations: The facility is subject to 45CSR2. [Exempt per 45CSR§7-10.1]
- n. <u>45CSR17</u> To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter: The facility is subject to 45CSR2. [exempt per 45CSR§17-6.1]

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|-------------|--------|----------|
| \boxtimes | Permit | Smeia |

| 20. Facility-Wide Applicable Requirements |
|--|
| List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (<i>Note: Title V permit condition numbers alone are not the underlying applicable requirements</i>). |
| Note: All references to a Title V (T5) permit condition in this section refer to Permit No. R30-06100027-2014(MM01). |
| FWAR-1 |
| FWAR-2 |
| FWAR-3 |
| FWAR-4 |
| FWAR-5 |
| FWAR-6 |
| FWAR-7 |
| FWAR-8 |
| FWAR-9 |
| FWAR-10 |
| FWAR-11 |
| FWAR-12 |
| FWAR-13 |
| Permit Shield |
| include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) Facility-wide monitoring / testing / recordkeeping / reporting (FWTRR) requirements are listed below by number. |
| The numbers are linked to detailed information contained in Table 20B. FWTRR requirements are also referenced for each applicable requirement from the last column of Table 20A (applicable requirements) |
| FWTRR-1 |
| FWTRR-2 |
| FWTRR-3 |
| FWTRR-4 |
| FWTRR-5 |
| FWTRR-6 |
| FWTRR-7 |
| FWTRR-8 |
| FWTRR-9 |
| FWTRR-10 |
| FWTRR-11 |
| FWTRR-12 |
| FWTRR-13 |
| FWTRR-14 |
| FWTRR-15 |
| Are you in compliance with all facility-wide applicable requirements? Yes No |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F. |

Table 20.A Facility-Wide Applicable Requirements (FWAR) List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number. **Monitoring Testing** Permit Condition No. Link from Applicable Recordkeeping from Permit R30-General Form, Requirement Requirement Reporting 06100027-2008 Item 20 Citation Requirement Links Summary **Open burning.** The open burning of refuse by any person is prohibited except as FWAR-1 45CSR§6-3.1 3.1.1 FWTRR-10 noted in 45CSR§6-3.1. Open burning exemptions. The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric 3.1.2 FWTRR-10 FWAR-2 45CSR§6-3.1 stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **Asbestos.** Thoroughly inspect the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and comply with 40 C.F.R. § FWTRR-8 40 C.F.R. 61 and FWAR-3 3.1.3 61.145, 40 45CSR34 FWTRR-10 C.F.R. § 61.148, and 40 C.F.R. § 61.150. Notify the Secretary at least ten (10) working days prior to the commencement of any ashestos removal 45CSR§4-3.1 **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which FWAR-4 State Enforceable FWTRR-4 3.1.4 cause or contribute to an objectionable odor at any location occupied by the public. Only **Standby plan for reducing emissions.** Prepare standby plans for reducing the emissions of air FWTRR-8 FWAR-5 45CSR§11-5.2 3.1.5 pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11 when FWTRR-10 requested by the Secretary. FWTRR-3 FWTRR-6 W.Va. Code Emission inventory. Submit, on an annual basis, an emission inventory in accordance with the FWAR-6 3.1.6 FWTRR-8 § 22-5-4(a)(14) submittal requirements of the Division of Air Quality. FWTRR-9 FWTRR-10 Ozone-depleting substances. For those facilities performing maintenance, service, repair or disposal of appliances, comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B: a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 40 C.F.R. 82 FWAR-7 3.1.7 FWTRR-10 82.156. Subpart F b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158. c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. §

82.161.

Table 20.A Facility-Wide Applicable Requirements (FWAR)

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

| Link from General Form, Item 20 | Applicable Requirement Citation | Permit Condition No. from Permit R30-06100027- 2008 | Requirement Summary | Monitoring Testing Recordkeeping Reporting Requirement Links |
|---|--|--|---|---|
| FWAR-8 | 40 C.F.R. 68 | 3.1.8 | Risk Management Plan. Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71. | FWTRR-10 |
| 45CSR§2-5; 45CSR14, R14-0007, 5.1.3. | | Fugitive Particulate Matter Control. No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following: | | |
| | 5CSR14, 14-0007, 3.1.9 | a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and | FWTRR-5 FWTRR-10 | |
| | | c. Ash or fuel handling systems and ash disposal areas. Compliance with this streamlined condition will ensure compliance with 45CSR13/14 - Permit No. R13-1085/R14-7 "Other Requirement (B)(1)(e)" R14-0007, requirement 5.1.3. | | |
| | | | (In addition to the emission units that vent through the emission points identified in Section 5.0., also included are Em. Unit IDs S009A, S009B, S009C, S009D, S009E, S009F, S009G, and S009H which vent through Em.Pt. ID Stack 1.) | |
| FWAR-10 | 45CSR14, R14- 0007, 3.1.7.; 45CSR§2-5.1. | 3.1.10 | All plant roads and haulways shall be paved and shall be kept clean by appropriate measurements to minimize the emission or entrainment of fugitive particulate matter. | FWTRR-5 FWTRR-10 |
| FWAR-11 | 40CFR§97.406 | 3.1.11 | TR NOx Annual Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix A). | 45CSR§39-6.2 |
| FWAR-12 | 40CFR§.506 | 3.1.12 | TR NO _x Ozone Season Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix A) | |

Table 20.A Facility-Wide Applicable Requirements (FWAR)

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

| Link from General Form, Item 20 | Applicable Requirement Citation | Permit Condition No. from Permit R30-06100027- 2008 | Requirement Summary | Monitoring Testing Recordkeeping Reporting Requirement Links |
|---------------------------------------|--|---|--|---|
| | 40CFR§97.606 | 3.1.13 | TR SO ₂ Group 1 Trading Program. The permittee shall comply with the standard requirements set forth in the attached Transport Rule (TR) Trading Program Title V Requirements (see Appendix A). | |
| | 45CSR14, R14-0007, 4.1.18.;45 CSR§13-5.11 | 3.1.14 | Operation and Maintenance of Air Pollution Control Equipment. The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary. | |
| FWAR-14 | 40 C.F.R. 98 | None | Greenhouse Gas Reporting. Follow the mandatory greenhouse gas (GHG) reporting requirements of 40 C.F.R. Part 98 including all applicable subparts if the facility meets the applicability requirements of either §§ 98.2(a)(1), 98.2(a)(2), or 98.2(a)(3). | FWTRR-15 |

Revised -

Table 20B. Facility-Wide Testing, Recordkeeping and Reporting Requirements (FWTRR)

| Link from Table 20A | Applicable Requirement Citation | Permit Condition Number from Permit R30-06100027-2008 | Requirement Summary |
|------------------------|---|--|--|
| FWTRR-1 | WV Code§22-5-4(a)(15) and 45CSR13/14 | 3.3.1 | Stack testing. As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following: a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall |
| FWTRR-2 | 45CSR§30-5.1.c.2.A.; 45CSR14-R14-0007, 4.4.1 | 3.4.1 | Recordkeeping - Monitoring Information. Maintain records of monitoring information that include the following: a. The date, place as defined in this permit and time of sampling or measurements; b. The date(s) analyses were performed; |

Table 20B. Facility-Wide Testing, Recordkeeping and Reporting Requirements (FWTRR)

| Link from Table 20A | Applicable Requirement Citation | Permit Condition Number from Permit R30-06100027- 2008 | Requirement Summary |
|------------------------|---|--|--|
| | | | c. The company or entity that performed the analyses; |
| | | | d. The analytical techniques or methods used; |
| | | | e. The results of the analyses; and |
| | | | f. The operating conditions existing at the time of sampling or measurement. |
| FWTRR-3 | 45CSR§30-5.1.c.2.B. | 3.4.2 | Recordkeeping - Retention of records. Retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring in0strumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records. |
| FWTRR-4 | 45CSR§30-5.1.c. State-Enforceable only | 3.4.3 | Recordkeeping - Odors. For the purposes of 45CSR4, maintain a record of all odor complaints received. Such record shall contain an assessment of the validity of the complaints as well as any corrective actions taken. |
| FWTRR-5 | 45CSR§30-5.1.c. | 3.4.4 | Recordkeeping – Dust Control. Maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. Maintain records of all scheduled and non-scheduled maintenance and record any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken. |
| | 45CSR14, R14-0007, 5.5.2. | 3.4.5 | Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. |
| | 45CSR14, R14-0007, 4.4.3. | 3.4.6 | Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded: a. The equipment involved. b. Steps taken to minimize emissions during the event. c. The duration of the event. d. The estimated increase in emissions during the event. For each such case associated with an equipment malfunction, the additional information shall also be recorded: e. The cause of the malfunction. f. Steps taken to correct the malfunction. g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction. |

Table 20B. Facility-Wide Testing, Recordkeeping and Reporting Requirements (FWTRR)

| Link from Table 20A | Applicable Requirement Citation | Permit Condition Number from Permit R30-06100027- 2008 | Requirement St | ummary |
|------------------------|---------------------------------------|--|--|---|
| FWTRR-6 | 45CSR§30-4.4. and 5.1.c.3.D. | 3.5.1 | Responsible official. Any application form, report, or computed to the DAQ and/or USEPA shall contain a certification on information and belief formed after reasonable incomputed and complete. | cation by the responsible official that states that, |
| FWTRR-7 | 45CSR§30-5.1.c.3.E. | 3.5.2 | A permittee may request confidential treatment for 45CSR§30-5.1.c.3. pursuant to the limitations and procedure | |
| FWTRR-8 | Not Applicable | 3.5.3 | Except for the electronic submittal of the annual certification notices, requests, demands, submissions and other commun Secretary of DEP and/or USEPA shall be made in writing a delivered by hand, mailed first class or by private carrier with below or to such other person or address as the Secretary of designate: If to the DAQ: Director WVDEP 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0475 FAX: 304/926-0478 | ications required or permitted to be made to the and shall be deemed to have been duly given when ith postage prepaid to the address(es) set forth |
| FWTRR-9 | 45CSR§30-8. | 3.5.4 | Certified emissions statement. The permittee shall submit an annual basis in accordance with the submittal requirement. | |
| FWTRR-10 | 45CSR§30-5.3.e. | 3.5.5 | Compliance certification. The permittee shall certify compliance by the DAQ. In addition to the annual compliance certification, the frequently under an applicable requirement of this permit. The USEPA on or before March 15 of each year, and shall certify cor certification to the USEPA shall be submitted in electronic form address: R3_APD_Permits@epa.gov. The permittee shall n (5) years from submittal of the certification. | e permittee may be required to submit certifications more annual certification shall be submitted to the DAQ and appliance for the period ending December 31. The annual at only. It shall be submitted by e-mail to the following |
| FWTRR-11 | 45CSR§30-5.1.c.3.A. | 3.5.6 | Semi-annual monitoring reports. The permittee shall sub September 15 for the reporting period January 1 to June 30 July 1 to December 31. All instances of deviation from per reports. All required reports must be certified by a responsi | and on or before March 15 for the reporting period mit requirements must be clearly identified in such |

Table 20B. Facility-Wide Testing, Recordkeeping and Reporting Requirements (FWTRR)

| Link from Table 20A | Applicable Requirement Citation | Permit Condition Number from Permit R30-06100027- 2008 | Requirement Summary |
|------------------------|--|--|---|
| | | | Emergences. For reporting emergency situations, refer to Section 2.17 of this permit. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for |
| FWTRR-12 | 45CSR§30-5.7.a., .b., .c., d., and .e. | 3.5.7 and 2.17 | noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that: a. An emergency occurred and that the permittee can identify the cause(s) of the emergency; b. The permitted facility was at the time being properly operated; c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and |
| | | | d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. |
| | | | In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof This provision is in addition to any emergency or upset provision contained in any applicable requirement. |

Table 20B. Facility-Wide Testing , Recordkeeping and Reporting Requirements (FWTRR)

| Link from Table 20A | Applicable Requirement Citation | Permit Condition Number from Permit R30-06100027-2008 | Requirement Summary |
|------------------------|--|--|---|
| FWTRR-13 | 45CSR§30-5.1.c.3.B. 45CSR§30-5.1.c.3.C. | 3.5.8 | Reporting – Deviations. In addition to monitoring reports required by this permit, promptly submit supplemental reports and notices in accordance with the following: Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. |
| FWTRR-14 | 45CSR§30-4.3.h.1.B. | 3.5.9 | New applicable requirements. If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement. |

| Permit or Consent Order Number | Date of Issuance MM/DD/YYYY | List any Permit Determinations that Affect the Permit (if any) |
|--------------------------------|-----------------------------|--|
| CO-R13, 14, 16, 30-E-2013-6 | 05/01/2013 | |
| R30-06100027-2014 (MM01) | 01/24/2014 | |
| R14-0007C | 04/05/2016 | |
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| 22. Inactive Permits/Obsolete Permit Conditions | | | |
|---|------------------|-------------------------|--|
| Permit Number | Date of Issuance | Permit Condition Number | |
| R13-1085A/R14-0007A | 08/10/1989 | Entire Permit | |
| R13-1085/R14-0007 | 05/18/1989 | Entire Permit | |
| R13-1085/B/R14-007B | 04/20/1993 | Entire Permit | |
| CAIR Permit | 06/21/2007 | Entire Permit | |
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Section 3: Facility-Wide Emissions

| 23. Facility-Wide Emissions Summary [Tons per Y | [ear] |
|--|---------------------|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 558.5 |
| Nitrogen Oxides (NO _X) | 1,314 |
| Lead (Pb) | 0.57 |
| Particulate Matter (PM _{2.5}) ¹ | 75.5 |
| Particulate Matter (PM ₁₀) ¹ | 82.5 |
| Total Particulate Matter (TSP) | 100.3 |
| Sulfur Dioxide (SO ₂) | 1,248 |
| Volatile Organic Compounds (VOC) | 32.9 |
| Hazardous Air Pollutants ² | Potential Emissions |
| Hydrogen Chloride (HCl) | 24.0 |
| Hydrogen Fluoride (HF) | 1.8 |
| Antimony (Sb) | 0.0049 |
| Arsenic (As) | 0.0088 |
| Beryllium (Be) | 0.0009 |
| Cadmium (Cd) | 0.0006 |
| Chromium (Cr) | 0.0043 |
| Cobalt (Co) | 0.0007 |
| Manganese (Mn) | 0.0091 |
| Mercury (Hg) | 0.0920 |
| Nickel (Ni) | 0.0026 |
| Selenium (Se) | 0.0015 |
| Total Organic HAP | 1.9 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| Radionuclides | 0.0039 |

 $^{^{1}}PM_{2.5}$ and PM_{10} are components of TSP.

²For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

| 24. | Insign | ificant Activities (Check all that apply) |
|-------------|--------|--|
| \boxtimes | 1. | Air compressors and pneumatically operated equipment, including hand tools. |
| \boxtimes | 2. | Air contaminant detectors or recorders, combustion controllers or shutoffs. |
| \boxtimes | 3. | Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment. |
| \boxtimes | 4. | Bathroom/toilet vent emissions. |
| \boxtimes | 5. | Batteries and battery charging stations, except at battery manufacturing plants. |
| \boxtimes | 6. | Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description. |
| | 7. | Blacksmith forges. |
| \boxtimes | 8. | Boiler water treatment operations, not including cooling towers. |
| \boxtimes | 9. | Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source. |
| | 10. | CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process. |
| \boxtimes | 11. | Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources. |
| | 12. | Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel. |
| \boxtimes | 13. | Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment. |
| \boxtimes | 14. | Demineralized water tanks and demineralizer vents. |
| | 15. | Drop hammers or hydraulic presses for forging or metalworking. |
| \boxtimes | 16. | Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam. |
| | 17. | Emergency (backup) electrical generators at residential locations. |
| | 18. | Emergency road flares. |
| \boxtimes | 19. | Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. |
| | | Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: |
| | | One (1) Parts Washer (cold cleaner) - Potential to emit VOC = 0.075 lb/hr & 0.33 tpy (AP-42, Table 4.6-2) |
| | | |
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| 24. | Insign | ificant Activities (Check all that apply) |
|-------------|--------|--|
| | 20. | Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: |
| | | |
| | 21. | Environmental chambers not using hazardous air pollutant (HAP) gases. |
| | 22. | Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption. |
| | 23. | Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment. |
| \boxtimes | 24. | Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis. |
| | 25. | Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP. |
| \boxtimes | 26. | Fire suppression systems. |
| \boxtimes | 27. | Firefighting equipment and the equipment used to train firefighters. |
| | 28. | Flares used solely to indicate danger to the public. |
| \boxtimes | 29. | Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted. |
| | 30. | Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation. |
| | 31. | Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic. |
| | 32. | Humidity chambers. |
| | 33. | Hydraulic and hydrostatic testing equipment. |
| \boxtimes | 34. | Indoor or outdoor kerosene heaters. |
| \boxtimes | 35. | Internal combustion engines used for landscaping purposes. |
| | 36. | Laser trimmers using dust collection to prevent fugitive emissions. |
| | 37. | Laundry activities, except for dry-cleaning and steam boilers. |
| \boxtimes | 38. | Natural gas pressure regulator vents, excluding venting at oil and gas production facilities. |
| \boxtimes | 39. | Oxygen scavenging (de-aeration) of water. |
| | 40. | Ozone generators. |
| | 41. | Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.) |
| | 42. | Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device. |

| 24. | Insign | ificant Activities (Check all that apply) |
|-------------|--------|---|
| \boxtimes | 43. | Process water filtration systems and demineralizers. |
| | 44. | Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification. |
| | 45. | Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified. |
| \boxtimes | 46. | Routing calibration and maintenance of laboratory equipment or other analytical instruments. |
| | 47. | Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers. |
| | 48. | Shock chambers. |
| | 49. | Solar simulators. |
| \boxtimes | 50. | Space heaters operating by direct heat transfer. |
| \boxtimes | 51. | Steam cleaning operations. |
| \boxtimes | 52. | Steam leaks. |
| | 53. | Steam sterilizers. |
| \boxtimes | 54. | Steam vents and safety relief valves. |
| | 55. | Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized. |
| | 56. | Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list. |
| | 57. | Such other sources or activities as the Director may determine. |
| | 58. | Tobacco smoking rooms and areas. |
| \boxtimes | 59. | Vents from continuous emissions monitors and other analyzers. |

25. Equipment Table

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

26. Emission Units

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance** Form as ATTACHMENT F.

27. Control Devices

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

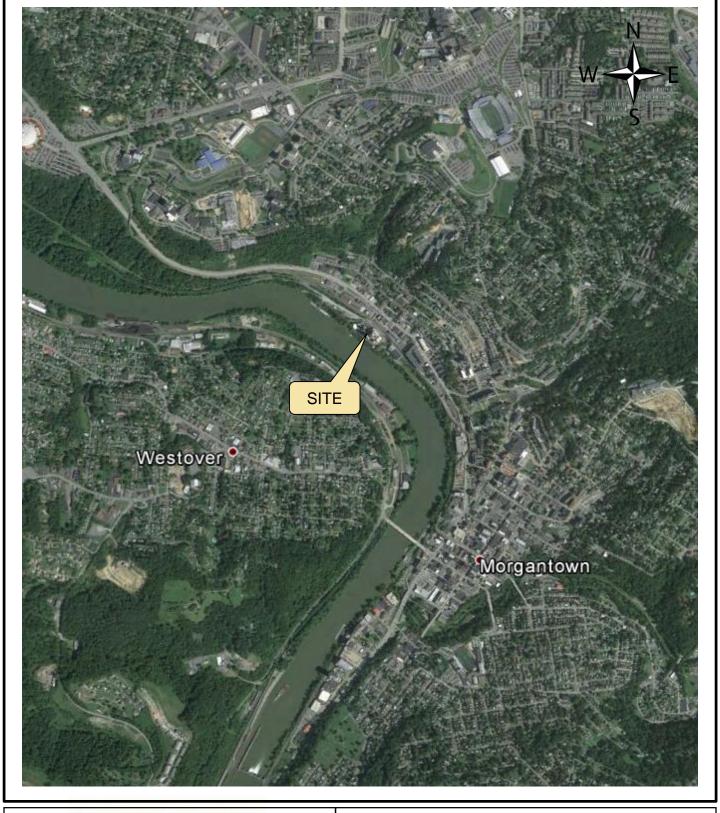
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

| 28. | . Certification of Truth, Accuracy and Completeness and Certification of Compliance | | | | |
|-----------------------------|---|--|--|--|--|
| Noi | te: This Certification must be signed by a responsible official. The original , signed in blue ink , must be submitted with the application. Applications without an original signed certification will be considered as incomplete. | | | | |
| a. | Certification of Truth, Accuracy and Completeness | | | | |
| this I ce sub resp kno fals | I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment. | | | | |
| b. | Compliance Certification | | | | |
| und | cept for requirements identified in the Title V Application for which compliance is not achieved, I, the dersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air attaminant sources identified in this application are in compliance with all applicable requirements. | | | | |
| Res | sponsible official (type or print) | | | | |
| Naı | me: Dean Motl Title: Asset Manager | | | | |
| | Responsible official's signature: Signature: Signature Date: 7/18/2018 (Mass be signed and dated in blue ink) | | | | |
| | | | | | |
| Not | te: Please check all applicable attachments included with this permit application: | | | | |
| X | ATTACHMENT A: Area Map | | | | |
| × | ATTACHMENT B: Plot Plan(s) | | | | |
| × | ATTACHMENT C: Process Flow Diagram(s) | | | | |
| × | ATTACHMENT D: Equipment Table | | | | |
| × | ATTACHMENT E: Emission Unit Form(s) | | | | |
| \boxtimes | ATTACHMENT F: Schedule of Compliance Form(s) | | | | |
| \boxtimes | ATTACHMENT G: Air Pollution Control Device Form(s) | | | | |

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wy.gov/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

ATTACHMENT A AREA MAP





DATE: June 11, 2018

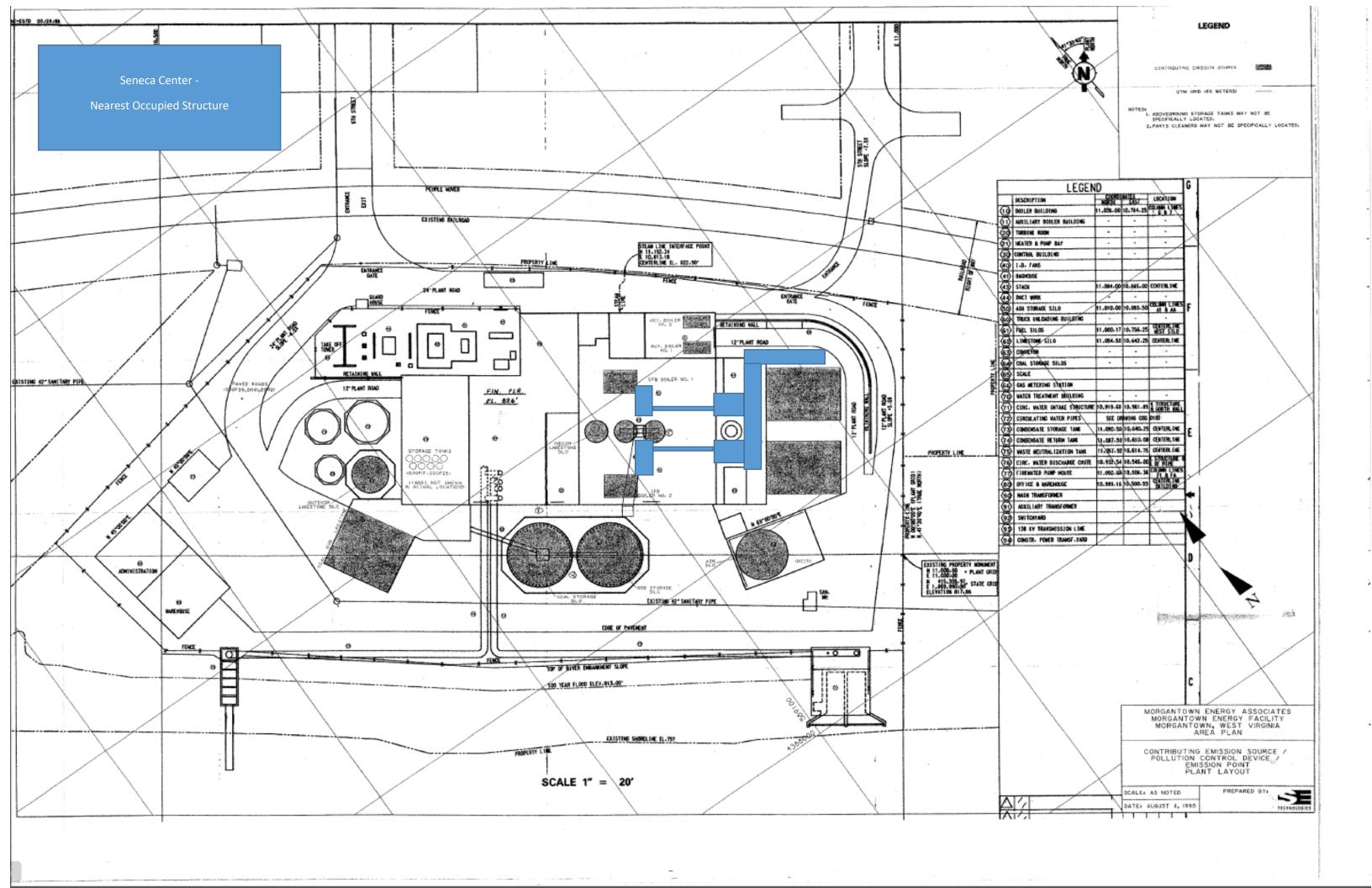
PROJECT NO. 0101-18-0097

MAPPING FOR VISUAL REPRESENTATION ONLY

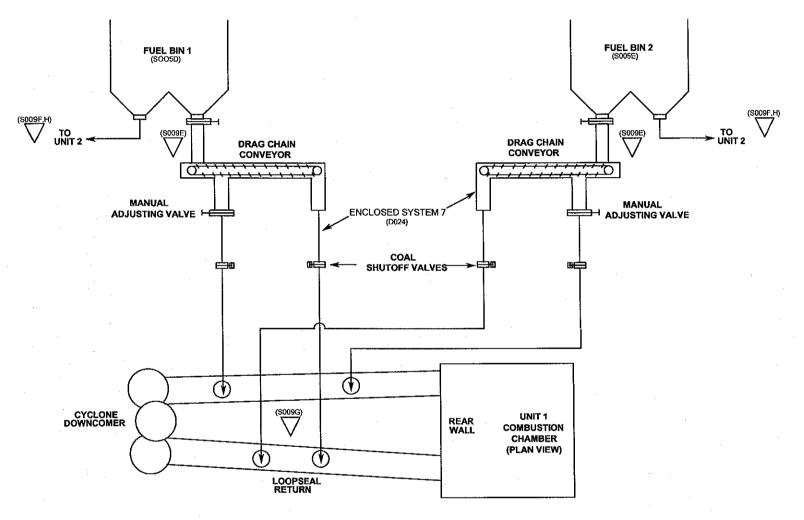
SITE LOCATION MAP MORGANTOWN ENERGY ASSOCIATES MORGANTOWN, MONONGALIA COUNTY, WV

NOT TO SCALE

ATTACHMENT B PLOT PLAN



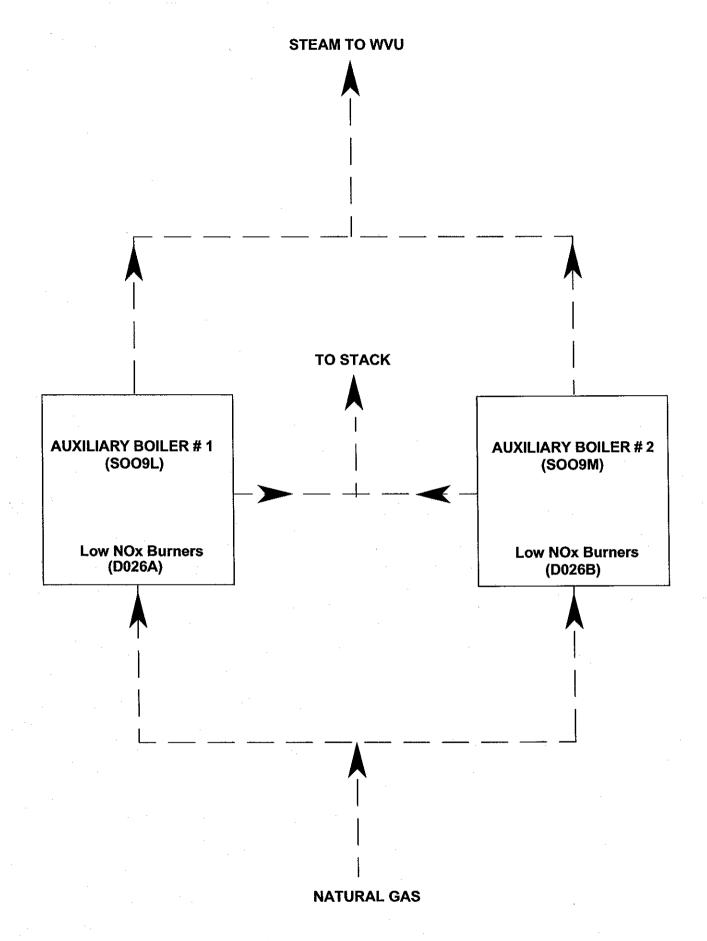
ATTACHMENT C PROCESS FLOW DIAGRAM



MORGANTOWN ENERGY ASSOCIATES COAL FEED SYSTEM EMISSION SOURCES

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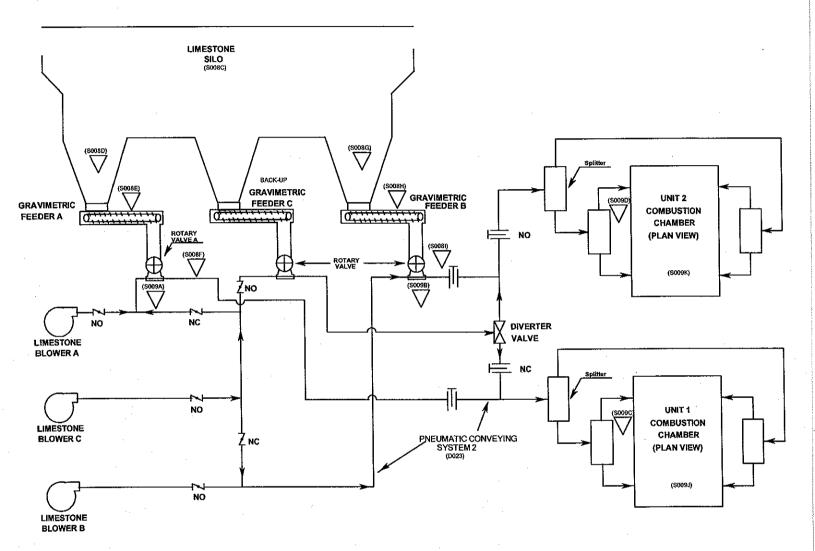
DATE: FEBRUARY 15, 2008



MORGANTOWN ENERGY ASSOCIATES AUXILIARY BOILERS SYSTEM EMISSION SOURCES

SCALE: NONE

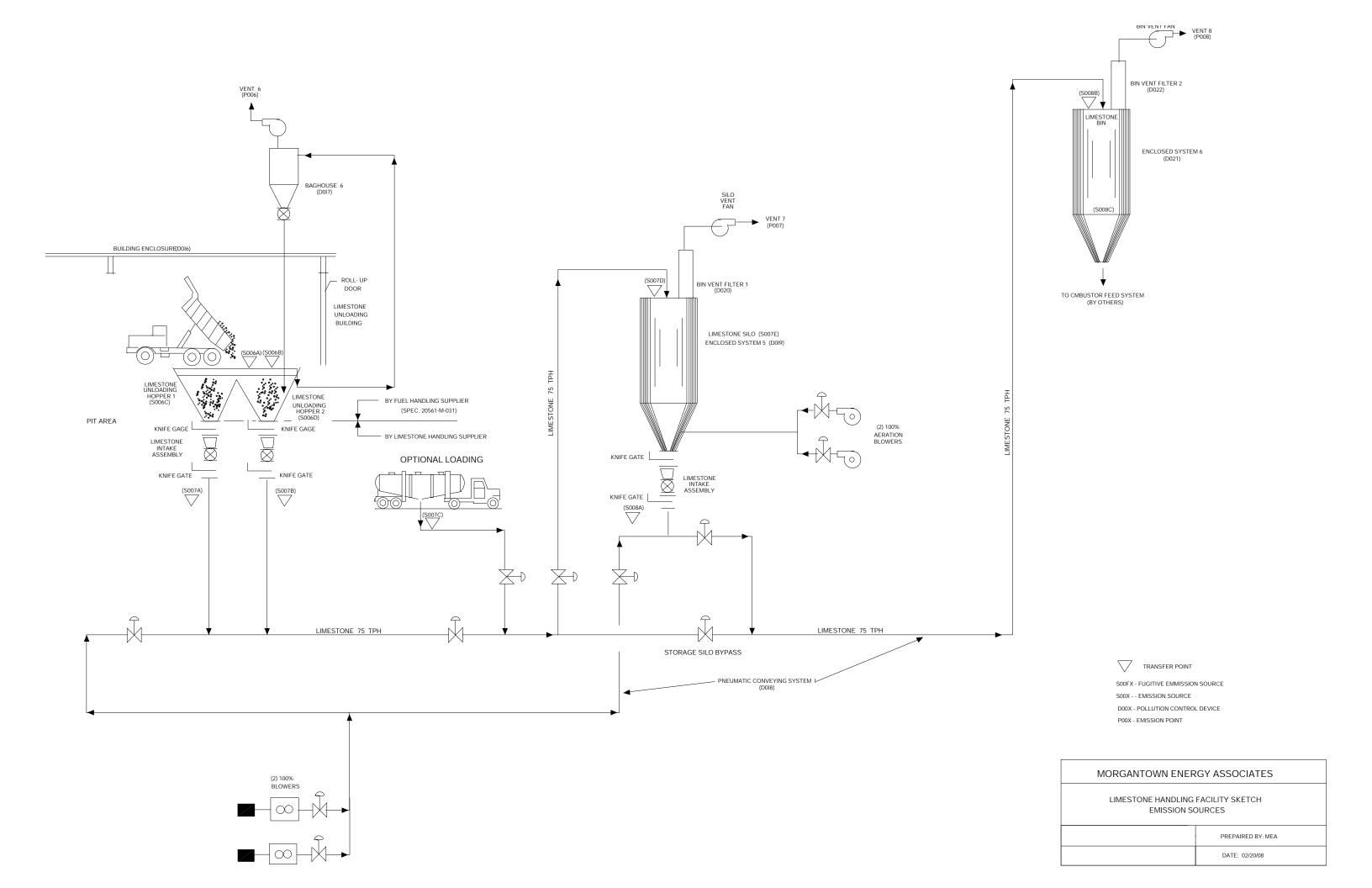
)ATE: 02-08-2008

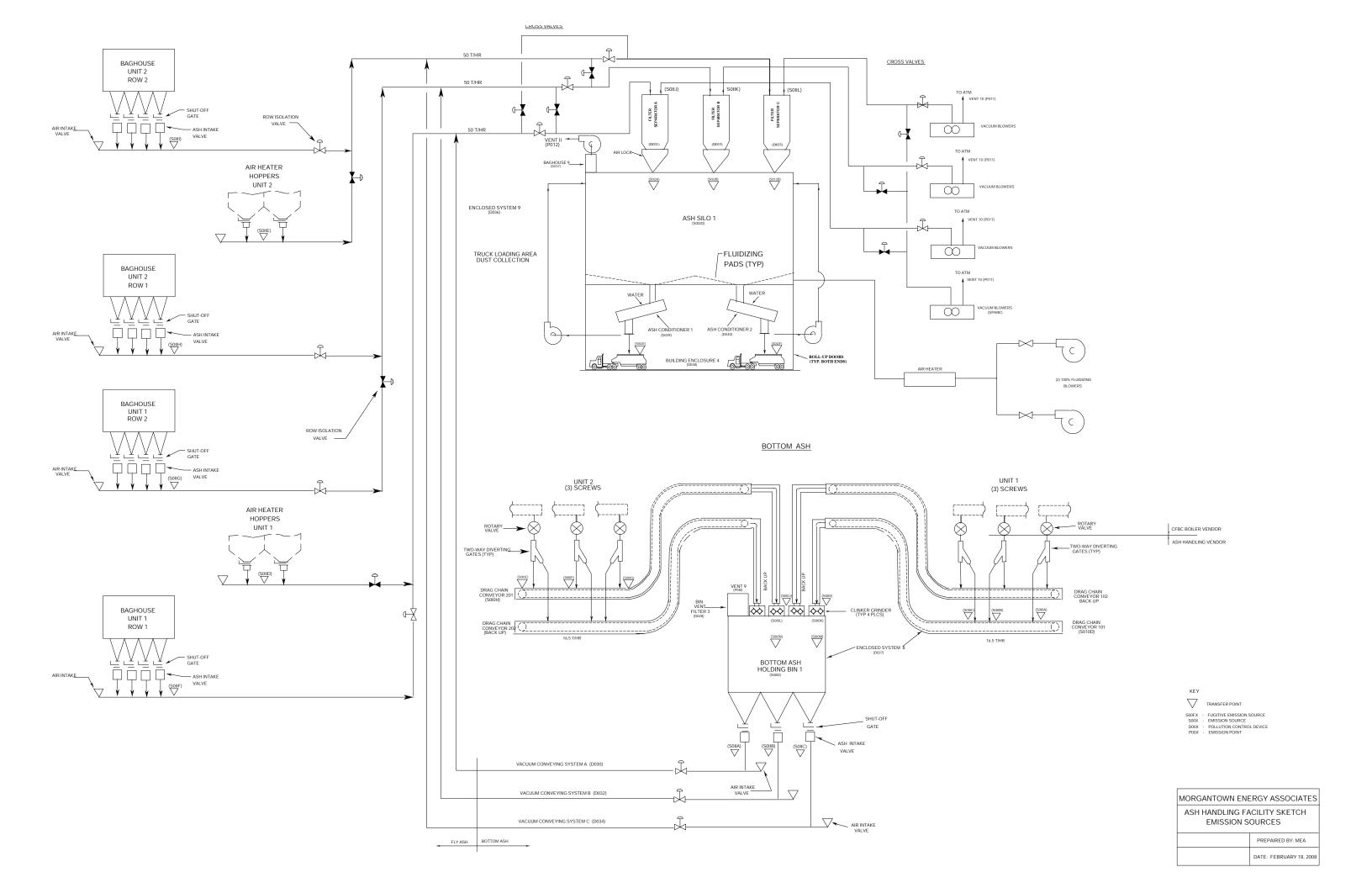


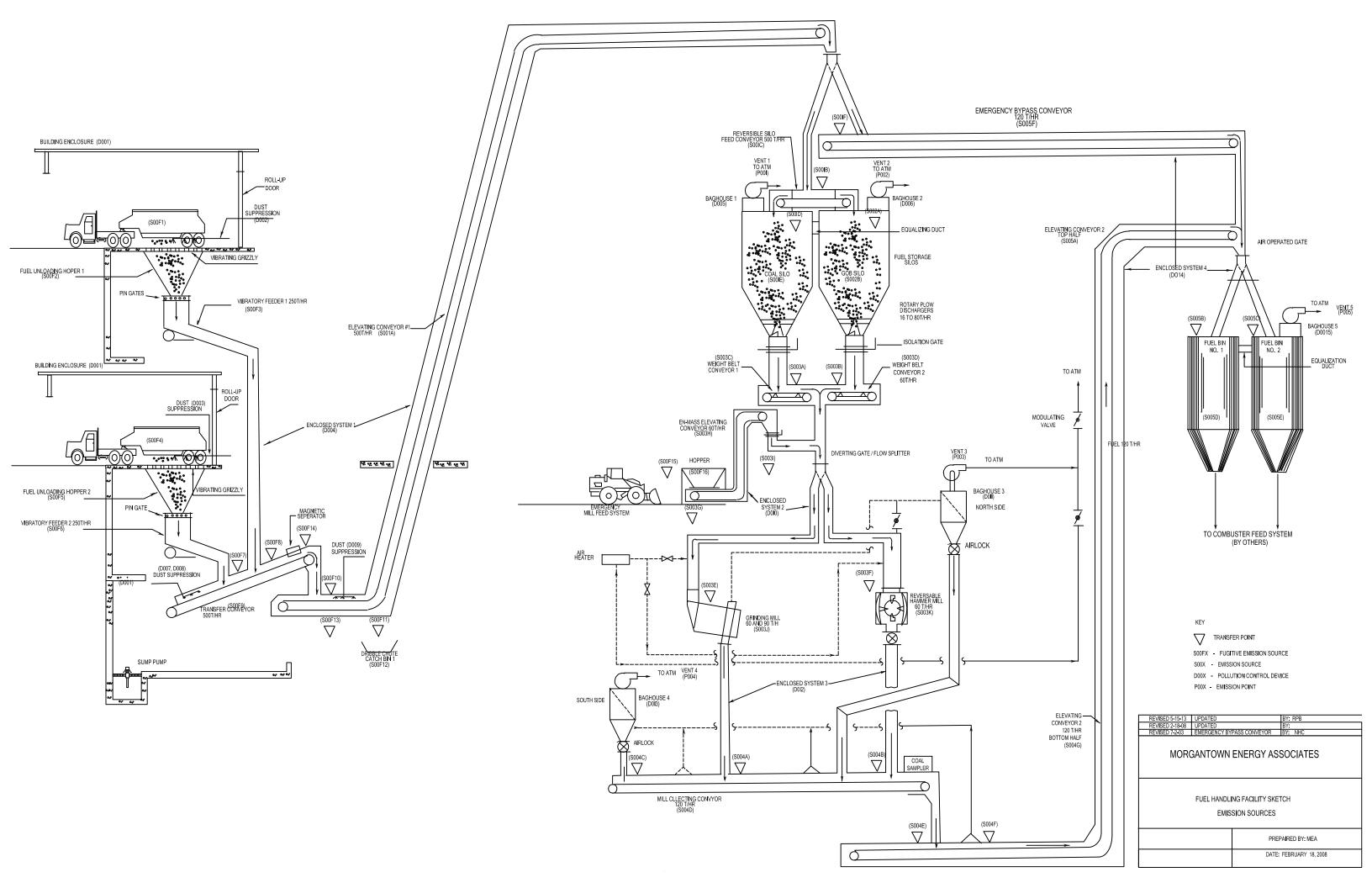
MORGANTOWN ENERGY ASSOCIATES LIMESTONE FEED SYSTEM EMISSION SOURCES

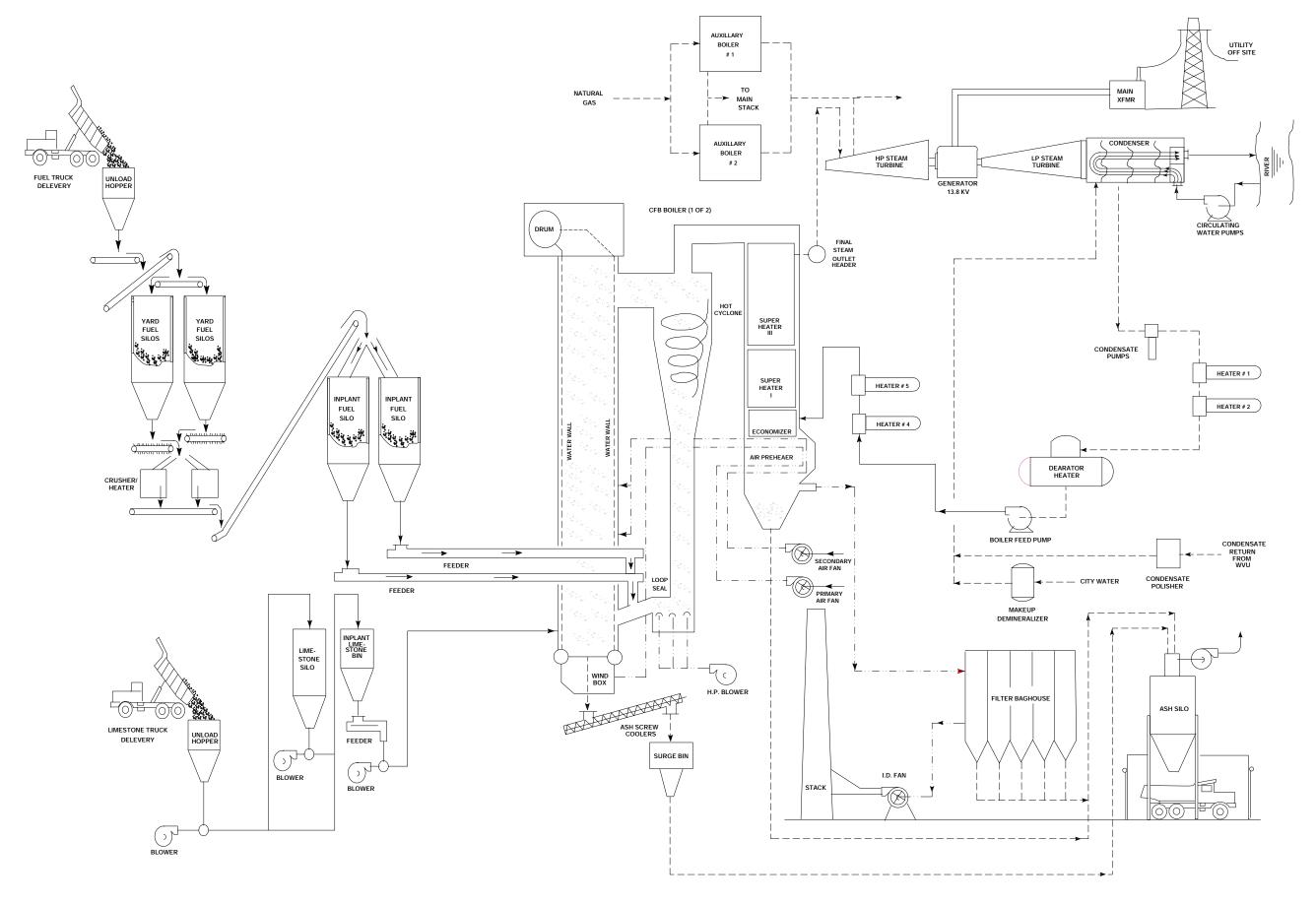
SCALE: NONE

DATE: FEBRUARY 15, 2008









MORGANTOWN ENERGY FACILITY

ATTACHMENT D EQUIPMENT TABLE

| Emission Point ID ¹ | Control | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|--------------------------------|---------------------|----------------------------------|--|-----------------|-----------------------------|
| roint ID | Device ¹ | Unit ID | Fuel Handling | | Modified |
| TI . 100 | FG 1 | good | T T | 500 7774 | 1022 |
| Vents 1 & 2 | ES 1 BH 1 & 2 | S001A | Elevating Conveyor 1 | 500 TPH | 1989 |
| Vents 1 & 2 | ES 1 BH 1 & 2 | S001B | TP001B - Elevating Conveyor 1 to Reversible Feed Conveyor 1 | 500 TPH | 1989 |
| Vents 1 & 2 | ES 1 BH 1 & 2 | S001C | Reversible Feed Conveyor 1 | 500 TPH | 1989 |
| Vent 1 | ES 1 BH 1 | S001D | TP001D - Reversible Feed Conveyor 1 to Coal Silo 1 | 500 TPH | 1989 |
| Vent 1 | ES 1 BH 1 | S001E | Coal Silo 1 | 2,100 Tons | 1989 |
| Vents 1 & 2 | ES 1/ BH 1 & 2 | S001F | TP001F - Elevating Conveyor 1 to Emergency Bypass Conveyor | 120 TPH | 2001 |
| Vent 2 | ES 1 BH 2 | | | 500 TPH | 1989 |
| Vent 2 | ES 1 BH 2 | S002B | Gob Storage Silo 1 | 2,100 Tons | 2001 |
| Vent 3 | ES 2 BH 3 | S003A | TP003A - Coal Silo 1 to Weigh Belt Conveyor 1 | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003B | TP003B - Gob Storage Silo 1 to Weigh Belt Conveyor 2 | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003C | Weigh Belt Conveyor 1 | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003D | Weigh Belt Conveyor 2 | 60 TPH | 2001 |
| Vent 3 | ES 2 BH 3 | S003E | TP003E - Weigh Belt Conveyor 1 & 2 to Grinding Mill | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003F | TP003F - Weigh Belt Conveyor 1& 2 to Hammer Mill | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003G | TP003G - Emergency Mill Feed System Hopper 1 to En-mass Elevating Conveyor 1 | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003H | En-mass Elevating Conveyor 1 | 60 TPH | 1989 |
| Vent 3 | ES 2 BH 3 | S003I | TP0031 - En-mass Elevating Conveyor 1 to Mill Inlet Chute System | 60 TPH | 1989 |

| Emission Point ID ¹ | Control Device ¹ | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|-----------------------------------|-------------------------------------|----------------------------------|---|-----------------|-----------------------------|
| Vent 3 | ES 2 BH 3 | S003J | Grinding Mill 1 | 60 & 90 TPH | 1989 |
| Vent 3 | ent 3 ES 2 S003K Hammer Mill 1 BH 3 | | | | 1989 |
| Vent 4 | ES 3 BH 4 | S004A | TP004A - Grinding Mill 1 to Mill Collecting Conveyor 1 | 60 & 90 TPH | 1989 |
| Vent 4 | ES 3 BH 4 | S004B | TP004B - Hammer Mill 1 to Mill Collecting Conveyor 1 | 60 TPH | 1989 |
| Vent 4 | ES 3 BH 4 | S004C | TP004C - Baghouse 4 Dust Discharge to Mill Collecting Conveyor 1 | 5 TPH (est.) | 1989 |
| Vent 4 | ES 3 BH 4 | S004D | Mill Collecting Conveyor 1 | 120 TPH | 2001 |
| Vent 4 | ES 3 BH 4 | S004E | TP004E - Mill Collecting Conveyor 1 to Elevating Conveyor 2 | 120 TPH | 1989 |
| Vent 4 | ES 3 BH 4 | S004F | TP004F - Baghouse 3 Dust Discharge to Mill Collecting Conveyor 1 | 12 TPH | 1989 |
| Vent 4 | ES 3 BH 4 | S004G | Elevating Conveyor 2 (Bottom Half) | 120 TPH | 2001 |
| Vent 5 | ES 4 BH 5 | S005A | Elevating Conveyor 2 (Top Half) | 120 TPH | 1989 |
| Vent 5 | ES 4 BH 5 | S005B | TP005B – Elevating Conveyor 2 to Fuel Bin 1 | 120 TPH | 1989 |
| Vent 5 | ES 4 BH 5 | S005C | TP005C – Elevating Conveyor 2 to Fuel Bin 2 | 120 TPH | 1989 |
| Vent 5 | ES 4 BH 5 | S005D | Fuel Bin 1 | 375 Tons | 1989 |
| Vent 5 | ES 4 BH 5 | S005E | Fuel Bin 2 | 375 Tons | 1989 |
| Vent 5 | ES 4 BH 5 | 120 TPH | 2001 | | |

| $\begin{array}{c ccc} Emission & Control & Emission \\ Point ID^1 & Device^1 & Unit ID^1 \end{array}$ | | | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|---|---------------|-------|--|-----------------|-----------------------------|
| | | | Limestone Handling | | |
| Vent 6 | BE 2 BH 6 | S006A | TP006A – Transfer from Truck to Limestone Unloading Hopper 1 | 37.5 TPH | 1989 |
| Vent 6 | BE 2 BH 6 | S006B | TP006B – Transfer from Truck to Limestone Unloading Hopper 2 | 37.5 TPH | 1989 |
| Vent 6 | BE 2 BH 6 | S006C | Limestone Unloading Hopper 1 | 75 TPH | 1989 |
| Vent 6 | BE 2 BH 6 | S006D | Limestone Unloading Hopper 2 | 75 TPH | 1989 |
| Vent 7 & 8 | PCS 1 | S007A | TP007A – Transfer from Limestone Unloading Hopper 1 to Pneumatic Conveying System 1 | 75 TPH | 1989 |
| Vent 7 & 8 | PCS 1 | S007B | TP007B – Transfer from Limestone Unloading Hopper 2 to Pneumatic Conveying System 1 | 75 TPH | 1989 |
| Vent 7 & 8 | PCS 1 | S007C | TP007C – Transfer from Truck to Pneumatic Conveying System 1 | 75 TPH | 1989 |
| Vent 7 | ES 5 BVF 1 | S007D | TP007D – Transfer from Pneumatic Conveying System 1 to Limestone Silo 1 | 75 TPH | 1989 |
| Vent 7 | ES 5 BVF 1 | S007E | Limestone Silo 1 | 1,160 Tons | 1989 |
| Vent 8 | PCS 1 | S008A | TP008A – Transfer from Limestone Silo 1 to Pneumatic Conveying System 1 | 75 TPH | 1989 |
| Vent 8 | ES 6 BVF 2 | S008B | TP008B – Transfer from Pneumatic Conveying System 1 to Limestone Bin 1 | 75 TPH | 1989 |
| Vent 8 | ES 6 BVF 2 | S008C | Limestone Bin 1 | 250 Tons | 1989 |
| Vent 8 | ES 6 BVF 2 | S008D | TP008D– Limestone Bin 1 to Gravimetric Feeder/Conveyor A | 10 TPH | 1989 |
| Vent 8 | ES 6 BVF 2 | S008E | Gravimetric Feeder/Conveyor A | 10 TPH | 1989 |
| Vent 8 | ES 6 BVF 2 | S008F | TP008F– Gravimetric Feeder/Conveyor A to Rotary Valve A | 10 TPH | 1989 |
| Vent 8 | ES 6 BVF 2 | S008G | TP008G– Limestone Bin 1 to Gravimetric Feeder/Conveyor B | 10 TPH | 1989 |

| Emission Point ID ¹ | Control Device ¹ | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified | |
|-----------------------------------|--|----------------------------------|---|-----------------|-----------------------------|--|
| Vent 8 | ES 6 BVF 2 | S008H | Gravimetric Feeder/Conveyor B | 10 TPH | 1989 | |
| Vent 8 | ES 6 BVF 2 | S008I | TP008I– Gravimetric Feeder/Conveyor B to Rotary Valve B | 10 TPH | 1989 | |
| | | | | | | |
| STACK1 | PCS BH 7 & 8 | S009A | TP009A - Limestone Feeder Rotary Valve A to Pneumatic Conveying System 2 | 10 TPH | 1989 | |
| STACK1 | PCS BH 7 & 8 | S009B | TP009B - Limestone Feeder Rotary Valve B to Pneumatic Conveying System 2 | 10 TPH | 1989 | |
| STACK1 | PCS BH 7 & 8 | S009C | TP009C - Pneumatic Conveying System 2 to CFB Boiler 1 | 10 TPH | 1989 | |
| STACK1 | PCS BH 7 & 8 | | | 10 TPH | 1989 | |
| STACK1 | ES BH 7 & 8 | S009E | TP009E – Fuel Bin 1 to Enclosed Conveying System 7 | 46 TPH | 1989 | |
| STACK1 | ES BH 7 & 8 | S009F | TP009F – Fuel Bin 2 to Enclosed Conveying System 7 | 46 TPH | 1989 | |
| STACK1 | ES BH 7 & 8 | S009G | Enclosed Conveying System 7 to CFB Boiler 1 | 46 TPH | 1989 | |
| STACK1 | ES BH 7 & 8 | S009H | Enclosed Conveying System 7 to CFB Boiler 2 | 46 TPH | 1989 | |
| STACK1 | Limestone Injection, BH 8, SNCR | S009J | Ahlstrom Pyroflow CFB Boiler/Cyclone #1 | 375 mmBtu/hr | 1989 SNCR 2016 | |
| STACK1 | Limestone Injection, BH 7, SNCR | S009K | Ahlstrom Pyroflow CFB Boiler/Cyclone #2 | 375 mmBtu/hr | 1989 SNCR 2016 | |
| STACK1 | LNB | S009L | Zurn Auxiliary Boiler #1 | 132 mmBtu/hr | 1989 | |
| STACK1 | LNB | S009M | Zurn Auxiliary Boiler #2 | 132 mmBtu/hr | 1989 | |
| | | | Ash Handling | | | |
| Vent 9 | ES 8, BVF 3 | S010A | TP010A – CFB Boiler 1 Bottom Ash Screw A to Drag Chain Conveyor 101 | 16.5 TPH | 1989 | |
| Vent 9 | ES 8, BVF 3 | S010B | TP010C – CFB Boiler 1 Bottom Ash Screw B to Drag Chain Conveyor 101 | 16.5 TPH | 1989 | |

| Emission Point ID ¹ | Control Emission Emission Unit Description Device Unit ID | | Emission Unit Description | Design Capacity | Year Installed/ Modified | | | |
|-----------------------------------|---|-------|--|-----------------|-----------------------------|--|--|--|
| Vent 9 | ES 8, BVF 3 | S010C | TP010E – CFB Boiler 1 Bottom Ash Screw C to Drag Chain Conveyor 101 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010D | Drag Chain Conveyor 101 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010E | TP010I – CFB Boiler 2 Bottom Ash Screw A to Drag Chain Conveyor 201 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010F | TP010K – CFB Boiler 2 Bottom Ash Screw B to Drag Chain Conveyor 201 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010G | TP010M – CFB Boiler 2 Bottom Ash Screw C to Drag Chain Conveyor 201 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010H | Drag Chain Conveyor 201 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010I | TP010Q – Drag Chain Conveyor 101 to Clinker Grinder 1 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010J | TP010S – Drag Chain Conveyor 201 to Clinker Grinder 3 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010K | Clinker Grinder 1 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010L | Clinker Grinder 3 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010M | TP010Y – Clinker Grinder 1 to Bottom Ash Holding Bin 1 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010N | TP010AA – Clinker Grinder 3 to Bottom Ash Holding Bin 1 | 16.5 TPH | 1989 | | | |
| Vent 9 | ES 8, BVF 3 | S010O | Bottom Ash Holding Bin | 76.5 Tons | 1989 | | | |
| Vent 10 | ES 3 VCS A FS A | S011A | TP011A – Bottom Ash Holding Bin Discharge A to Vacuum Conveying System A | 50 TPH | 1989 | | | |
| Vent 10 | ES 3 VCS B FS B | S011B | TP011B – Bottom Ash Holding Bin Discharge B to Vacuum Conveying System B | 50 TPH | 1989 | | | |
| | | | TP011C – Bottom Ash Holding Bin Discharge C to Vacuum Conveying System C | | | | | |

| Emission Point ID ¹ | Control Device ¹ | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|-----------------------------------|--------------------------------|----------------------------------|--|-----------------|-----------------------------|
| Vent 10 | ES 3 VCS A FS A | S011D | TP011D – CFB No. 1 Air Heater Hopper to Vacuum Conveying System A | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS C FS C | S011E | TP011E – CFB No. 2 Air Heater Hopper to Vacuum Conveying System C | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS A FS A | S011F | TP011F – CFB No. 1 Baghouse Row 1 Discharge to Vacuum Conveying System A | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS B FS B | S011G | TP011G – CFB No. 1 Baghouse Row 2 Discharge to Vacuum Conveying System B | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS B FS B | S011H | TP011H – CFB No. 2 Baghouse Row 1 Discharge to Vacuum Conveying System B | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS C FS C | S011I | TP011I – CFB No. 2 Baghouse Row 2 Discharge to Vacuum Conveying System C | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS A FS A | S011J | Filter/Separator A Exhaust | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS B FS B | S011K | Filter/Separator B Exhaust | 50 TPH | 1989 |
| Vent 10 | ES 3 VCS C FS C | S011L | Filter/Separator C Exhaust | 50 TPH | 1989 |
| Vent 11 | ES 9 BH 9 | S012A | TP012A – Filter/Separator A to Ash Silo1 | 50 TPH | 1989 |
| Vent 11 | ES 9 BH 9 | S012B | TP012B – Filter/Separator B to Ash Silo1 | 50 TPH | 1989 |
| Vent 11 | ES 9 BH 9 | S012C | TP012C – Filter/Separator A to Ash Silo1 | 50 TPH | 1989 |
| Vent 11 | ES 9 BH 9 | S012D | Ash Silo1 | 1,300 Tons | 1989 |
| Vent 11 | BH 9 BE 4 AC 1 | S012E | TP012E – Ash Silo to Truck | 300 TPH | 1989 |

| Emission Point ID ¹ | Control Device ¹ | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified | |
|------------------------------------|--------------------------------|----------------------------------|---|-----------------|-----------------------------|--|
| Vent 11 BH 9 S012F BE 4 AC 2 | | S012F | TP012FE – Ash Silo to Truck | 300 TPH | 1989 | |
| | | F | uel Receiving & Emergency Fuel Feed Fugitives | | | |
| S00F1 | BE 1 WS 1 | Fugitive Emission 1 | TP00F1 – Transfer from Truck to Fuel Unloading Hopper/Vibratory Feeder 1 | 250 TPH | 1989 | |
| S00F2 | BE 1 WS 1 | Fugitive Emission 2 | Fuel Unloading Hopper 1 | 250 TPH | 1989 | |
| S00F3 | BE 1 ES 1 | Fugitive Emission 3 | Vibratory Feeder 1 | 250 TPH | 1989 | |
| S00F4 | BE 1 WS 2 | Fugitive Emission 4 | TP00F4 – Transfer from Truck to Fuel Unloading Hopper/Vibratory Feeder 2 | 250 TPH | 1989 | |
| S00F5 | BE 1 WS 2 | Fugitive Emission 5 | Fuel Unloading Hopper 2 | 250 TPH | 1989 | |
| S00F6 | BE 1 ES 1 | Fugitive Emission 6 | Vibratory Feeder 2 | 250 TPH | 1989 | |
| S00F7 | BE 1 ES 1 WS 3 | Fugitive Emission 7 | TP00F7 – Vibratory Feeder 2 to Transfer Conveyor 1 | 250 TPH | 1989 | |
| S00F8 | BE 1 ES 1 WS 4 | Fugitive Emission 8 | TP00F8 – Vibratory Feeder 1 to Transfer Conveyor 1 | 250 TPH | 1989 | |
| S00F9 | BE 1 ES 1 | Fugitive Emission 9 | Transfer Conveyor 1 | 500 TPH | 1989 | |
| S00F10 | BE 1 ES 1 WS 5 | Fugitive Emission 10 | TP00F10 – Transfer Conveyor 1 to Elevating Conveyor 1 | 500 TPH | 1989 | |
| S00F11 | BE 1 | | | N/A | 1989 | |
| S00F12 | BE 1 | Fugitive Emission 12 | | N/A | 1989 | |
| , i | | | TP00F13 – Dribble Chute Catch Bin 1 to Dribble Chute Conveyor 1 | N/A | 1989 | |

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

| Emission Point ID ¹ | Control Device ¹ | Emission Unit ID ¹ | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|-----------------------------------|--------------------------------|---|--|-----------------|-----------------------------|
| S00F14 | BE 1 Fugitive Emission 14 | | TP00F14 – Dribble Chute Conveyor 1 to Transfer Conveyor 1 | N/A | 1989 |
| S00F15 | N/A | Fugitive Emission 15 | TP00F15 – Front End Loader to Emergency Mill Feed System Hopper 1 | 60 TPH | 1989 |
| S00F16 | N/A | Fugitive Emission 16 | | | 1989 |
| | | | Storage Tank Fugitives | | |
| S00F17 | S00F17 N/A | | A.S.T. 01 Acid Tank | 5,800 Gallons | 1989 |
| S00F18 | N/A | Fugitive Emission 18 | A.S.T. 02 Caustic Tank | 5,800 Gallons | 1989 |
| S00F21 | N/A | Fugitive Emission 21 | A.S.T. 05 Turbine Oil Tank | 2,378 Gallons | 1989 |
| S00F22 | N/A | Fugitive Emission 22 | A.S.T. 06 EHC Oil Storage Tank | 105 Gallons | 1989 |
| S00F23 | N/A | Fugitive Emission 23 | A.S.T. 07 Water Treatment Phosphate Tank | 1,600 Gallons | 1989 |
| S00F24 | N/A | Fugitive Emission 24 | A.S.T. 08 Water Treatment Corrosion Inhibitor Tank | 400 Gallons | 1989 |
| S00F25 | N/A | A Fugitive A.S.T. 09 Water Treatmer Emission 25 Scavenger Tan | | 400 Gallons | 1989 |
| | | | Paved Roadway Fugitives | | |
| S00F26 | Paved, Water Cleaning | Fugitive Emission 26 | Plant Roadway | N/A | 1989 |

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E EMISSION UNIT FORM(S)

| ATTACHMENT E - Emission Unit Form | | | | | | | | | | |
|---|---|--|------------------|--|--|--|--|--|--|--|
| Emission Unit Description | | | | | | | | | | |
| Emission unit ID number: | Emission unit name: | List any control dev | | | | | | | | |
| S009J and S009K | Sources for Stack 1: S009J is CFB #1 Boiler/Cyclone #1 S009K is CFB #2 Boiler/Cyclone #2 | with this emission uses 7 & 8 | init: | | | | | | | |
| Provide a description of the emission. The Emission Units S009J and S009K designed to combust a blend of coal aron a heat input of 375 mmBtu/hr which | vn Energy Facility. Ea 5% waste coal. Each b | ch boiler is | | | | | | | | |
| Manufacturer: Ahlstrom Pyropower | Model number: Pyroflow CFB | Serial number: CFB #1: National Bo CFB #2: National Bo | | | | | | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s | s): | | | | | | | |
| Design Capacity (examples: furnace S009J is designed to produce 280,000 S009K is designed to produce 280,000 | lbs/hr of steam at 1500 psi and 950°F. | | | | | | | | | |
| Maximum Hourly Throughput: S009J - 280,000 lbs/hr of steam at 1500 psi and 950°F S009K - 280,000 lbs/hr of steam at 1500 psi and 950°F | Maximum Annual Throughput: S009J – 2,452,500,000 lbs/yr of steam S009K - 2,452,500,000 lbs/yr of steam | Maximum Operating Schedule: 8760 hours per year | | | | | | | | |
| Fuel Usage Data (fill out all applicat | ole fields) | | | | | | | | | |
| Does this emission unit combust fuel | ? <u>√</u> YesNo | If yes, is it? | | | | | | | | |
| | | Indirect Fired | ✓ Direct Fired | | | | | | | |
| Maximum design heat input and/or The maximum design heat input for ea | | Type and Btu/hr ra N/A | ting of burners: | | | | | | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. The fuel for the CFBs is a blend of at least 65% gob (waste coal) and not more than 35% coal. Each boiler consumes blended fuel at a maximum hourly rate of 23.35 TPH. Pursuant to the Permit Applicability Determination issued by the Department on November 21, 2017, coarse limestone may also be blended into the solid fuel stream. Thus, each boiler would have a maximum annual fuel usage of 204,546 tons based on 8760 hours of operation in a year. Each CFB boiler also contains 3 natural gas fired burners; however, the burners are only used for startup purposes and for stabilizing steam output during load changes. | | | | | | | | | | |
| Describe each fuel expected to be use | Describe each fuel expected to be used during the term of the permit. | | | | | | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | | | | | | |
| Blended Fuel (as-received basis) | 3.5% | 51.7% 7775 Btu/lb | | | | | | | | |
| | | | | | | | | | | |

| Emissions Data | | | | | | |
|--|---------------------|------------------|--|--|--|--|
| Criteria Pollutants | Potential Emissions | | | | | |
| | PPH | TPY ⁵ | | | | |
| Carbon Monoxide (CO) ¹ | 117.5 | 514.65 | | | | |
| Nitrogen Oxides (NO _X) ¹ | 300 | 1,314 | | | | |
| Lead (Pb) ¹ | 0.13 | 0.57 | | | | |
| Particulate Matter (PM _{2.5}) ^{2,3} | 15.0 | 65.70 | | | | |
| Particulate Matter (PM ₁₀) ^{2,3} | 16.4 | 71.94 | | | | |
| Total Particulate Matter (TSP) ¹ | 22.5 | 98.55 | | | | |
| Sulfur Dioxide (SO ₂) ¹ | 285 | 1248 | | | | |
| Volatile Organic Compounds (VOC) ¹ | 5.55 | 2,4.31 | | | | |
| Hazardous Air Pollutants | Potential Emissions | | | | | |
| | PPH | TPY | | | | |
| Hydrogen Chloride ² | 5.475 | 24.0 | | | | |
| Hydrogen Fluoride ¹ | 0.4 | 1.8 | | | | |
| Antimony ² | 0.001125 | 0.0049 | | | | |
| Arsenic ¹ | 0.002 | 0.0088 | | | | |
| Beryllium ¹ | 0.0002 | 0.0009 | | | | |
| Cadmium ² | 0.000112 | 0.0005 | | | | |
| Chromium ² | 0.000953 | 0.0042 | | | | |
| Cobalt ² | 0.000150 | 0.0007 | | | | |
| Manganese ² | 0.002070 | 0.0091 | | | | |
| Mercury ¹ | 0.021 | 0.0920 | | | | |
| Nickel ² | 0.000542 | 0.0024 | | | | |
| Selenium ² | 0.000350 | 0.0015 | | | | |
| Total Organic HAP ⁴ | 0.43 | 1.9 | | | | |
| Regulated Pollutants other than | Potential | Emissions | | | | |
| Criteria and HAP | PPH | TPY | | | | |
| Radionuclides ¹ | 0.0009 | 0.0039 | | | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

¹PPH emissions based on permit limit.

² PPH emissions based on stack testing conducted in 2010. Refer to emission calculations in Appendix 1.

³ PPH and TPY emissions for PM₁₀ and PM_{2.5} include condensable particulate matter. Refer to Appendix 1.

⁴ PPH emissions based on summation of HAP factors in AP-42 (5th Edition, 9/1998), Table 1.1-1. Refer to Appendix 1.

 $^{^5\,\}mathrm{TPY}$ emissions based on 8,760 hours of operation per year.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Limitations and Standards

Visible Emissions from each stack shall not exceed ten (10) percent opacity based on a six minute block average. Compliance with this streamlined limit ensures compliance with 40 C.F.R. §60.42Da(b) for the CFB boilers.

[45CSR§2-3.1.; 40 C.F.R. §60.42Da(b); 45CSR16; 45CSR14, R14-0007; 4.1.17.m.] (Title V permit condition 4.1.1)

The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary.

[45CSR§2-4.4.] (Title V permit condition 4.1.2)

The visible emission standards of condition 4.1.1., shall apply at all times except in periods of start-ups, shutdowns and malfunctions. [45CSR§2-9.1.] (Title V permit condition 4.1.3)

Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR§2-9.2., 45CSR16, 40 C.F.R. §60.11(d)] (Title V permit condition 4.1.4)

Emissions of nitrogen oxides (NO_x) expressed as NO₂, emitted to the atmosphere from each of the CFB boilers shall not exceed the following limits to the corresponding averaging periods.

- NO_x concentration shall not exceed 293 ppmvd corrected to 3% oxygen on a 24-hr average basis.
- NO_x emission rate shall not exceed 0.40 lb/MMBtu on a 30 day rolling average.
- The permittee shall operate the SNCR in such manner as to maintain compliance with the above NO_x limits and in Condition 4.1.9.

[45CSR14, R14-0007, 4.1.3.] (Title V permit condition 4.1.5.)

Sulfur Dioxide (SO2) emissions emitted to the atmosphere from each of the CFB boilers shall not exceed the following limits to the corresponding averaging periods.

- SO₂ emission rate shall not exceed 0.40 lb/MMBtu on a 30 day rolling average. [40 C.F.R. §60.43Da(g)]
- h SO₂ concentration of no greater than 215 ppmvd corrected to 3.0 percent oxygen on a 24-hour average.
- The SO₂ reduction efficiency from each unit shall not be less than 94.6% on a 30-day rolling average. Compliance with this underlying permit requirement ensures compliance with the 70 percent reduction requirement in 40 C.F.R. §60.43Da(a)(2).

[45CSR14, R14-0007, 4.1.2. and 4.1.2.a. through c.; 45CSR16; 40 C.F.R. §§60.43Da(a)(2), and 60.43Da(g)] (Title V permit condition 4.1.6.)

Particulate Matter (PM) emissions emitted to the atmosphere from each of the CFB boilers shall not exceed the following limits to the corresponding averaging periods.

- PM emission rate shall not exceed 0.03 lb/MMBtu of heat input on a 30-day rolling average. [45CSR§2-4.1.a., and 40 C.F.R. §60.42Da(a)]
- PM concentration of no greater than 0.016 grains per dscf corrected to 3.5 percent oxygen.

[45CSR14, R14-0007, 4.1.1., 4.1.1.a., and 4.1.1.b.; 45CSR16; 40 C.F.R. §§60.42Da(a)] (Title V permit condition 4.1.7.)

During periods when the CFB boilers are in operation, the emissions from Stack 1 shall not exceed the following emission limitations:

- Particulate matter emission shall not exceed 22.5 pounds per hour. Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1.a. for the CFB boilers (S009J, S009K).
- b. When the auxiliary boiler(s) are in operation, the PM emission rate shall not exceed 0.022 lb/MMBtu. Compliance with this streamlined PM limit assures compliance with 40 C.F.R. §60.42Da(a) for the CFB boilers (S009J, S009K).
- c. Sulfur dioxide emission shall not exceed 285 pounds per hour on a 24-hour average basis. *Compliance with this streamlined SO*₂ *limit assures compliance with 45CSR§10-3.3.f. for the auxiliary boilers (S009L, S009M).*
- d. Nitrogen oxides (NO_x) emission shall not 300 pounds per hour on a 24-hour average basis.
- e. Carbon monoxide (CO) emissions shall not exceed 117.5 pounds per hour except when the auxiliary boiler(s) are in operation as well, then the CO emission rate shall not exceed 127.5 pounds per hour.
- f. Volatile organic compounds (VOC) emissions shall not exceed 5.5 pounds per hour except when the auxiliary boiler(s) are in operation as well, then the VOC emission rate shall not exceed 7.5 pounds per hour.
- g. Lead emissions shall not exceed 0.13 pounds per hour.
- h. Mercury emissions shall not exceed 0.021 lb/hr.
- i. Fluorides emissions shall not exceed 0.4 pounds per hour
- j. Beryllium emissions shall not exceed 0.0002 pounds per hour.
- k. Arsenic emissions shall not exceed 0.002 pounds per hour.
- 1. Radionuclides emissions shall not exceed 0.0009 pounds per hour.

[45CSR14, R14-0007, 4.1.17.; 45CSR\$2-4.1.a.; 45CSR\$10-3.3.f.; 40 C.F.R. \$\$60.42Da(a), 60.43Da(a)(2), 45CSR16] (Title V permit condition 4.1.9.)

Compliance Date for 40 C.F.R. 63 Subpart UUUUU and Compliance Extensions. If you have an existing EGU, you must comply with 40 C.F.R. 63 Subpart UUUUU no later than April 16, 2015. unless a one-year extension is granted and then the compliance deadline is extended to April 16, 2016. An additional extension for up to three (3) years for compliance with the acid gas standard may be granted for waste coal facilities which would extend the compliance deadline for Hydrogen Chloride (HCl) or the alternate Sulfur Dioxide (SO₂) emission limitation to April 16, 2019. The facility received a one-year extension for MATS compliance and an additional one-year extension for the acid gas standard. Effective April 16, 2017, the SO₂ emission shall not exceed the limit in condition 4.1.17. on a 30 boiler operating day rolling average. 45CSR14, R14-0007C, 4.1.1.c. and 4.1.2.d.; WVDAQ [40 C.F.R. §63.9984(b); 45CSR34; Director's "Conditional Extension of Compliance NESHAP: Coal-Oil-Fired Letter Approval for and 40 Utility Steam Generating Units, C.F.R. 63 Subpart UUUUU" to Mr. Todd Shirley, Morgantown Energy Associates, dated December 15, 2014; WVDAQ Director's Letter "Conditional Approval Compliance from HC1 Requirements" Todd Shirley, of to Mr. Morgantown Energy Associates, dated April 15, 2016; §112(i)(3)(B)] (CFB Boilers S009J and S009K) (Title V permit condition 4.1.14.)

You must demonstrate that compliance has been achieved by conducting the required performance tests and other activities, no later than 180 days after the applicable date in paragraph (b) of 40 C.F.R. §63.9984 (condition 4.1.14.).

- a. Filterable Particulate Matter (PM). Before October 13, 2016, the permittee shall either demonstrate initial compliance with the filterable particulate matter (PM) standard (Condition 4.1.16.) or demonstrate that the CFB boilers qualify as a low emitting EGU (LEE) for filterable PM in accordance with 40 C.F.R. §63.10005(h).
- b. Acid Gases. Before October 13, 2017, the permittee shall demonstrate initial and continuous compliance with the applicable hydrogen chloride (HCl) standard in Subpart UUUUU to Part 63 or the alternative to the HCl standard, which is the SO₂ standard (Condition 4.1.17.), using SO₂ CEMS in accordance with Condition 4.2.1.
- c. Mercury (Hg). Before October 13, 2016, the permittee shall demonstrate initial compliance with the mercury standard of 40 C.F.R. §63.10005(a) (Condition 4.1.18.) or demonstrate that the CFB boilers qualify as a low emitting EGU (LEE) for mercury in accordance with 40 C.F.R. §63.10005(h).
- d. **Tune-up Work Practice**. For an existing EGU without a neural network, a tune-up, following the procedures in \$63.10021(e), must occur within 6 months (180 days) after April 16, 2016. If a tune-up occurs prior to April 16, 2016, you must keep records showing that the tune-up met all rule requirements.
- [40 C.F.R. §§ 63.9984(f) and 63.10005(f); 45CSR34; 45CSR14, R14-0007, 4.1.13., 4.1.14., 4.1.15.: and WVDAQ Director's Letter "Conditional Approval for Extension of Compliance from HCl Requirements" to Mr. Todd Shirley, Morgantown Energy Associates, dated April 15, 2016; §112(i)(3)(B)] (CFB Boilers S009J and S009K) (Title V permit condition 4.1.15.)

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Revised - 07/31/07

Filterable Particulate Matter (PM) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU. If your EGU is in the coal-fired unit not low rank virgin coal subcategory, for filterable particulate matter (PM), you must meet the emission limit 0.030 lb/MMBtu or 0.30 lb/MWh (gross output), by collecting a minimum of 1 dscm per run according to applicable test methods in Table 5 to Subpart IIIIIIIII.

[40 C.F.R. §63.9991(a)(1), Table 2, Item #1.a.; 40 C.F.R. §63.10000(a); 45CSR34; 45CSR14, R14-0007C, 4.1.1.c.] (CFB Boilers S009J and S009K) (Title V permit condition 4.1.16.)

Sulfur Dioxide (SO₂) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU. If your EGU is in the coalfired unit not low rank virgin coal subcategory, for sulfur dioxide (SO₂), you must meet the emission limit 0.20 lb/MMBtu or 1.5 lb/MWh (gross basis), using SO₂ CEMS according to applicable methods in Table 5 and procedures in Table 7 to 40 C.F.R. 63 Subpart UUUUU.

You may use the alternate SO₂ limit in Table 2 to 40 C.F.R. 63 Subpart UUUUU only if your EGU:

- (1) Has a system using wet or dry flue gas desulfurization technology (this includes limestone injection into a fluidized bed combustion unit, as per the definition of *Dry flue gas desulfurization technology* in 40 C.F.R. §63.10042) and an SO₂ continuous emissions monitoring system (CEMS) installed on the unit EGU; and
- (2) At all times, you operate the wet or dry flue gas desulfurization technology (this includes limestone injection into a fluidized bed combustion unit, as per the definition of *Dry flue gas desulfurization technology* in 40 C.F.R. §63.10042) and the SO₂ CEMS installed on the unit EGU consistent with 40 C.F.R. §63.10000(b) (permit condition 4.1.22.).

The permittee shall operate a dry flue gas desulfurization system for the unit at all times consistent with 40 C.F.R. §63.10000(b). Compliance with this requirement is satisfied through the use of limestone injection into the CFB boilers coupled with the fabric filter collection system.

[40 C.F.R. §63.9991(a)(1), Table 2, Item #1.b.; 40 C.F.R. §63.10021(a), Table 7, Item #1; 40 C.F.R. §63.9991(c)(1) and (2); 40 C.F.R. §63.10000(a); 45CSR34; 45CSR14, R14-0007, 4.1.2.d. and 4.1.2.e.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit 4.1.17.)

Mercury (Hg) Emission Limitation for 40 C.F.R. 63 Subpart UUUUU. If your EGU is in the coal-fired unit not low rank virgin coal subcategory, for mercury (Hg), you must meet the emission limit 1.2 lb/TBtu or 0.013 lb/GWh, using LEE testing for 30 boiler operating days with 10 days maximum sampling period consistent with that given in section 5.2.1. of appendix A to Subpart UUUUU per Method 30B run or Hg CEMS or sorbent trap monitoring system only using applicable methods in Table 5 to Subpart UUUUU. [40 C.F.R. §63.9991(a)(1), Table 2, Item #1.c.; 40 C.F.R. §63.10000(a); 45CSR34; 45CSR14, R14-0007, 4.1.6.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.1.18.)

Tune-up Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU. If your EGU is an existing EGU, you must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months as specified in 40 C.F.R. §63.10021(e). Each performance tune-up specified in §63.10021(e) must be no more than 36 calendar months after the previous performance tune-up.

Conduct periodic performance tune-ups of your EGU(s), as specified in paragraphs (1) through (9) of this condition. For your first tune-up, you may perform the burner inspection any time prior to the tune-up or you may delay the first burner inspection until the next scheduled EGU outage provided you meet the requirements of §63.10005. Subsequently, you must perform an inspection of the burner at least once every 36 calendar months unless your EGU employs neural network combustion optimization during normal operations in which case you must perform an inspection of the burner and combustion controls at least once every 48 calendar months. If your EGU is offline when a deadline to perform the tune-up passes, you shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit.

- (1) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows:
 - (i) Burner or combustion control component parts needing replacement that affect the ability to optimize NOx and CO must be installed within 3 calendar months after the burner inspection,
 - (ii) Burner or combustion control component parts that do not affect the ability to optimize NOx and CO may be installed on a schedule determined by the operator;
- (2) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type;

- (3) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors;
- (4) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors:
- (5) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O₂ probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary;
- (6) Optimize combustion to minimize generation of CO and NOx. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NOx optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles;
- (7) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NOx in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). You may use portable CO, NOx and O2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single preand post-tune-up value rather than continual values before and after each optimization adjustment made by the system;
- (8) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (1) through (9) of this condition including:
 - The concentrations of CO and NOx in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems;
 - (ii) A description of any corrective actions taken as a part of the combustion adjustment; and
 - (iii) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and
- (9) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in §63.10031(f)(5) (condition 4.5.19.(5)), until July 1, 2020. On or after July 1, 2020, report the date of all tune-ups electronically, in accordance with §63.10031(f). The tune-up report date is the date when tune-up requirements in paragraphs (6) and (7) of this condition are completed.

[40 C.F.R. §63.9991(a)(1), Table 3, Item #1; 40 C.F.R. §§63.10021(e) and (e)(1) through (9); 40 C.F.R. §63.10021(a), Table 7, Item #5; 40 C.F.R. §63.10000(e); 40 C.F.R. §63.10005(e); 40 C.F.R. §63.10006(i)(1); 45CSR34; 45CSR14, R14-0007, 4.1.8.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14., and must initially be completed by the date specified in condition 4.1.15. (Title V permit condition 4.1.19.)

Startup Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU. If your EGU is a coal-fired EGU during startup you must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, you must use natural gas for ignition. Once you convert to firing coal, residual oil, or solid oil-derived fuel, you must engage all of the applicable control technologies except dry scrubber and SCR. You must start your dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. You must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown in this subpart. You must keep records during startup periods. You must provide reports concerning activities and startup periods, as specified in §63.10021(i) (condition 4.5.16.a.(1)). [40 C.F.R. §63.9991(a)(1), Table 3, Item #3; 40 C.F.R. §63.10021(a), Table 7, Item #6; 40 C.F.R. §63.10000(a); 40 C.F.R. §63.10005(j); 40 C.F.R. §63.10011(g); 45CSR34; 45CSR14, R14-0007, 4.1.9. and 4.1.10.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.1.20.)

Shutdown Work Practice Standard for 40 C.F.R. 63 Subpart UUUUU. You must operate all CMS during shutdown. You must also collect appropriate data, and you must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used.

While firing coal, residual oil, or solid oil-derived fuel during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, you must operate your controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than this Subpart and that require operation of the control devices.

If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in §63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.

You must comply with all applicable emissions limits at all times except during startup periods and shutdown periods at which time you must meet this work practice. You must collect monitoring data during shutdown periods, as specified in §63.10020(a). You must keep records during shutdown periods, as provided in §863.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. You must provide reports concerning activities and shutdown periods as specified in §63.10021(i) (condition 4.5.16.a.(1)).

[40 C.F.R. §63.9991(a)(1), Table 3, Item #4; 40 C.F.R. §63.10021(a), Table 7, Item #7; 40 C.F.R. §63.10000(a); 40 C.F.R. §63.10005(j); 40 C.F.R. §63.10011(g); 45CSR34; 45CSR14, R14-0007, 4.1.9. and 4.1.11.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.1.21.)

At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. §63.10000(b); 45CSR34; 45CSR14, R14-0007, 4.1.7.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.1.22.)

You must determine the fuel whose combustion produces the least uncontrolled emissions, *i.e.*, the cleanest fuel, either natural gas or distillate oil, that is available on site or accessible nearby for use during periods of startup or shutdown. Your cleanest fuel, either natural gas or distillate oil, for use during periods of startup or shutdown determination may take safety considerations into account. [40 C.F.R. §§63.10011(f)(1) and (2); 45CSR34] (CFB Boilers S009J and S009K) (Title V permit condition 4.1.23.)

Emissions of carbon monoxide (CO) emitted to the atmosphere from each of the CFB boilers shall not exceed the following limits to the corresponding averaging periods.

- (a) CO concentration shall not exceed 188 ppmvd corrected to 3 % oxygen on a 24-hr average.
- (b) CO emissions rate shall not exceed 0.157 lb/MMBtu.

[45CSR14, R14-0007, 4.1.4.] (Title V permit condition 4.1.24.)

Emissions of volatile organic compounds (VOC) emitted to the atmosphere from each of the CFB boilers shall not exceed 0.0074 lb/MMBtu.

[45CSR14, R14-0007, 4.1.5.] (Title V permit condition 4.1.25.)

If the permittee elects to demonstrates compliance with PM and/or Hg emissions limit of Condition 4.1.16. and/or Condition 4.1.18, respectively, through use of a continuous monitoring system (CMS), where a CMS includes a continuous parameter monitoring system (CPMS) as well as a continuous emissions monitoring system (CEMS), the permittee must develop a site-specific monitoring plan and submit this site-specific monitoring plan in accordance with Conditions 3.5.1. at least 60 days before the initial performance evaluation (where applicable) of the CMS. The site-specific monitoring plan shall include the information specified in 40 C.F.R. §§63.10000(d)(5)(i) through (d)(5)(vii). The permittee must operate and maintain the CMS according to the site-specific monitoring plan.

[45CSR14, R14-0007, 4.1.12.; 40 C.F.R. §§63.10000(d)(1), (d)(2), and (d)(3); 45CSR34] (Title V permit condition 4.1.26.)

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring Requirements

The owner or operator shall install, calibrate, certify, operate, maintain, and record the output of continuous monitoring systems that measure all Opacity, SO₂, NO_x, and O₂ or CO₂ emissions from emission point *Stack I* as specified in 40 C.F.R. Part 60, Subpart Da for the CFB boilers; and NO_x as specified in 40 C.F.R. Part 60, Subpart Db for the auxiliary boilers. Alternatively, the SO₂, NO_x and O₂ or CO₂ CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 C.F.R. Part 75, provided that the relevant requirements of 40 CFR §§60.49Da(b)(4), (c)(2), and (d) are met. Recordkeeping and reporting shall be conducted pursuant to Subparts F and G in 40 C.F.R. Part 75.

NOx CEMS: The NOx CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. For use of NOx CEMS used to demonstrate compliance for the auxiliary boilers (S009L and S009M), the permittee shall also meet the requirements of 40 CFR §60.49b. Data reported to meet the requirements of 40 CFR \$60.49b for the auxiliary boilers shall not include data substituted using the missing data procedures in Subpart D of Part 75 of Chapter 40, nor shall the data have been bias adjusted according [40 procedures Part 75 Chapter C.F.R. §60.48b(b)(2)] of of 40. Diluent Monitor: The oxygen (O2) or carbon dioxide (CO2) content of the flue gas shall be monitored at the location where SO₂ and NO_x are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

i. If the permittee use an oxygen (O2) or carbon dioxide (CO2) CEMS to convert measured pollutant concentrations to the units of emissions limit in Condition 4.1.17., the O2 or CO2 concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the EGU, downstream of all emission control devices. The permittee must install, certify, maintain, and operate the CEMS according to part 75 of this chapter. Use only quality-assured O2 or CO2 data in the emissions calculations; do not use part 75 substitute data values. [40 C.F.R. §63.10010(b)]

Flow Monitor: The volumetric flow rate of the flue gas shall be monitored at the location where SO₂ and NO_x are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75. [40 C.F.R. §60.49Da(m)]

COMS: Exhaust gas opacity from Stack 1 shall be monitored using a continuous opacity monitoring system for the purpose of demonstrating compliance with Condition 4.1.1. The permittee shall install calibrate, maintain, and operate the COMS in accordance with Performance Specification (PS) 1 in 40 CFR Part 60, Appendix B. [40 C.F.R. §§60.49Da(a) and (a)(1); 45CSR§2-8.2.a.1., and 45CSR§2A-6.2.]

[45CSR16; 40 C.F.R. § 60.49Da, 40 C.F.R. §60.48b, 40 C.F.R. §60.13; 45CSR13, R14-0007, 4.2.1., 4.2.1.a., 4.2.1.b., 4.2.1.c., 4.2.1.d., and 4.2.1.e.; 45CSR§10-8.2.c.1.; 40 C.F.R. §§ 64.3(a), 64.3(b), 64.3(d)(1), and 64.6(c)(1); 40 C.F.R. §§60.49Da(b)(4), (c)(2), and (d)] (Title V permit condition 4.2.1.)

Compliance with the visible emission requirements of 45CSR§2-3.1. (condition 4.1.1.) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems and as described in the approved monitoring plan. Compliance with the weight emission limit (4.1.7.) shall be demonstrated by periodic particulate matter stack testing (4.3.1. and 4.3.12.), conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. Such testing shall be conducted at a frequency to be established by the Director. [Permit R14-0007 serves as the approved monitoring plan.]

[45CSR§\$2-3.2. and 8.1.a., 45CSR§2A-6] (Title V permit condition 4.2.2)

Compliance with the visible emissions limit (4.1.1.) shall be monitored as set forth in the approved monitoring plan for each emission unit. [Permit R14-0007 serves as the approved monitoring plan.]

[45CSR§2-8.2.a.] (Title V permit condition 4.2.3)

Commencement of operation. The permittee shall conduct the monitoring required under 40 C.F.R. Part 64 upon issuance of this permit that includes such monitoring.

[40 C.F.R. § 64.7(a); 45CSR§30-5.1.c.] (Title V permit condition 4.2.4)

Proper Maintenance - At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 C.F.R. § 64.7(b); 45CSR§30-5.1.c.] (Title V permit condition 4.2.5)

Continued Operation - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 C.F.R. § 64.7(c); 45CSR§30-5.1.c.] (Title V permit condition 4.2.6)

Documentation of Need for Improved Monitoring - After approval of monitoring under 40 C.F.R. Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 C.F.R. § 64.7(e); 45CSR§30-5.1.c.] (Title V permit condition 4.2.7)

Quality Improvement Plan (QIP) - Based on the results of a determination made under permit condition 4.4.3.(2), the Administrator or the Director may require the permittee to develop and implement a QIP. Consistent with 40 C.F.R. §64.6(c)(3), the permittee is limited to an accumulation of exceedances or excursions no greater than five (5) percent of the operating time for the boilers during a reporting period, prior to requiring the implementation of a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8(b) through (e). Refer to permit condition 4.5.6.(2)(iii) for the reporting required when a QIP is implemented.

[40 C.F.R. § 64.8; 45CSR§30-5.1.c.] (Title V permit condition 4.2.8)

Supplementary Actions prior to an Excursion - For CAM purposes, normal operation shalt be between 0% and 6% opacity on a six-minute block basis during any one-hour period. Opacity greater than 6% (six-minute block) triggers the following supplementary actions.

- a. Monitor the opacity as the baghouses (which are dedicated to either CFB#l or CPB#2) go through a manually initiated cleaning cycle. The opacity will increase when the compartment with the problem or leaking bag goes through the cleaning cycle.
- b. Once the problem compartment is identified, the compartment will be isolated and appropriate corrective measures will be taken. [40 C.F.R. § 64.3(a); 45CSR§§30-5.1.c. and 12.7.] (Title V permit condition 4.2.9)

Excursions - An excursion shall be defined as opacity greater than eight (8) percent during any six-minute period during any one- hour period after supplementary action (as defined in condition 4.2.9.) has been taken. An excursion will not be deemed to have occurred if the opacity exceeds 8% during the cleaning cycle specified in condition 4.2.9.a. If the opacity exceeds 8% before the permittee has time to perform the supplementary actions in condition 4.2.9., an excursion will be deemed to have occurred. Refer to conditions 4.4.3., 4.4.4., and 4.5.6. for recordkeeping and reporting requirements for excursions.

 $[40 \ C.F.R. \ \S \ 64.6(c)(2); \ 45CSR \S 30\text{-}5.1.c.] \ (Title \ V \ permit \ condition \ 4.2.10)$

40 C.F.R. 63 Subpart UUUUU affected units utilizing common stack with non-affected units.

- (i) When one or more affected units shares a common stack with one or more non-affected units, you shall either:
 - (A) Install the required CEMS, PM CPMS, and sorbent trap monitoring systems in the ducts leading to the common stack from each affected unit; or
 - (B) Install the required CEMS, PM CPMS, and sorbent trap monitoring systems described in this section in the common stack and attribute all of the emissions measured at the common stack to the affected unit(s).
- (ii) If you choose the common stack monitoring option:
 - (A) For each hour in which valid data are obtained for all parameters, you must calculate the pollutant emission rate and
 - (B) You must assign the calculated pollutant emission rate to each unit that shares the common stack.

[40 C.F.R. §63.10010(a)(3); 45CSR34; 45CSR14, R14-0007, 4.2.1.a.i.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.11.)

Specifications and Operation of SO₂ CEMS for 40 C.F.R. 63 Subpart UUUUU.

- (1) If you use an SO₂ CEMS, you must install the monitor at the outlet of the EGU, downstream of all emission control devices, and you must certify, operate, and maintain the CEMS according to 40 C.F.R. part 75.
- (2) For on-going QA, the SO₂ CEMS must meet the applicable daily, quarterly, and semiannual or annual requirements in sections 2.1 through 2.3 of appendix B to 40 C.F.R. part 75, with the following addition: You must perform the linearity checks required in section 2.2 of appendix B to 40 C.F.R. part 75 if the SO₂ CEMS has a span value of 30 ppm or less.
- (3) Calculate and record a 30-boiler operating day rolling average SO₂ emission rate in the units of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all of the valid hourly SO₂ emission rates in the 30 boiler operating day period.
- (4) Use only unadjusted, quality-assured SO₂ concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO₂ data and do not use part 75 substitute data values. For startup or shutdown hours (as defined in \$63.10042) the default gross output and the diluent cap are available for use in the hourly SO₂ emission rate calculations, as described in \$63.10007(f). Use a flag to identify each startup or shutdown hour and report a special code if the diluent cap or default gross output is used to calculate the SO₂ emission rate for any of these hours.

[40 C.F.R. §§63.10010(f)(1) through (4); 45CSR34; 45CSR14, R14-0007, 4.2.1.a.ii., iii., and iv.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.12.)

You must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 C.F.R. §63.8(c)(7) of this part), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. You are required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

[40 C.F.R. §63.10020(b); 45CSR34] (CFB Boilers S009J and S009K, SO₂ CEMS) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.13.)

You may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii) In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. You must use all the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system.

[40 C.F.R. §63.10020(c); 45CSR34; 45CSR14, R14-0007, 4.4.4.i.] (CFB Boilers S009J and S009K, SO₂ CEMS) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.14.)

Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), failure to collect required data is a deviation from the monitoring requirements. [40 C.F.R. §63.10020(d); 45CSR34; 45CSR14, R14-0007, 4.4.4.j.] (CFB Boilers S009J and S009K, SO2 CEMS) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.15.)

Except as otherwise provided in 40 C.F.R. $\S63.10020(c)$ (condition 4.2.14.), if you use a CEMS to measure SO₂, PM, or Hg emissions, or using a sorbent trap monitoring system to measure Hg emissions, you must demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO₂, O₂, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 in 40 C.F.R. $\S63.10021(b)$ to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.

[40 C.F.R. §63.10021(b); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.16.)

If you use an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. You must install, certify, maintain, and operate the CEMS according to part 75 of this chapter. Use only quality-assured O₂ or CO₂ data in the emissions calculations; do not use part 75 substitute data values.

[40 C.F.R. §63.10010(b); 45CSR34] (CFB Boilers S009J and S009K, SO₂ CEMS) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.2.17.)

NO_x & SO₂ CEMS: The permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with CEMS, the permittee shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR §60.49Da(h) for SO2 and Test Method 7 or 7A for NOx.

[45CSR14, R14-0007, 4.2.1.h.; 40 C.F.R. §60.49Da(f)(1) and §60.48b(f); 45CSR16] (Title V permit condition 4.2.18.)

NOx and SO2 Emissions: The permittee shall determine 30 day rolling average for each of the CFB boilers for NOx and SO2, in accordance with 40 C.F.R. §60.48Da, which is to be expressed in lb/MMBtu. The permittee shall determine the 30 day rolling average of NOx in accordance with 40 C.F.R. §60.48b, which is to be expressed in lb/MMBtu.

[45CSR14, R14-0007, 4.2.1.i.; 40 C.F.R. §60.48Da and §60.48b; 45CSR16] (Title V permit condition 4.2.19.)

The permittee shall install, calibrate, maintain, and operate an "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 of Appendix A of Part 60 be used to determine potential SO₂ emissions in place of a continuous SO₂ emission monitor at the inlet to the SO₂ control device as required under 40 C.F.R. §60.49Da(b)(1). The permittee shall use the output data from the "as fired" system and SO2 CEMS to determine compliance with the percent SO2 reduction of Condition 4.1.6.c. in accordance with 40 CFR §60.50Da(c) on daily and 30 successive boiler operating days basis. Such records of this monitoring system, data collected, and calculated values shall be maintained in accordance with Condition 3.2.1.

[45CSR14, R14-0007, 4.2.2.; 40 C.F.R. §§ 60.49Da(b) and (b)(3), and §§60.50Da(a) and (c); 45CSR16] (Title V permit **condition 4.2.20.)**

On or before the date an EGU is subject to this subpart, you must install, certify, operate, maintain, and quality assure each monitoring system necessary for demonstrating compliance with the work practice standards for PM or non-mercury HAP metals during startup periods and shutdown periods. You must collect, record, report, and maintain data obtained from these monitoring systems during startup periods and shutdown periods. [40 C.F.R. §63.10000(1); 45CSR34] (Title V permit condition 4.2.21.)

Testing Requirements

Compliance with the particulate matter emission limitations under condition 4.1.7.a. and 4.1.7.b. and 40 C.F.R. §60.42Da(a) shall be demonstrated in accordance with 40 C.F.R. §60.8, 40 C.F.R. §60.48Da, 40 C.F.R. §60.50Da, and 45CSR2 Appendix - Compliance Test Procedures for 45CSR2.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.1.)

Compliance with the sulfur dioxide emission limitation and sulfur dioxide reduction requirements under conditions 4.1.6., and 4.1.9.c. and as required by 40 C.F.R. §60.43Da(a), shall be demonstrated in accordance with 40 C.F.R. §60.8, 40 C.F.R. §60.48Da, 40 C.F.R. §60.50Da, except that compliance with the maximum SO₂ emission limitation shall be demonstrated for each and all fixed twenty-four hour periods. Compliance with the SO₂ emission limitations in units of lb/mmBtu and SO₂ percent reduction shall be demonstrated based on the rolling average of 30 successive boiler operating days.

[40 C.F.R. §60.43Da(g); 45CSR16; 45CSR§30-5.1.c.] (Title V permit condition 4.3.2.)

Compliance with the nitrogen oxides emission limitation under condition 4.1.5. shall be demonstrated in accordance with 40 C.F.R. §60.8, 40 C.F.R. §60.49Da, 40 C.F.R. §60.49Da, and 40 C.F.R. §60.50Da.

[45CSR§30.5.1.c.] (Title V permit condition 4.3.3.)

Compliance with the volatile organic compound emission limitation under conditions 4.1.8., and 4.1.9. shall be demonstrated in accordance with 40 C.F.R. 60, Appendix A - Method 25 or 25A.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.5.)

Compliance with the carbon monoxide emission limitations under conditions 4.1.8., and 4.1.9. shall be demonstrated in accordance with 40 C.F.R. 60 Appendix A - Method 25 or 25A.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.6.)

The owner or operator shall conduct a test at least once every five (5) years to determine the compliance of the CFB Boilers 1 & 2 with the carbon monoxide (CO) limits of condition 4.1.9. Such tests shall be conducted in accordance with 40 CFR 60 Appendix A - Method 10. A compliance test shall be conducted no later than eighteen (18) months of the issuance date of this permit. An emission factor shall be determined from the test results and updated from the results of each subsequent test. The emission factor shall be used for compliance demonstration for periods between tests.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.7.)

Compliance with the emission limitation for lead under condition 4.1.9. shall be demonstrated in accordance with 40 CFR 60 Appendix A - Method 12.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.8.)

Compliance with the emission limitation for mercury under condition 4.1.9. shall be demonstrated in accordance with 40 C.F.R. Part 60, Appendix A, Method 30B.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.9.)

Compliance with the emission limitation for fluorides under condition 4.1.9. shall be demonstrated in accordance with 40 C.F.R. 60, Appendix A - Method 13.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.10)

Compliance with the emission limitation for beryllium under condition 4.1.9. shall be demonstrated in accordance with 40 C.F.R. 61, Appendix B - Method 104.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.11.)

The owner or operator shall conduct, or have conducted, tests to determine the compliance of CFB Boilers 1 & 2 with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Director. Such tests shall be conducted in accordance with the schedule set forth in the following table.

| Test | Test Results | Testing Frequency |
|------------------|---|-------------------|
| Initial Baseline | ≤50% of weight emission standard | Once/3 years |
| Initial Baseline | between 50% and 80% of weight emission standard | Once/2 years |
| Initial Baseline | ≥80% of weight emission standard | Annual |
| Annual | after three successive tests indicate mass emission rates <pre></pre> | Once/3 years |
| Annual | after two successive tests indicate mass emission rates between 50% and 80% of weight emission standard | Once/2 years |
| Annual | any tests indicates a mass emission rate ≥80% of weight emission standard | Annual |
| Once/2 years | after two successive tests indicate mass emission rates <a>50% of weight emission standard | Once/3 years |
| Once/2 years | any tests indicates a mass emission rate between 50% and 80% of weight emission standard | Once/2 years |
| Once/2 years | any tests indicates a mass emission rate \geq 80% of weight emission standard | Annual |
| Once/3 years | any tests indicates a mass emission rate ≤50% of weight emission standard | Once/3 years |
| Once/3 years | any test indicates mass emission rates between 50% and 80% of weight emission standard | Once/2 years |
| Once/3 years | any test indicates a mass emission rate ≥80% of weight emission standard | Annual |

At this renewal the last testing was completed on April 3, 2012 and the next testing shall be conducted no later than March 6, 2018. [45CSR§2-8.1., 45CSR§2A-5.2.] (Title V permit condition 4.3.12.)

NOTE: MEA CONDUCTED TESTING ON MARCH 6, 2018.

Recordkeeping Requirements

Records of the operating schedule and quantity and quality of fuel consumed shall be maintained on site for each fuel burning unit and made available to the Director or his duly authorized representative upon request. Such records shall include, but not be limited to the date and time of start-up and shutdown and for:

- a. Pipeline quality natural gas, the quantity of fuel consumed on a monthly basis,
- b. Coal Ash and BTU analysis for each shipment and the quantity of fuel consumed on a daily basis.

[45CSR§2-8.3.c.; 45CSR§2A-7.1.a.; 40 C.F.R. §60.49Da(b)(3); 45CSR16; 45CSR14, R14-0007, 4.4.4.d.i. and 4.4.5.] (Title V permit condition 4.4.1)

Records of monitored data established in the monitoring plan shall be maintained on site and shall be made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.a.] (Title V permit condition 4.4.2)

Response to Excursions or Exceedances

- (1) Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (2) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. § 64.7(d); 45CSR§30-5.1.c.] (Title V permit condition 4.4.3)

General recordkeeping requirements for 40 C.F.R. Part 64 (CAM)

The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (4.2.8.) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

[40 C.F.R. §64.9(b); 45CSR§30-5.l.c.] (Title V permit condition 4.4.4)

You must keep records according to paragraphs (1) and (2) of this condition.

- (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification Notification or Compliance Status or semiannual compliance report submitted. according the that you requirements in 40 C.F.R. §63.10(b)(2)(xiv).
- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).
- [40 C.F.R. §63.7555(a); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10. (Title V permit condition 4.4.5.)

You must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. [40 C.F.R. §63.7555(i); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10. (Title V permit condition 4.4.6.)

You must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. [40 C.F.R. §63.7555(j); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10. (Title V permit condition 4.4.7.)

- (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.
- [40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10.
- [40 C.F.R. §§63.10033(a), (b), and (c); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.8.)

You must keep records according to paragraphs (1) and (2) of this condition.

- (1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart UUUUU. including all documentation supporting any Initial Notification or Notification of Compliance Status semiannual compliance report submitted, according or that vou to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).
- (2) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 C.F.R. §63.10(b)(2)(viii).
- [40 C.F.R. §63.10032(a); 45CSR34; 45CSR14, R14-0007, 4.4.4.a.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.9.)

For each CEMS, you must keep records according to paragraphs (1) through (4) of this condition.

- (1) Records described in § 63.10(b)(2)(vi) through (xi).
- (2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 C.F.R. §63.8(d)(3).
- (3) Request for alternatives to relative accuracy test for CEMS as required in 40 C.F.R. §63.8(f)(6)(i).
- (4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- [40 C.F.R. §63.10032(b); 45CSR34; 45CSR14, R14-0007, 4.4.4.b.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.10.)

You must keep the records required in Table 7 to 40 C.F.R. 63 Subpart UUUUU (conditions 4.1.17., 4.3.13.(ii), 4.3.13.(iii), 4.3.13.(iii), 4.3.13.(iv), 4.1.19., 4.1.20., and 4.1.21.) to show continuous compliance with each emission limit and operating limit that applies to you.

[40 C.F.R. §§63.10032(c) and 63.10021(h); 45CSR34; 45CSR14, R14-0007, 4.4.4.c.] (CFB Boilers S009J) and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.11.)

For each EGU subject to an emission limit, you must also keep the records in paragraphs (1) and (3) of this condition.

- (1) You must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used.
- (2) For an EGU that qualifies as an LEE under 40 C.F.R. §63.10005(h), you must keep annual records that document that your emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year.
- [40 C.F.R. §§63.10032(d)(1) and (3); 45CSR34; 45CSR14, R14-0007, 4.4.4.d.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.12.)

Should you choose to rely on paragraph (1) of the definition of "startup" in 63.10042 for your EGU, you must keep records of the occurrence and duration of each startup and/or shutdown.

[40 C.F.R. §§63.10032(f) and 63.10021(h); 45CSR34; 45CSR14, R14-0007, 4.4.4.e.] (CFB Boilers S009J) and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.13.)

You must keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[40 C.F.R. §63.10032(g); 45CSR34; 45CSR14, R14-0007, 4.4.4.f.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.14.)

You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. §63.10000(b) (condition 4.1.22.), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 C.F.R. §63.10032(h); 45CSR34; 45CSR14, R14-0007, 4.4.4.g.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.15.)

You must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [40 C.F.R. §§63.10032(i) and 63.10021(h); 45CSR34; 45CSR14, R14-0007, 4.4.4.h.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.16.)

Continuous Monitoring Requirements. Records of maintenance, calibration checks, and output data, shall be maintained in accordance with condition 3.4.2. The permittee must monitor and collect data according to 40 C.F.R. §63.10020 and the site-specific monitoring plan required in Condition 4.1.26. [45CSR14, R14-0007, 4.2.1.j.] (Title V permit condition 4.4.17.)

Reporting Requirements

For Subpart Da Reporting for SO2 and PM from the CFB boilers, the permittee shall submit CFB boilers, the permittee shall submit reports to the Director and Administrator semiannually. The reporting periods shall begin on January 1 and July 1 with the end of the reporting periods ending on June 30 and December 31 respectively. These reports shall be postmarked by 30 days following the end of the reporting period. Such reports shall contain the following information.

- (a) For SO₂, the following information is reported to the Director for each 24-hour period.
 - i. Calendar date.
 - ii. The average emission rates (lb/MMBtu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
 - iii. The percent reduction of the potential combustion concentration of SO₂ for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
 - iv. Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
 - v. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, or malfunction.
 - Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - vii. Identification of the times when the pollutant concentration exceeded full span of the CEMS.
 - viii. Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
 - ix. If the minimum quantity of emission data as required by 40 CFR \$60.49Da (Condition 4.2.1.) is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR \$60.48Da(h) is reported to the Administrator for that 30-day period:
 - The number of hourly averages available for outlet emission rates (no) and inlet emission rates (ni) as applicable.
 - 2. The standard deviation of hourly averages for outlet emission rates (s₀) and inlet emission rates (s_i) as applicable.
 - 3. The lower confidence limit for the mean outlet emission rate (E_{0*}) and the upper confidence limit for the mean inlet emission rate (E_{i*}) as applicable.
 - 4. The applicable potential combustion concentration.
 - 5. The ratio of the upper confidence limit for the mean outlet emission rate (E_{0}^{*}) and the allowable emission rate (E_{std}) as applicable.
 - x. For any periods for which opacity, SO₂ or NOx emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

- xi. The responsible official of permitted facility shall submit a signed statement indicating whether:
 - 1. The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
 - The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
 - 3. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - 4. Compliance with the standards has or has not been achieved during the reporting period.
- xii. For the purposes of the reports required under 40 CFR §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR §60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.

[45CSR14, R14-0007, 4.5.1.; 40 C.F.R. §60.19(d) and §§60.51Da(b), (c), (f), (h), and (i); 45CSR15] (Title V permit condition 4.5.1.)

Compliance with the periodic exception reporting of permit condition 4.5.5. shall be demonstrated by quarterly reports in accordance with 40 C.F.R. §60.7(c).

[40 C.F.R. §60.7; 45CSR16] (Title V permit condition 4.5.2.)

Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

- (a) The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period;
- (b) Excess opacity does not exceed forty percent (40%)

[45CSR§2-9.3.a.] Title V permit condition 4.5.3.)

Except as provided in permit condition 4.5.3. above, the owner or operator shall report to the Director by telephone, telefax, or e-mail any malfunction of CFB #1 or CFB #2 or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity, by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

- (a) A detailed explanation of the factors involved or causes of the malfunction;
- (b) The date, and time of duration (with starting and ending times) of the period of excess emissions;
- (c) An estimate of the mass of excess emissions discharged during the malfunction period;
- (d) The maximum opacity measured or observed during the malfunction;
- (e) Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- (f) A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.b.] (Title V permit condition 4.5.4.)

A periodic exception report shall be submitted to the Director, in a manner and at a frequency to be established by the Director.

[45CSR§2-8.3.b.] (Title V permit condition 4.5.5.)

General reporting requirements for 40 C.F.R. Part 64 (CAM)

- (1) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit CAM monitoring reports with the quarterly excess emissions reports. A copy of the CAM monitoring reports generated within the semiannual monitoring report period shall be included with the semi-annual monitoring report under permit condition 3.5.6. Incorporation by reference within the semi-annual monitoring report is not acceptable.
- (2) A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:

Summary information on the number, if duration and cause (including unknown applicable) of excursions or exceedances, as applicable, and the corrective actions taken; Summary information on the number, duration and cause applicable) for monitor downtime incidents (other than downtime (including unknown cause, with zero associated and span or other daily calibration checks, if applicable); and (iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 C.F.R. §64.9(a); 45CSR§30-5.1.c.] (Title V permit condition 4.5.6.) Notification of Compliance Status for 40 C.F.R. 63 Subpart UUUUU. You must submit the Notification Compliance Status containing the results of the initial compliance demonstration accordance with the requirements in 40 C.F.R. §§ 63.10030(e) and 63.9(h)(2)(ii). The Notification Compliance Status report must contain all the information specified in paragraphs (1) through (7) of this condition, as applicable.

- Summary of the results of all performance tests and fuel analyses and calculations conducted t demonstrate initial compliance including all established operating limits.
- (2) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing; fuel moisture analyses; performance testing with operating limits (e.g., use of PM CPMS); CEMS; or a sorbent trap monitoring system.
- (3) Identification of whether you plan to demonstrate compliance by emissions averaging.
- (4) A signed certification that you have met all applicable emission limits and work practice standards.
- (5) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation in the Notification of Compliance Status report.
- (6) In addition to the information required in 40 C.F.R. §63.9(h)(2), your notification of compliance status must include the following:
 - summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable. If you are conducting once every 3 years consistent with 40 C.F.R. §63.10005(h)(1)(i), of each the date stack test conducted during the previous 3 years, achieved comparison of emission level you in each stack conducted during the previous 3 years to the 50 percent limit threshold required emission in 40 C.F.R. §63.10006(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.
 - (ii) Certifications of compliance, as applicable, and must be signed by a responsible official stating:
 - (A) "This EGU complies with the requirements in §63.10021(a) to demonstrate continuous compliance."
 - (B) "No secondary materials that are solid waste were combusted in any affected unit."
 - (iii) For each of your existing EGUs, identification of each emissions limit as specified in Table 2 to 40 C.F.R. 63 Subpart UUUUU with which you plan to comply.
 - (A) You may switch from a mass per heat input to a mass per gross output limit (or vice-versa), provided that:
 - submit a (1) You request that identifies for each **EGU EGU** emissions or averaging group involved in the the proposed switch both current and proposed emission limit;
 - (2) Your request arrives to the Administrator at least 30 calendar days prior to the date that the switch is proposed to occur;
 - (3) Your demonstrates performance request through stack test results your completed within 30 days prior to submission, compliance for each EGU emissions averaging group with both the mass heat or per input and mass per gross output limits;
 - (4) You revise and submit all other applicable plans, e.g., monitoring and emissions averaging, with your request; and
 - (5) You maintain records of all information regarding your choice of emission limits.
 - (B) You begin to use the revised emission limits starting in the next reporting period, after receipt of written acknowledgement from the Administrator of the switch.
 - submission of (C) From your request until start of the next reporting period after from of written acknowledgement the Administrator of the switch, you demonstrate compliance with both the mass per heat input and mass per gross output emission for each **EGU EGU** limits each pollutant for or emissions averaging group.
- (7) Identification of whether you plan to rely on paragraph (1) or (2) of the definition of "startup" in \$63.10042.
- [40 C.F.R. §§ 63.10005(k), 63.10011(e), 63.10030(a), and 63.10030(e); 45CSR34; 45CSR14, R14-0007, 4.5.2.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.12.)

You must submit the reports required under 40 C.F.R. §63.10031. CEMS data shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including CEMS performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under 40 C.F.R. §63.10031 (conditions 4.5.16., 4.5.17., 4.5.18., 4.5.19.). [40 C.F.R. §63.10021(f); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.14)

You must report each instance in which you did not meet an applicable emissions limit or operating limit in Tables 2 and 3 to 40 C.F.R. 63 Subpart UUUUU or failed to conduct a required tune-up (conditions 4.1.16. through 4.1.21.). These instances are deviations from the requirements of 40 C.F.R. 63 Subpart UUUUU. These deviations must be reported according to 40 C.F.R. \(\frac{6}{3}\).10031 (condition 4.5.16.c.). \(\frac{1}{4}\) C.F.R. \(\frac{6}{3}\).10021(g); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.15.)

You must submit a Compliance report for 40 C.F.R. 63 Subpart UUUUU containing:

- a. Information required in 40 C.F.R. §§63.10031(c)(1) through (4) and (6) through (9), which is:
 - (1) The information required by the summary report located in 40 C.F.R. §63.10(e)(3)(vi).
 - (2) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.
 - (3) Indicate whether you burned new types of fuel during the reporting period. If you did burn new types of fuel you must include the date of the performance test where that fuel was in use.
 - (4) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in §§63.10021(e)(6) and (7) were completed.
 - (6) You must report emergency bypass information annually from EGUs with LEE status.
 - (7) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If you are conducting stack tests once every 3 years to maintain LEE status, consistent with §63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison of emission level you achieved in each stack test conducted during the previous 3 years to the 50 percent emission limit threshold required in §63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.
 - (8) A certification
- (b) If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart UUUUU that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in 40 C.F.R. §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and
- (c) If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in 40 C.F.R. §63.10031(d) (section d. of this condition). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were outof-control, as specified in 40 C.F.R. §63.8(c)(7), the report must contain the information in 40 C.F.R. §63.10031(e) (condition 4.5.18.).
- (d) For each excess emissions occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in 40 C.F.R. §63.10(e)(3)(v) in the compliance report specified in section a. of this condition.

(e) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

You must submit the report semiannually according to the requirements in 40 C.F.R. §60.10031(b) (condition 4.5.17.)

[40 C.F.R. §63.10031(a), Table 8, Item #1; 40 C.F.R. §§63.10031(c)(1) through (4) and (6) through (9); 40 C.F.R. §63.10031(d); 40 C.F.R. §63.10031(g); 40 C.F.R. §63.10021(i); 45CSR34; 45CSR14, R14-0007, 4.5.3.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.16.)

Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. §63.10(a), you must submit each report by the date in Table 8 to 40 C.F.R. 63 Subpart UUUUU and according to the requirements in paragraphs (1) through (5) of this condition.

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. §63.9984 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in 40 C.F.R. §63.9984.
- (2) The first compliance report must be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 C.F.R. §63.9984.
- (3) Each subsequent compliance report must cover the semiannual reporting period from January through June 30 or the semiannual reporting period from July 1 through December 31.
- (4) Each subsequent compliance report must be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (5) You may submit the first and subsequent compliance reports according to the dates in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.
- [40 C.F.R. §§63.10031(b)(1) through (5); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.17.)

You must report all deviations as defined in 40 C.F.R. 63 Subpart UUUUU in the semiannual monitoring report required by condition 3.5.6. If an affected source submits a compliance report pursuant to Table 8 to 40 C.F.R. 63 Subpart UUUUU (condition 4.5.16.) along with, or as part of, the semiannual monitoring report required by condition 3.5.6., and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in 40 C.F.R. 63 Subpart UUUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 C.F.R. §63.10031(e); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.18.)

As of January 1, 2012, and within 60 days after the date of completing each performance test, you must submit the results of the performance tests required by 40 C.F.R. 63 Subpart UUUUU according to 40 C.F.R. §63.10031(f).

- (1) On or after July 1, 2020, within 60 days after the date of completing each CEMS (SO₂, PM, HCl, HF, and Hg) performance evaluation test, as defined in 40 C.F.R. §63.2 and required by 40 C.F.R. 63 Subpart UUUUU, you must submit the relative accuracy test audit (RATA) data (or, for PM CEMS, RCA and RRA data) required by 40 C.F.R. 63 Subpart UUUUU according to 40 C.F.R. §63.10031(f)(1).
- (3) Reports for an SO₂ CEMS, a Hg CEMS or sorbent trap monitoring system, an HCl or HF CEMS, and any supporting monitors for such systems (such as a diluent or moisture monitor) shall be submitted using the ECMPS Client Tool, as provided for in Appendices A and B to 40 C.F.R. 63 Subpart UUUUU and 40 C.F.R. §63.10021(f) (condition 4.5.14.).

- after July 1, 2020, submit the compliance reports required (4) On under paragraphs (c) \$63.10031 (conditions 4.5.16.a.(1) through (4), and 4.5.16.d., respectively) and 40 C.F.R. the compliance status notification of required under 40 C.F.R. §63.10030(e) (condition 4.5.12.) electronically according to 40 C.F.R. §63.10031(f)(4).
- (5) All reports required by 40 C.F.R. 63 Subpart UUUUU not subject to the requirements in paragraphs (f) introductory text and (f)(1) through (4) of 40 C.F.R. §63.10031 (sub-conditions (1), (3), and (4) of this condition) must be sent to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. If acceptable to both the Administrator and the owner or operator of a source, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to paragraphs (f) introductory text and (f)(1), (2), and (3) of 40 C.F.R. §63.10031 in paper format.
- (6) Prior to July 1, 2020, all reports subject to electronic submissions in 40 C.F.R. §§63.10031(f) introductory text, (f)(1) and (4) shall be submitted to the EPA at the frequency specified in those paragraphs of 40 CFR §§63.10031(f) in electronic portable document format (PDF) using the ECMPS Client Tool. Each PDF version of a submitted report must include sufficient information to assess compliance and to demonstrate that the testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file:
 - The facility name, physical address, mailing address (if different from the physical address), and county;
 - (ii) The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID;
 - (iii) The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System;
 - (iv) If any of the EGUs in paragraph (6) iii. of this condition share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to part 75 of this chapter, report the ID number of the common stack as it is represented in the electronic monitoring plan required under §75.53 of this chapter;
 - (v) If any of the EGUs described in paragraph (6) iii. of this condition are in an averaging plan under \$63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90-day averaging plan;
 - (vi) The identification of each emission point to which the report applies. An "emission point" is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in paragraph (6) iii. of this condition or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (e.g., "Unit 2 stack," "common stack CS001," or "multiple stack MS001");
 - (vii) The rule citation (e.g., §63.10031(f)(1), §63.10031(f)(2), etc.) for which the report is showing compliance;
 - (viii) The pollutant(s) being addressed in the report;
 - (ix) The reporting period being covered by the report (if applicable);
 - (x) The relevant test method that was performed for a performance test (if applicable);
 - (xi) The date the performance test was conducted (if applicable); and
 - (xii) The responsible official's name, title, and phone number.

[40 C.F.R. §§ 63.10031(f), 63.10031(f)(1), 63.10031(f)(3), 63.10031(f)(4), 63.10031(f)(5), 63.10031(f)(6); 45CSR34; 45CSR14, R14-0007, 4.3.1., 4.3.2., 4.5.4., 4.5.5., and 4.5.6.] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.19.)

You must submit all of the notifications in 40 C.F.R. \\$63.7(b) and \\$63.7(c), and \\$63.8 (e), by the dates specified.

[40 C.F.R. §§ 63.10030(a); 45CSR34] (CFB Boilers S009J and S009K) This requirement is subject to the compliance date in condition 4.1.14. (Title V permit condition 4.5.20.)

Compliance Plan

| There | is | no | compliance | plan | since | a | responsible | official | certified | compliance | with | all | applicable | requirements |
|----------|------|--------|----------------|---------|----------|-----|--------------|----------|-----------|------------|------|-----|------------|--------------|
| in the r | enev | wal aj | pplication for | this Ti | tle V op | era | ting permit. | | | | | | | |

| Are you in compliance with all applicable requirements for this emission unit? | <u>✓</u> Yes | No |
|--|--------------|----|
|--|--------------|----|

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

| ATTACHMENT E - Emission Unit Form | | | | |
|--|--|---|--|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control dev | | |
| S009L and S009M | Sources for Stack 1: S009L is Auxiliary Boiler #1 S009M is Auxiliary Boiler #2 | Low NO _x Burners | | |
| Provide a description of the emission. The Emissions Units S009L and S009d designed to combust natural gas, and is mmBtu/hr and will produce steam at a occurs when the CFBs are off line, dur periods when the steam demand for W fluidized bed boilers and the auxiliary | M are the auxiliary boilers at the Morg s equipped with a low NO _X burner. Ea maximum rate of 85,000 lbs/hr. Norn ring the start up of the CFBs, or for tes est Virginia University requires the co | gantown Energy Facilich boiler has a design nally, operation of the ting purposes. Howev | ty. Each boiler is heat input of 132 boilers only er, there are | |
| Manufacturer: Zurn Industries | Model number: Keystone | Serial number: AUX #1: National Board # is 19482 AUX #2: National Board # is 19481 | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s | ;): | |
| Design Capacity (examples: furnace S009L is designed to produce 85,000 l S009M is designed to produce 85,000 | bs/hr of steam at 300 psi and 500°F. | | | |
| Maximum Hourly Throughput: S009L - 85,000 lbs/hr S009M - 85,000 lbs/hr | Maximum Annual Throughput: S009L – 744,600,000 lbs/yr S009M – 744,600,000 lbs/yr | Maximum Operating Schedule: 8760 hours per year (Typically less than 876 hours) | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | |
| Does this emission unit combust fuel? <u>✓</u> YesNo | | If yes, is it? | | |
| | | Indirect Fired | ✓ Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: The maximum design heat input for each boiler is 132 mmBtu/hr. | | Type and Btu/hr rating of burners: One Coen DAF-32 burner per boiler with a rating of 132 mmBtu/hr. (Low NO _x Burner) | | |
| List the primary fuel type(s) and if a the maximum hourly and annual fue. The fuel for the Auxiliary Boilers is N MCF/hr. Thus, each boiler would have operation in a year. Note that annual o typical fuel usage is much less than this | el usage for each. atural Gas. Each boiler can consume f e a maximum annual fuel usage of 1,13 perating time has not exceeded 811 ho | uel at a maximum hou 56,320 MCF based on | erly rate of 132 8760 hours of | |
| Describe each fuel expected to be use | ed during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| Natural Gas | 1.71 grains/MCF | ~ 0 | 1093 Btu/CF | |
| | | | | |
| | | | | |

| Emissions Data | | | |
|--|---------------------|------------------|--|
| Criteria Pollutants | Potential Emissions | | |
| | PPH | TPY ⁵ | |
| Carbon Monoxide (CO) ¹ | 10 | 43.8 | |
| Nitrogen Oxides (NO _X) ¹ | 50 | 219 | |
| Lead (Pb) ² | 0.000132 | 0.000578 | |
| Particulate Matter (PM _{2.5}) ³ | 2.006 | 8.79 | |
| Particulate Matter (PM ₁₀) ³ | 2.006 | 8.79 | |
| Total Particulate Matter (TSP) 1 | 1.2 | 5.26 | |
| Sulfur Dioxide (SO ₂) ¹ | 0.14 | 0.61 | |
| Volatile Organic Compounds (VOC) ¹ | 1.95 | 8.54 | |
| Hazardous Air Pollutants | Potential Emissions | | |
| | PPH | TPY | |
| Arsenic ² | 0.000053 | 0.000231 | |
| Beryllium ² | 0.000003 | 0.000014 | |
| Cadmium ² | 0.000290 | 0.001272 | |
| Chromium ² | 0.000370 | 0.001619 | |
| Cobalt ² | 0.000022 | 0.000097 | |
| Manganese ² | 0.000100 | 0.000439 | |
| Mercury ² | 0.000069 | 0.000301 | |
| Nickel ² | 0.000554 | 0.002428 | |
| Selenium ² | 0.000006 | 0.000028 | |
| Total Organic HAP ⁴ | 0.496320 | 2.17 | |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | | |
| | PPH | TPY | |
| N/A | N/A | N/A | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

¹PPH emissions based on permit limit.

⁵ TPY emissions based on 8,760 hours of operation per year.

² PPH emissions based on factors from AP-42 (5th Edition, 9/1998), Section 1.4, Table 1.4-4. Refer to Appendix 1. ³ PPH emissions based on factors from AP-42 (5th Edition, 9/1998), Section 1.4, Table 1.4-2 and include condensable particulate. Refer to Appendix 1.

⁴ PPH emissions based on summation of HAP factors from AP-42 (5th Edition, 7/1998), Section 1.4, Table 1.4-3. Refer to

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Limitations and Standards

Visible Emissions from each stack shall not exceed ten (10) percent opacity based on a six minute block average. Compliance with this streamlined limit ensures compliance with 40 C.F.R. §60.42Da(b) for the CFB boilers.

[45CSR§2-3.1.; 40 C.F.R. §60.42Da(b); 45CSR16; 45CSR14, R14-0007, 4.1.17.m.] (Title V permit condition 4.1.1)

The visible emission standards of condition 4.1.1., shall apply at all times except in periods of start-ups, shutdowns and malfunctions. [45CSR§2-9.1.] (Title V permit condition 4.1.3)

Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR§2-9.2., 45CSR16, 40 C.F.R. §60.11(d)] (Title V permit condition 4.1.4)

The following conditions and requirements are specific to the auxiliary boilers (ID S009L and S009M):

a. During those periods when neither of the two fluidized bed boilers are in operation but steam demand for the West Virginia University requires operation of either or both of the gas-fired auxiliary boilers, emission from the common stack shall not exceed the emission limits in Table 4.1.8.a.

| Pollutant | lbm/hr | lbm/mmBtu |
|----------------------------|--------|-----------------------|
| Particulate Matter | 1.20 | .0045 |
| Sulfur Dioxide | .14 | 5.3 x10 ⁻⁴ |
| Nitrogen Oxides | 50 | .189* |
| Volatile Organic Compounds | 1.95 | .0074 |
| Carbon Monoxide | 10 | .038 |

^{*}Emission limit shall be demonstrated on a 30-day rolling average basis [40 C.F.R. §60.44b(i)]

Compliance with these streamlined PM and SO_2 time-rate limits assures compliance with 45CSR§2-4.1.b. and 45CSR§10-3.3.f., respectively. Compliance with this streamlined NO_X heat-rate limit assures compliance with 40 C.F.R. \$60.44b(a)(1)(ii).

[45CSR14, R14-0007, 4.1.16.a.; 45CSR\$2-4.1.b.; 45CSR\$10- 3.3.f.; 40 C.F.R. \$60.44b(a)(1)(ii); 45CSR16] Title V permit condition 4.1.8.)

Compliance Date for 40 C.F.R. 63 Subpart DDDDD. If you have an existing boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016, except as provided in 40 C.F.R. §63.6(i). [40 C.F.R. §63.7495(b); 45CSR34] (Auxiliary Boilers S009L and S009M) (Title V permit condition 4.1.10.)

Annual Tune-up for 40 C.F.R. 63 Subpart DDDDD. If your unit is a new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater as specified in 40 C.F.R. §63.7540 (paragraphs (i) through (vi) of this condition). Units in the Gas 1 subcategory will conduct this tune-up as a work practice for all regulated emissions under 40 C.F.R. 63 Subpart DDDDD.

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (vi)(A) through (C) of this condition.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

You must conduct an annual performance tune-up according to \$63.7540(a)(10). Each annual tune-up specified in \$63.7540(a)(10) must be no more than 13 months after the previous tune-up.

If the unit is not operating on the required date for a tune-up, the tune up must be conducted within 30 calendar days of startup.

You must complete an initial tune-up by following the procedures described in paragraphs (i) through (vi) of this condition no later than the compliance date specified in 40 C.F.R.§63.7495(b) (condition 4.1.10.), except as specified in paragraph (j) of 40 C.F.R.§63.7510.

C.F.R. §63.7500(a)(1), Table 3, Item #3; 40 C.F.R. 63.7505(a), 63.7510(e), 63.7515(d), 63.7540(a)(10) and (a)(10)(i) through (vi), 63.7540(a)(13); 45CSR34; 45CSR14, R14-0007, 4.1.16.b.] (Auxiliary Boilers S009L and S009M) (Title V permit condition 4.1.11.)

One-time Energy Assessment for 40 C.F.R. 63 Subpart DDDDD. If your unit is an existing boiler or process heater located at a major source facility, not including limited use units, you must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Table 3 to 40 C.F.R. 63 Subpart DDDDD, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in applicable section (1) of the definition of *Energy assessment* in 40 C.F.R. §63.7575: The energy assessment for facilities with affected boilers and process heaters with a combined heat input capacity of less than 0.3 trillion Btu (TBtu) per year will be 8 onsite technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, process heat, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8- hour on-site energy assessment.

- (a) A visual inspection of the boiler or process heater system.
- (b) An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- (c) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- (d) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
- (e) A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
- (f) A list of cost-effective energy conservation measures that are within the facility's control.
- (g) A list of the energy savings potential of the energy conservation measures identified.
- (h) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

specified in You this condition compliance complete the one-time energy assessment no later than the date specified in 40 C.F.R. §63.7495(b) (condition 4.1.10.), except specified in paragraph 40 C.F.R. §63.7510.

[40 C.F.R. §63.7500(a)(1), Table 3, Item #4; 40 C.F.R. §§ 63.7505(a) and 63.7510(e); 45CSR34] (Auxiliary Boilers S009L and S009M) (Title V permit condition 4.1.12.)

At all times, you must operate and maintain any affected source (as defined in 40 C.F.R. §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance procedures, review of operation of the source.

[40 C.F.R. §63.7500(a)(3); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10. (Title V permit condition 4.1.13.)

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring Requirements

The owner or operator shall install, calibrate, certify, operate, maintain, and record the output of continuous monitoring systems that measure all Opacity, SO2, NOx, and O2 or CO2 emissions from emission point *Stack I* as specified in 40 C.F.R. Part 60, Subpart Da for the CFB boilers; and NOx as specified in 40 C.F.R. Part 60, Subpart Db for the auxiliary boilers. Alternatively, the SO2, NOX and O2 or CO2 CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 C.F.R. Part 75, provided that the relevant requirements of 40 CFR §\$60.49Da(b)(4), (c)(2), and (d) are met. Recordkeeping and reporting shall be conducted pursuant to Subparts F and G in 40 C.F.R. Part 75.

NOx CEMS: The NOx CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. For use of NOx CEMS used to demonstrate compliance for the auxiliary boilers (\$009L and S009M), the permittee shall also meet the requirements of 40 CFR §60.49b. Data reported to meet the requirements of 40 CFR \$60.49b for the auxiliary boilers shall not include data substituted using the missing data procedures in Subpart D of Part 75 of Chapter 40, nor shall the data have been bias adjusted according procedures of §60.48b(b)(2)] of Part Chapter 40. [40 C.F.R. 75 Diluent Monitor: The oxygen (O2) or carbon dioxide (CO2) content of the flue gas shall be monitored at the location where SO2 and NOx are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

i. If the permittee use an oxygen (O2) or carbon dioxide (CO2) CEMS to convert measured pollutant concentrations to the units of emissions limit in Condition 4.1.17., the O2 or CO2 concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the downstream of all emission control devices. The permittee must install, certify, maintain, operate the CEMS according to part 75 of this chapter. Use only quality-assured O2 or CO2 data in emissions calculations; do 75 substitute values. [40 C.F.R. §63.10010(b)] not use part data

Flow Monitor: The volumetric flow rate of the flue gas shall be monitored at the location where SO2 and NOx are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75. [40 C.F.R. §60.49Da(m)]

COMS: Exhaust gas opacity from Stack 1 shall be monitored using a continuous opacity monitoring system for the purpose of demonstrating compliance with Condition 4.1.1. The permittee shall install calibrate, maintain, and operate the COMS in accordance with Performance Specification (PS) 1 in 40 CFR Part 60, Appendix B. [40 C.F.R. §\$60.49Da(a) and (a)(1); 45CSR§2-8.2.a.1., and 45CSR§2A-6.2.]

[45CSR16; 40 C.F.R. § 60.49Da, 40 C.F.R. §60.48b, 40 C.F.R. §60.13; 45CSR13, R14-0007, 4.2.1., 4.2.1.a., 4.2.1.b., 4.2.1.c., 4.2.1.d., and 4.2.1.e.; 45CSR§10-8.2.c.1.; 40 C.F.R. §§ 64.3(a), 64.3(b), 64.3(d)(1), and 64.6(c)(1); 40 C.F.R. §§60.49Da(b)(4), (c)(2), and (d)]

Compliance with the visible emission requirements of 45CSR§2-3.1. (condition 4.1.1.) shall be determined in accordance with 40 *C.F.R.* Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems and as described in the approved monitoring plan. Compliance with the weight emission limit (4.1.7.) shall be demonstrated by periodic particulate matter stack testing (4.3.1. and 4.3.12.), conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. Such testing shall be conducted at a frequency to be established by the Director. [*Permit R13-1085/R14-7B serves as the approved monitoring plan.*]

[45CSR§\$2-3.2. and 8.1.a., 45CSR§2A-6] (Title V permit condition 4.2.2)

Compliance with the visible emissions limit (4.1.1.) shall be monitored as set forth in the approved monitoring plan for each emission unit. [Permit R13-1085/R14-7B serves as the approved monitoring plan.]

[45CSR§2-8.2.a.] (Title V permit condition 4.2.3)

Compliance with the nitrogen oxides emission limitations under condition 4.1.8. shall be demonstrated in accordance with 40 C.F.R. §60.8, 40 C.F.R. §60.46b, 40 C.F.R. §60.48b and 40 C.F.R. §60.49b. [45CSR§30-5.1.c.] (Title V permit condition 4.3.4.)

Compliance with the volatile organic compound emission limitation under conditions 4.1.8., and 4.1.9. shall be demonstrated in accordance with 40 C.F.R. 60, Appendix A - Method 25 or 25A.

[45CSR§30-5.1.c.] (Title V permit condition 4.3.5.)

Compliance with the carbon monoxide emission limitations under conditions 4.1.8., and 4.1.9. shall demonstrated in accordance with C.F.R. Appendix Α Method 10. [45CSR§30-5.1.c.] (Title V permit condition 4.3.6.)

Recordkeeping Requirements

Records of the operating schedule and quantity and quality of fuel consumed shall be maintained on site for each fuel burning unit and made available to the Director or his duly authorized representative upon request. Such records shall include, but not be limited to the date and time of start-up and shutdown and for:

- a. Pipeline quality natural gas, the quantity of fuel consumed on a monthly basis,
- o. Coal, ash and BTU analysis for each shipment and the quantity of fuel consumed on a daily basis.

[45CSR§2-8.3.c., 45CSR§2A-7.1.a.] (Title V permit condition 4.4.1)

Records of monitored data established in the monitoring plan shall be maintained on site and shall be made available to the Director or his duly authorized representative upon request.

[45CSR§2-8.3.a.] (Title V permit condition 4.4.2)

You must keep records according to paragraphs (1) and (2) of this condition.

- of each notification and report that you submitted comply 40 C.F.R. 63 Subpart (1) A copy to with supporting DDDDDD, including all documentation Initial Notification Notification any or of according the Compliance Status or semiannual compliance report that submitted. you requirements in 40 C.F.R. §63.10(b)(2)(xiv).
- (2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).
- [40 C.F.R. §63.7555(a); 45CSR34] (Auxiliary Boilers S009L and S009M) This requirement is subject to the compliance date in condition 4.1.10. (Title V permit condition 4.4.5.)

and must maintain records of the calendar date, time, occurrence duration of each startup and shutdown §63.7555(i); 45CSR341 S009L **[40**] C.F.R. (Auxiliary Boilers and S009M) This is subject reauirement the compliance date in condition 4.1.10. (Title V permit condition 4.4.6.)

maintain records of the type(s) and amount(s) of fuels used during startup shutdown §63.7555(j); 45CSR34] (Auxiliary **Boilers** S009L **[40**] S009M) C.F.R. This and requirement subject the compliance date in condition 4.1.10. (Title V permit condition 4.4.7.)

Format and Retention of Records for 40 C.F.R. 63 Subparts DDDDD and UUUUU

- (a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- example, You must keep each record on site, or they must be accessible from site through on (for network), for least 2 years after the date of each occurrence, measurement, maintenance, computer at §63.10(b)(1). corrective report. record. according to 40 C.F.R. You keep the records action. or can off site for the remaining 3 years.
- [40 C.F.R. §§63.7560(a), (b), and 45CSR34] (Auxiliary **Boilers** and S009M) This requirement (c); condition subject to the compliance date in 4.1.10. [40 C.F.R. §§63.10033(a), (b), and (c); 45CSR34] (CFB **Boilers** S009.I and S009K) This reauirement subject to the compliance date in condition 4.1.14. (Title V permit condition 4.4.8.)

The permittee shall record and maintain records as specified in the following for the two auxiliary boilers:

- (a) The amount of natural gas combusted during each day and calculate the annual capacity factor. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
- (b) All records shall be maintained in accordance with Condition 3.4.2.

[40 C.F.R. §60.49b(d)(1); 45CSR16; 45CSR14, R14-0007, 4.4.6.] (Title V permit condition 4.4.18.)

Reporting Requirements

Compliance with the periodic exception reporting of permit condition 4.5.5. shall be demonstrated by quarterly reports in accordance with 40 C.F.R. §60.7(c).

[45CSR16, 40 C.F.R. §60.7] (Title V permit condition 4.5.2)

Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

- a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and
- b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.] (Title V permit condition 4.5.3)

A periodic exception report shall be submitted to the Director, in a manner and at a frequency to be established by the Director. [45CSR§2-8.3.b.] (Title V permit condition 4.5.5)

Are you in compliance with all applicable requirements for this emission unit?

Yes ____No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form Emission Unit Description Emission unit ID number: Emission unit name: List any control devices associated with this emission unit: S009J-K and S009L-M Sources for Stack 1: (Combined Operation of CFB and AUX S009J is CFB #1 Boiler/Cyclone #1 Baghouses 7 & 8 / Low NO_x Burners Boilers) S009K is CFB #2 Boiler/Cyclone #2 S009L is Auxiliary Boiler #1 S009M is Auxiliary Boiler #2 Provide a description of the emission unit (type, method of operation, design parameters, etc.): Occasionally, combined operation of the CFB and AUX Boilers will occur due to high steam flow demands from West Virginia University. Otherwise, combined operation only occurs during the start up of the CFB Boilers after they have been off line. See Attachment E for S009J-K for specific CFB Boiler information. See Attachment E for S009L-M for specific AUX Boiler information. Model number: Serial number: Manufacturer: **Construction date: Installation date: Modification date(s):** 1989 1989 Design Capacity (examples: furnaces - tons/hr, tanks - gallons): See Attachment E for S009J-K for specific CFB Boiler information. See Attachment E for S009L-M for specific AUX Boiler information. **Maximum Hourly Throughput: Maximum Annual Throughput: Maximum Operating Schedule:** See Attachment E for S009J-K for See Attachment E for S009J-K for 8760 hours per year specific CFB Boiler information. specific CFB Boiler information. (Typically less than 876 hours) See Attachment E for S009L-M for See Attachment E for S009L-M specific AUX Boiler information. for specific AUX Boiler information. Fuel Usage Data (fill out all applicable fields) Does this emission unit combust fuel? ✓ Yes ___No If yes, is it? Indirect Fired ✓ Direct Fired Maximum design heat input and/or maximum horsepower rating: Type and Btu/hr rating of burners: See Attachment E for S009J-K for specific CFB Boiler information. See Attachment E for S009L-M for specific AUX Boiler information List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. See Attachment E for S009J-K for specific CFB Boiler information. See Attachment E for S009L-M for specific AUX Boiler information. Describe each fuel expected to be used during the term of the permit. Max. Sulfur Content Max. Ash Content Fuel Type BTU Value Blended Fuel (as received) (CFBs) 3.5% 51.7% 7775 Btu/lb 1.71 grains/MCF ~ 0 1093 Btu/CF Natural Gas (AUXs)

| Potential Emissions | |
|---------------------|---|
| PPH | TPY |
| 127.5 | 558.45 |
| 300 | 1,314 |
| 0.13 | 0.57 |
| 17.0 | 74.49 |
| 18.4 | 80.73 |
| 22.5 | 98.55 |
| 285 | 1,248 |
| 7.5 | 32.85 |
| Pote | ntial Emissions |
| РРН | TPY |
| 5.475 | 24.0 |
| 0.4 | 1.8 |
| 0.001125 | 0.0049 |
| 0.002 | 0.0088 |
| 0.0002 | 0.0009 |
| 0.000402 | 0.0018 |
| 0.001322 | 0.0058 |
| 0.000172 | 0.0008 |
| 0.002170 | 0.0095 |
| 0.021 | 0.0920 |
| 0.001097 | 0.0048 |
| 0.000357 | 0.0016 |
| 0.927 | 4.1 |
| Pote | ntial Emissions |
| PPH | TPY |
| 0.0009 | 0.0039 |
| | PPH 127.5 300 0.13 17.0 18.4 22.5 285 7.5 Pote: PPH 5.475 0.4 0.001125 0.002 0.0002 0.000402 0.000402 0.000172 0.002170 0.021 0.001097 0.000357 0.927 Pote: PPH |

¹ PPH emissions based on permit limit. TPY emission = PPH x 8760 hrs/yr

² PPH emissions = PPH_{CFB} + PPH_{AUX} (values obtained from Emission Unit Forms for Units S009J-K and S009L-M) TPY emissions = TPY_{CFB} + TPY_{AUX} (values obtained from Emission Unit Forms for Units S009J-K and S009L-M)

| Applicable Requirements |
|--|
| List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included. |
| See Attachment E for S009J &K and S009L&M for Limitations and Standards Requirements, Recordkeeping and Reporting Requirements which also apply when the sources are operating together. |
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| ✓ Permit Shield |

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | |
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| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo | | |
| | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F. | | |

| ATTACHMENT E - Emission Unit Form | | | |
|--|---|--|-------------------|
| Emission Unit Description | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated with this emission unit: Pneumatic Conveying System 2/ Baghouses 7 & 8/ Enclosed System 7 | |
| S009A thru S009H | Sources for Stack 1 (The units provide Fuel and Limestone to the CFBs) | | |
| Provide a description of the emission The Emission Units S009A thru S009I limestone is used to control SO ₂ emiss and CFB #2 for combustion. | D pneumatically conveys limestone to | CFB #1 and CFB #2 fo | or injection. The |
| Manufacturer: NA | Model number: NA | Serial number: NA | . |
| Construction date: 1989 | Installation date: 1989 | Modification date(s) | : NA |
| Design Capacity (examples: furnace S009A-D have a design capacity of 10 S009E-H have a design capacity of 46 | TPH/unit | <u> </u> | |
| Maximum Hourly Throughput: S009A-D - 10 TPH/unit S009E-H - 46 TPH/unit | Maximum Annual Throughput: S009A-D - 87,600 TPY S009E-H - 402,960 TPY | Maximum Operating Schedule: 8760 hours per year | |
| Fuel Usage Data (fill out all applicat | ole fields) | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | |
| | | Indirect Fired | Direct Fired |
| $\begin{tabular}{ll} \textbf{Maximum design heat input and/or maximum horsepower rating:} \\ N/A \end{tabular}$ | | Type and Btu/hr rating of burners: N/A | |
| List the primary fuel type(s) and if a the maximum hourly and annual fue N/A | | s). For each fuel type li | isted, provide |
| Describe each fuel expected to be us | ed during the term of the permit. | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | N/A | N/A | N/A |
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| Criteria Pollutants | Potential | Emissions |
|---|-----------|-----------|
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _X) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | 0.175 | 0.77 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential | Emissions |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| Regulated Pollutants other than | Potential | Emissions |
| Criteria and HAP | PPH | TPY |
| N/A | N/A | N/A |
| | | |

See Emission Calculations in Attachment I

| Applicable Requirements |
|--|
| List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included. |
| |
| No emissions unit-specific applicable requirements for this source. |
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| ✓ Permit Shield |
| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
| |
| No emissions unit-specific testing, recordkeeping, reporting requirements for this source. |
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| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo |
| |

| ATTACHMENT E - Emission Unit Form | | | | |
|--|---|--|--|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated with this emission unit: | | |
| S00F1 thru S00F14 | Sources for Fugitive Emissions 1 thru 14 | Building Enclosure 1 System 1/ Water Spra | | |
| Provide a description of the emission. The Emission Units S00F1 thru S00F3 and Vibratory Feeder 1 (S00F3). The 1 truck to the Fuel Unloading Hopper 2 S00F10 transfers coal or gob from Vibror gob to Elevating Conveyor 1 (S00F spillage, [via the Dribble Chute 1 (S00F Conveyor (S00F13-14)], and returns the | transfers coal or gob from the truck to Emission Units S00F4 thru S00F6 trans (S00F5) and Vibratory Feeder 2 (S00I tratory Feeders 1 & 2 to the Transfer C10). The Emission Units S00F11 thru F11), the Dribble Chute Catch Bin (S0 | o the Fuel Unloading Fusfers coal or gob (waster). The Emission Unit conveyor 1 (S00F9) when S00F14 catches coal/g00F12), and the Dribbl | Hopper 1 (S00F2) the coal) from the ss S00F7 thru ich transfers coal ob transfer | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s) |): | |
| Design Capacity (examples: furnace S00F1-8 have a design capacity of 250 S00F9-10 have a design capacity of 50 S00F11-14 the design capacity for the | O TPH/unit OO TPH/unit | | | |
| Maximum Hourly Throughput: S00F1-8 – 250 TPH/unit S00F9-10 - 500 TPH/unit S00F11-14 - N/A | Maximum Annual Throughput: \$00F1-8 - 2,190,000 TPY \$00F9-10 - 4,380,000 TPY \$00F11-14 - N/A | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicable fields) | | | | |
| Does this emission unit combust fuel?Yes ✓ No If yes, is it? | | | | |
| | | Indirect FiredDirect Fired | | |
| $\label{eq:maximum horsepower rating: N/A} \begin{picture}(20,2) \put(0,0){\line(1,0){100}} \put(0,$ | | Type and Btu/hr rating of burners: N/A | | |
| List the primary fuel type(s) and if a the maximum hourly and annual fue N/A | |). For each fuel type l | isted, provide | |
| Describe each fuel expected to be used during the term of the permit. | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |
| | | | | |
| | | | | |

| Criteria Pollutants | Potential Emissions | |
|---|---------------------|-----------|
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _X) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | 0.0009 | 0.0041 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential | Emissions |
| | РРН | TPY |
| N/A | N/A | N/A |
| | | |
| Regulated Pollutants other than | Potential Emissions | |
| Criteria and HAP | РРН | TPY |
| N/A | N/A | N/A |
| | | |

See Emission Calculations in Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | 0.0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | 0.099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | 0.014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | 0.027 |
| One Limestone Day Bin | Baghouse | 0.005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| ✓ | Permit Shield | | |
|---|---------------|--|--|
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Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | .0002 |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS): (1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. Title V permit condition 5.3.1.)

| be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
|--|
| Recordkeeping Requirements |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) |
| Reporting Requirements |
| Reserved (Title V permit condition 5.5.1.) |
| Compliance Plan |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) |
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| |
| Are you in compliance with all applicable requirements for this emission unit?YesNo |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F. |
| |

 $For all \ applicable \ requirements \ listed \ above, provide \ monitoring/testing/record keeping/reporting \ which \ shall$

| ATTACHMENT E - Emission Unit Form | | | | | |
|--|--|-------------------------------------|----------------|--|--|
| Emission Unit Description | | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated | | | |
| S00F15 and S00F16 | Sources for Fugitive Emissions 15 & 16 | with this emission u | mit: | | |
| Provide a description of the emission The Emission Units S00F15 and S00F Emergency Mill Feed System Hopper situation. | 16 handle the transfer of pre-blended | fuel from a Front End | Loader to the | | |
| Manufacturer: | Model number: | Serial number: | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s |): | | |
| Design Capacity (examples: furnace S00F15-16 have a design capacity of 6 | | | | | |
| Maximum Hourly Throughput: S00F15-16 – 60 TPH/unit | | | | | |
| Fuel Usage Data (fill out all applicat | ole fields) | , | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | | |
| | | Indirect Fired | Direct Fired | | |
| Maximum design heat input and/or maximum horsepower rating: N/A Type and Btu/hr rating of burner N/A | | | | | |
| List the primary fuel type(s) and if a the maximum hourly and annual fue N/A | |). For each fuel type l | isted, provide | | |
| D | .]] | | | | |
| Describe each fuel expected to be use Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | |
| N/A | N/A | N/A | N/A | | |
| - V.* * | | 2.772 | 2 1/4 2 | | |
| | | | | | |

| Emissions Data | | |
|---|----------|-------------|
| Criteria Pollutants | Potentia | l Emissions |
| | PPH | TPY |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _X) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | 0 | 0 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potentia | l Emissions |
| | РРН | TPY |
| N/A | N/A | N/A |
| | | |
| Regulated Pollutants other than | Potentia | l Emissions |
| Criteria and HAP | PPH | TPY |
| N/A | N/A | N/A |

See Emission Calculations in Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | 0.0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | 0.099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | 0.014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | 0.027 |
| One Limestone Day Bin | Baghouse | 0.005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

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| Permit Shield | | | |

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | .0002 |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

[45CSR§30-5.1.c.]

| Note: | The | term | "Affected | Facility" | used | in | this | permit | means | any | of | the | following | (NSPS | or | non-NSPS) |
|--------|------|------|-----------|-----------|------|-------|------|--------|-------|-----|----|-----|-----------|-------|----|-----------|
| (1) C- | -1 D | : | 1 | : : : | 4 (: | -1 1: | 1 | 1 | .11 | \ | | | | | | |

(1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. (Title V permit condition 5.3.1.)

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
|--|
| Recordkeeping Requirements |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) |
| Reporting Requirements |
| Reserved (Title V permit condition 5.5.1.) |
| Compliance Plan |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) |
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| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . |
| |

| ATTACHMENT E - Emission Unit Form | | | | | | | | |
|---|--|---|-----------------------------|--|--|--|--|--|
| Emission Unit Description | | | | | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated | | | | | | |
| S00F17 thru S00F18 and S00F21 thru S00F25 | Sources for Fugitive Emissions 17, 18, and 21 thru 25 | with this emission u N/A | ınit: | | | | | |
| Note: S00F19-20 are no longer used | | | | | | | | |
| Provide a description of the emission The Emission Units S00F17 and S00F Treatment in the Demineralizer Trains Storage Tanks used for the Turbine Gethat contain Phosphate, Corrosion Inhi | 18 are the Acid and Caustic Storage T The Emission Units S00F21 and S00 merator. The Emission Units S00F23 t | anks which are used for F22 are the Turbine C | or Water oil and EHC Oil | | | | | |
| Manufacturer: | Model number: | Serial number: | | | | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s |): | | | | | |
| S00F17-18 have a design capacity of 5 S00F21 has a design capacity of 2378 S00F22 has a design capacity of 105 g | Design Capacity (examples: furnaces - tons/hr, tanks - gallons): S00F17-18 have a design capacity of 5800 gal./unit S00F21 has a design capacity of 2378 gal. S00F22 has a design capacity of 105 gal. S00F23 has a design capacity of 1600 gal. | | | | | | | |
| $\label{eq:maximum Hourly Throughput: N/A} Maximum Hourly Throughput: N/A$ | | | | | | | | |
| Fuel Usage Data (fill out all applicab | ele fields) | | | | | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | | | | | |
| | | Indirect Fired | Direct Fired | | | | | |
| | | | | | | | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | | | | | | |
| Describe each fuel expected to be use | ed during the term of the permit. | | | | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | | | | |
| N/A | N/A | N/A | N/A | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Emissions Data | | | | |
|---|---------------------|---------------------|--|--|
| Criteria Pollutants | Potential | Emissions | | |
| | PPH | TPY | | |
| Carbon Monoxide (CO) | N/A | N/A | | |
| Nitrogen Oxides (NO _X) | N/A | N/A | | |
| Lead (Pb) | N/A | N/A | | |
| Particulate Matter (PM _{2.5}) | N/A | N/A | | |
| Particulate Matter (PM ₁₀) | N/A | N/A | | |
| Total Particulate Matter (TSP) | N/A | N/A | | |
| Sulfur Dioxide (SO ₂) | N/A | N/A | | |
| Volatile Organic Compounds (VOC) | N/A | N/A | | |
| Hazardous Air Pollutants | Potential Emissions | | | |
| | PPH | TPY | | |
| N/A | N/A | N/A | | |
| | | | | |
| Regulated Pollutants other than | Potential | Potential Emissions | | |
| Criteria and HAP | РРН | TPY | | |
| N/A | N/A | N/A | | |

See Emission Calculations in Appendix A

| Applicable Requirements |
|--|
| List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included. |
| No emissions unit-specific applicable requirements for this source. |
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| ✓ Permit Shield |
| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
| No emissions unit-specific testing, recordkeeping, reporting requirements for this source. |
| |
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| |
| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo |

| AT | TACHMENT E - Emission Un | it Form | | | |
|--|---|--|------------------|--|--|
| Emission Unit Description | | | | | |
| Emission unit ID number: S00F26 | Emission unit name: Source for Fugitive Emissions 26 | List any control devices associated with this emission unit: Paved/Water Cleaning | | | |
| | on unit (type, method of operation, de paved roadways areas around the faci | | | | |
| Manufacturer: | Model number: | Serial number: | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s) |): | | |
| Design Capacity (examples: furnac S00F26 design capacity is N/A | res - tons/hr, tanks - gallons): | | | | |
| Maximum Hourly Throughput: N/A | Maximum Annual Throughput: N/A | Maximum Operatin 4848 hours per year | g Schedule: | | |
| Fuel Usage Data (fill out all applica | able fields) | | | | |
| Does this emission unit combust fu | el?Yes <u>✓</u> No | If yes, is it? | | | |
| | | Indirect Fired | Direct Fired | | |
| $\label{eq:maximum design heat input and/one} \begin{tabular}{ll} Maximum design heat input and/one N/A \end{tabular}$ | r maximum horsepower rating: | Type and Btu/hr rat N/A | ting of burners: | | |
| List the primary fuel type(s) and if the maximum hourly and annual for N/A | applicable, the secondary fuel type(suel usage for each. | s). For each fuel type l | isted, provide | | |
| Describe each fuel expected to be u | sed during the term of the permit. | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | |
| N/A | N/A | N/A | N/A | | |
| | | | | | |
| | | | | | |

| Criteria Pollutants | Potential Emissions | | |
|--|---------------------|-----------|--|
| | РРН | TPY | |
| Carbon Monoxide (CO) | N/A | N/A | |
| itrogen Oxides (NO _X) | N/A | N/A | |
| ead (Pb) | N/A | N/A | |
| Particulate Matter (PM _{2.5}) | N/A | N/A | |
| articulate Matter (PM ₁₀) | N/A | N/A | |
| Fotal Particulate Matter (TSP) | 0.015 | 0.069 | |
| Sulfur Dioxide (SO ₂) | N/A | N/A | |
| Volatile Organic Compounds (VOC) | N/A | N/A | |
| Hazardous Air Pollutants | Potential Emissions | | |
| | РРН | TPY | |
| N/A | N/A | N/A | |
| | | | |
| Regulated Pollutants other than Criteria and HAP | Potential | Emissions | |
| Cincila and HAI | PPH | TPY | |
| V/A | N/A | N/A | |

See Emission Calculations in Appendix A

| Applicable Requirements |
|--|
| List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included. |
| All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed. [5CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.) |
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| |
| <u>✓</u> Permit Shield |
| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
| There are no emissions unit-specific monitoring, testing, recordkeeping or reporting requirements for this emissions unit. |
| |
| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo |
| If no complete the Schedule of Compliance Form as ATTACHMENT F |

| ATTACHMENT E - Emission Unit Form | | | | |
|---|---|--|------------------|--|
| Emission Unit Description | | | | |
| Emission unit ID number: Emission unit name: List any control d | | | | |
| S001A thru S002B | Sources for Vent 1 & Vent 2 | with this emission u | | |
| | | Enclosed System 1/E | sagnouse 1 & 2 | |
| Provide a description of the emission The Emission Units S001A thru S002E and emergency situation, S001A (Elev S001F (Emergency Bypass Conveyor) | B moves coal and gob to the respective ating Conveyor #1) can transfer pre-s: | e silos with the excepti ized and pre-blended f | on of S001F. In | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): 2001 for S001F and S002B | | |
| Design Capacity (examples: furnace S001A-D & S002A have a design capa S001F has a design capacity of 120 TF S001E & S002B have a design capacit | acity of 500 TPH/unit PH/unit | | | |
| Maximum Hourly Throughput: S001A-D & S002A – 500 TPH/unit S001F – 120 TPH/unit S001E & S002B – 2100 tons each | Maximum Annual Throughput: S001A-D & S002A – 4,380,000 TPY S001F – 1,051,200 TPY S001E & S002B – 4,380,000 TPY | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | |
| | | Indirect Fired | Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: N/A Type and Btu/hr rating of b N/A | | | ting of burners: | |
| List the primary fuel type(s) and if a the maximum hourly and annual fue N/A | |). For each fuel type | isted, provide | |
| Describe each fuel expected to be use | ed during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |
| | | | | |
| | | | | |

| Potential Emissions | | | |
|---------------------|---|--|--|
| PPH ¹ | TPY ² | | |
| N/A | N/A | | |
| 0.0002 | 0.0009 | | |
| N/A | N/A | | |
| N/A | N/A | | |
| Potential | tial Emissions | | |
| РРН | TPY | | |
| N/A | N/A | | |
| | | | |
| | | | |
| | | | |
| Potential Emissions | | | |
| РРН | TPY | | |
| N/A | N/A | | |
| | | | |
| | | | |
| | PPH¹ N/A N/A N/A N/A N/A N/A N/A 0.0002 N/A N/A Potentia PPH N/A Potentia | | |

¹ PPH emissions based on permit limit.

 $^{^2\,\}text{TPY}$ emissions = (PPH permit limit x 8760 hr/yr) \div 2000 lb/ton

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | 0.0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | 0.099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | 0.014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | 0.027 |
| One Limestone Day Bin | Baghouse | 0.005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| Permit Shield | | | |
|-------------------|--|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | .0002 |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5):*

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS):

(1) Coal Processing and conveying equipment (including breakers and crushers)
(2) Coal Storage Systems.
(3) Coal Transfer and Loading Systems.
(Title V permit condition 5.3.1.)

| be used to demonstrate compliance. If the method is ba or citation. (Note: Each requirement listed above must compliance. If there is not already a required method in | sed on a per have an asso | mit or rule, i ociated meth | include th od of den | e condition onstrating | number |
|---|---|--|----------------------------------|--|---------------------------|
| Recordkeeping Requirements | | | | | |
| A record of each visible emissions observation shall be C.F.R. Part 60 Appendix A, Method 9. The record sharmission unit, the applicable visible emissions requirement observer. Records shall state any maintenance or inspections, and the times the fugitive dust control system(s) are in [45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | all include, a nent, the res c corrective | at a minimum sults of the actions take | m, the da observati n as a | ate, time, i on, and the result of | name of the ne name of |
| Reporting Requirements | | | | | |
| Reserved (Title V permit condition 5.5.1.) | | | | | |
| Compliance Plan | | | | | |
| There is no compliance plan since a responsible officing the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | cial certified | compliance | with all | applicable | requirements |
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| Are you in compliance with all applicable requirements | s for this em | ission unit? | ✓ Yes | No | |
| If no, complete the $\boldsymbol{Schedule}$ of $\boldsymbol{Compliance}$ Form as \boldsymbol{AT} | TACHMEN | TF. | | | |

| ATTACHMENT E - Emission Unit Form | | | | |
|--|---|--|--|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control dev | | |
| S003A thru S003K | Sources for Vent 3 | with this emission u | | |
| | | Enclosed System 2 / | Bagnouse 3 | |
| Provide a description of the emission. The Emission Units S003A-F and S000 either the Grinding Mill (S003J) or the Emission Units S003G-I will allow us Hammer Mill (S003K) for sizing. All (Emergency Mill Feed System Hopper | 3J-K move coal and gob from their rest Hammer Mill (S003K) to create blend to move pre-blended fuel directly to the items in this set of emissions units are | spective silos to in pro ded fuel. In an emerge ne Grinding Mill (S00 enclosed except for S | per proportions to ncy situation, 3J) or the | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): 2001 for S003D | | |
| Design Capacity (examples: furnaces S003A-I and S003K have a design cap S003J has design capacity of 60 TPH of | acity of 60 TPH/unit | | | |
| Maximum Hourly Throughput: S003A-I & S003K – 60 TPH/unit S003J – 60 TPH or 90 TPH | Maximum Annual Throughput: S003A-I & S003K – 525,600 TPY S003J – 525,600 TPY, 788,400 TPY | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | |
| | | Indirect Fired | Direct Fired | |
| Maximum design heat input and/or maximum horsepower rating: N/A Type and Btu/hr rating of burners N/A | | | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. | | | | |
| Describe each fuel expected to be used during the term of the permit. | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |
| | | | | |
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| Emissions Data | | |
|---|---------------------|------------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH ¹ | TPY ² |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _X) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | 0.099 | 0.43 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | РРН | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| | | |
| Regulated Pollutants other than | Potentia | al Emissions |
| Criteria and HAP | РРН | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| N/A | | |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|---|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | 0.0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | 0.0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | 0.099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | 0.014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | 0.027 |
| One Limestone Day Bin | Baghouse | 0.005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| <u>✓</u> | Permit Shield | | | |
|----------|---------------|--|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from entire system shall be controlled as specified with maximum particulate emissions not to exceed following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr | | |
|---|--|---|--|--|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 | | |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 | | |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 | | |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | | | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or

[45CSR14, R14-0007, 3.1.9.; 45CSR\$2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" Baghouse Vents (Vents 1-5):

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility. [45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS):

- (1) Coal Processing and conveying equipment (including breakers and crushers)
- (2) Coal Storage Systems.
- (3) Coal Transfer and Loading Systems.

(Title V permit condition 5.3.1.)

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | | | |
|---|--|--|--|--|
| Recordkeeping Requirements | | | | |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | | | | |
| Reporting Requirements | | | | |
| Reserved (Title V permit condition 5.5.1.) | | | | |
| Compliance Plan | | | | |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | | | | |
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| Are you in compliance with all applicable requirements for this emission unit?YesNo | | | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . | | | | |
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| ATTACHMENT E - Emission Unit Form | | | | |
|---|--|---|----------------------------|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control dev | | |
| S004A thru S004G | Sources for Vent 4 | Enclosed System 3/I | Baghouse 4 | |
| Provide a description of the emission Emission Units S001A-B and S004D- Emission Unit S004C transfers Baghous S004F transfers Baghouse 3 dust to the units is enclosed. | E move blended fuel to S004G (Elevature 4 dust to the Mill Collecting Convo | ting Conveyor #2—Bo eyor (S004D), and Em | ottomHalf). ission Unit | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): 2001 for S004D & S004G | | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): S004A has a design capacity of 60 TPH or 90 TPH S004B has a design capacity of 60 TPH S004C has an estimated design capacity of 5 TPH S004D-E and S004G have a design capacity of 120 TPH/unit S004F has a design capacity of 12 TPH | | | | |
| Maximum Hourly Throughput: S004A - 60 TPH, 90 TPH S004B - 60 TPH S004C - 5 TPH S004D-E & S004G - 120 TPH/unit S004F - 12 TPH | Maximum Annual Throughput: S004A – 525,600 tpy, 788,400 tpy S004B – 525,600 tpy S004C - 43,800 tpy S004D-E, S004G – 1,051,200 tpy S004F – 105,120 tpy | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicate | ole fields) | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | |
| | | Indirect FiredDirect Fired | | |
| $\label{eq:maximum design heat input and/or N/A} Maximum design heat input and/or N/A$ | Type and Btu/hr ra | ting of burners: | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | | |
| Describe each fuel expected to be us | | | D | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |

| Emissions Data | | | |
|---|---------------------|------------------|--|
| Criteria Pollutants | Potential Emissions | | |
| | PPH ¹ | TPY ² | |
| Carbon Monoxide (CO) | N/A | N/A | |
| Nitrogen Oxides (NO _X) | N/A | N/A | |
| Lead (Pb) | N/A | N/A | |
| Particulate Matter (PM _{2.5}) | N/A | N/A | |
| Particulate Matter (PM ₁₀) | N/A | N/A | |
| Total Particulate Matter (TSP) | 0.0002 | 0.0009 | |
| Sulfur Dioxide (SO ₂) | N/A | N/A | |
| Volatile Organic Compounds (VOC) | N/A | N/A | |
| Hazardous Air Pollutants | Potential | al Emissions | |
| | PPH | TPY | |
| N/A | N/A | N/A | |
| | | | |
| | | | |
| | | | |
| Regulated Pollutants other than | Potential | Emissions | |
| Criteria and HAP | РРН | TPY | |
| N/A | N/A | N/A | |
| | | | |
| | | | |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|---|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from entire system shall be controlled as specified with maximum particulate emissions not to exceed following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or

[45CSR14, R14-0007, 3.1.9.; 45CSR\$2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" Baghouse Vents (Vents 1-5):

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS): (1) Coal Processing and conveying equipment (including breakers and crushers)

- (2) Coal Storage Systems.
- (3) Coal Transfer and Loading Systems.

(Title V permit condition 5.3.1.)

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | | | |
|---|--|--|--|--|
| Recordkeeping Requirements | | | | |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | | | | |
| Reporting Requirements | | | | |
| Reserved (Title V permit condition 5.5.1.) | | | | |
| Compliance Plan | | | | |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | | | | |
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| | | | | |
| Are you in compliance with all applicable requirements for this emission unit? // Voc. No. | | | | |
| Are you in compliance with all applicable requirements for this emission unit? YesNo | | | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . | | | | |

| ATTACHMENT E - Emission Unit Form | | | | |
|--|--|--|------------------|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated with this emission unit: | | |
| S005A thru S005F | Sources for Vent 5 | Enclosed System 4/I | | |
| Provide a description of the emission The Emission Units in this group trans conveyor in this set of emissions units | fer blended fuel to indoor Fuel Bin 1 | | | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): 2001 for S005F | | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): S005A-C and S005F have a design capacity of 120 TPH/unit S005D-E have a design capacity of 375 tons each | | | | |
| Maximum Hourly Throughput: S005A-C & S005F - 120 TPH/unit S005D-E - 375 tons | Maximum Annual Throughput: S005A-C & S005F – 1,051,200 TPY S005D-E – 1,051,200 TPY | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | |
| Does this emission unit combust fuel?Yes ✓_No If yes, is it? | | | | |
| | | Indirect Fired | Direct Fired | |
| $\label{eq:maximum horsepower rating: N/A} \begin{tabular}{l} Maximum design heat input and/or maximum horsepower rating: N/A \\ \end{tabular}$ | | Type and Btu/hr ra | ting of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $N\!/A$ | | | | |
| Describe each fuel expected to be used during the term of the permit. | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |
| | | | | |
| | | | 1 | |

| Emissions Data | | |
|---|---------------------|------------------|
| Criteria Pollutants | Potential Emissions | |
| | PPH ¹ | TPY ² |
| Carbon Monoxide (CO) | N/A | N/A |
| Nitrogen Oxides (NO _X) | N/A | N/A |
| Lead (Pb) | N/A | N/A |
| Particulate Matter (PM _{2.5}) | N/A | N/A |
| Particulate Matter (PM ₁₀) | N/A | N/A |
| Total Particulate Matter (TSP) | 0.0002 | 0.0009 |
| Sulfur Dioxide (SO ₂) | N/A | N/A |
| Volatile Organic Compounds (VOC) | N/A | N/A |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |
| | | |
| Regulated Pollutants other than | Potential | l Emissions |
| Criteria and HAP | PPH | TPY |
| N/A | N/A | N/A |
| | | |
| | | |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| Permit Shield | | | |
|-------------------|--|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS): (1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. Title V permit condition 5.3.1.)

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
|--|
| Recordkeeping Requirements |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. [45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) |
| Reporting Requirements |
| Reserved (Title V permit condition 5.5.1.) |
| Compliance Plan |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) |
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| Are you in compliance with all applicable requirements for this emission unit? No |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . |
| |

| ATTACHMENT E - Emission Unit Form | | | |
|--|---|--|------------------|
| Emission Unit Description | | | |
| Emission unit ID number: S006A thru S006D | Emission unit name: Sources for Vent 6 | List any control devices associated with this emission unit: Building Enclosure 2/Baghouse 6 | |
| Provide a description of the emission The Emission Units S006A thru S006I (S006C) and Unloading Hopper 2 (S00 | D handles transfer of limestone from t | | |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s) |): |
| Design Capacity (examples: furnace S006A-B have a design capacity of 37 S006C-D have a design capacity of 75 | .5 TPH/unit | | |
| Maximum Hourly Throughput: S006A-B – 37.5 TPH/unit S006C-D – 75 TPY/unit | Maximum Annual Throughput: S006A-B – 328,500 TPY S006C-D – 657,000 TPY | Maximum Operating Schedule: 8760 hours per year | |
| Fuel Usage Data (fill out all applicate | ole fields) | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> _No | If yes, is it? | |
| | | Indirect Fired | Direct Fired |
| Maximum design heat input and/or maximum horsepower rating: N/A Type and Btu/hr rating of burners: N/A | | | ting of burners: |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | |
| Describe each fuel expected to be us | ed during the term of the permit. | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | N/A | N/A | N/A |
| | | | |
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| 1 | <u>I</u> | | |

| Potential Emissions | |
|---------------------|--|
| PPH ¹ | TPY ² |
| N/A | N/A |
| 0.027 | 0.12 |
| N/A | N/A |
| N/A | N/A |
| Potentia | ll Emissions |
| PPH | TPY |
| N/A | N/A |
| | |
| | |
| | |
| Potentia | l Emissions |
| PPH | TPY |
| N/A | N/A |
| | |
| | |
| | PPH N/A N/A N/A N/A N/A N/A 0.027 N/A N/A Potentia PPH N/A Potentia |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| _ | Permit Shield | |
|---|---------------|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS): (1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. Title V permit condition 5.3.1.)

| be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
|---|
| Recordkeeping Requirements |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) |
| Reporting Requirements |
| Reserved (Title V permit condition 5.5.1.) |
| Compliance Plan |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) |
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| Are you in compliance with all applicable requirements for this emission unit? YesNo |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F. |
| |

| ATTACHMENT E - Emission Unit Form | | | | |
|--|--|--|---------------------------|--|
| Emission Unit Description | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated with this emission unit: Pneumatic Conveying System 1/ Enclosed System 5 & 6/ Bin Vent Filter 1 & 2 | | |
| S007A thru S008I | Sources for Vent 7 & Vent 8 | | | |
| Provide a description of the emission The Emission Units S007A thru S0080 (S007E), the Limestone Bin (S008C), S008D thru S008I transfers limestone B (S008E & S008H) and their respecti | C transfers limestone from the unloadi or from the Limestone Silo to the Lim from the Limestone Bin (S008C) to the | ng hoppers to the Lime estone Bin. The Emiss | estone Silo sion Units | |
| Manufacturer: | Model number: | Serial number: | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): | | |
| Design Capacity (examples: furnace S007A-D & S008A-B have a design capacit S007E and S008C have design capacit S008D-I have a design capacity of 10 | apacity of 75 TPH/unit ies of 1160 tons and 250 tons respective. | vely | | |
| Maximum Hourly Throughput: S007A-D & S008A-B - 75 TPH/unit S007E & S008C - 1160 tons & 250 tons S008D-I - 10 TPH/unit | Maximum Annual Throughput: S007A-D & S008A-B – 657,000 TPY S007E & S008C – 657,000 TPY S008D-I – 87,600 TPY | Maximum Operating Schedule: 8760 hours per year | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | |
| Does this emission unit combust fuel | Does this emission unit combust fuel?Yes ✓ No If yes, is it? | | | |
| | | Indirect FiredDirect Fired | | |
| $\begin{tabular}{ll} \textbf{Maximum design heat input and/or maximum horsepower rating:} \\ N/A \end{tabular}$ | | Type and Btu/hr rating of burners: N/A | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | | |
| Describe each fuel expected to be used during the term of the permit. | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | |
| N/A | N/A | N/A | N/A | |
| - | | | | |

Emission Unit Form (emission_unit.doc)
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| Potential Emissions | | | | |
|---------------------|--|--|--|--|
| PPH ¹ | TPY ² | | | |
| N/A | N/A | | | |
| 0.019 | 0.08 | | | |
| N/A | N/A | | | |
| N/A | N/A | | | |
| Potential Emissions | | | | |
| PPH | TPY | | | |
| N/A | N/A | | | |
| | | | | |
| | | | | |
| | | | | |
| Potential Emissions | | | | |
| РРН | TPY | | | |
| N/A | N/A | | | |
| | | | | |
| | | | | |
| | PPH N/A N/A N/A N/A N/A N/A 0.019 N/A N/A Potentia PPH N/A Potentia | | | |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

| [40 | C.F.R. § | 60.11(d)] (Title ' | V permit cond | lition 5.1.3.) |
|-----|----------|--------------------|---------------|----------------|
|-----|----------|--------------------|---------------|----------------|

| Permit Shield | | | |
|-------------------|--|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

| | | | "Affected and convey | - | | | | | • | of | the | following | (NSPS | or | non-NSPS): |
|---------|------|--------|-------------------------|-------------|-----------|---------|------------|------------|-----|----|-----|-----------|-------|----|------------|
| (1) Coa | | | | ing equipii | ient (mei | ading o | ieakeis ai | ia crusiie | 18) | | | | | | |
| ` ′ | | | | G 4 | | | | | | | | | | | |
| ` ' | | | nd Loading | • | | | | | | | | | | | |
| Title V | perm | nt con | dition 5.3.1 | .) | | | | | | | | | | | |
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| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Recordkeeping Requirements | | | | | | | | |
| A record of each visible emissions observation shall be maintained on site, including any data required by a C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name the observer. Records shall state any maintenance or corrective actions taken as a result of the week inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | | | | | | | | |
| Reporting Requirements | | | | | | | | |
| Reserved (Title V permit condition 5.5.1.) | | | | | | | | |
| Compliance Plan | | | | | | | | |
| There is no compliance plan since a responsible official certified compliance with all applicable requirement the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | | | | | | | | |
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| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo | | | | | | | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . | | | | | | | | |

| ATTACHMENT E - Emission Unit Form | | | | | | | | | |
|---|---|--|--------------|--|--|--|--|--|--|
| Emission Unit Description | | | | | | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated with this emission unit: | | | | | | | |
| S010A thru S010O | Sources for Vent 9 | Enclosed System 8/E | | | | | | | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): The Emission Units S010A-C (Unit 1 Ash Screws A-C) transfer CFB #1 Bottom Ash to Drag Chain Conveyor 101 (S010D). The Emission Units S010E-G (Unit 2 Ash Screws A-C) transfer CFB #2 Bottom Ash to Drag Chain Conveyor 201 (S010H). Drag Chain 101 and 201 transfer ash to Clinker Grinder 1 (S010K) and Clinker Grinder 3 (S010L) respectively. The Clinker Grinders crush the bottom ash and transfer it to the Bottom Ash Holding Bin (S010O). All emission units are enclosed. | | | | | | | | | |
| Manufacturer: | Model number: | Serial number: | | | | | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s |): | | | | | | |
| Design Capacity (examples: furnace S010A-N have a design capacity of 16 S010O has a design capacity of 76.5 to | .5 TPH/unit | | | | | | | | |
| Maximum Hourly Throughput: S010A-N – 16.5 TPH/unit S010O – 76.5 tons | Maximum Annual Throughput: S010A-N – 144,540 TPY S010O – 670,140 TPY | 40 TPY 8760 hours per year | | | | | | | |
| Fuel Usage Data (fill out all applicab | ole fields) | | | | | | | | |
| Does this emission unit combust fuel | ?Yes <u>✓</u> No | If yes, is it? | | | | | | | |
| | | Indirect Fired | Direct Fired | | | | | | |
| $\label{eq:maximum design heat input and/or} M/A$ N/A | Maximum design heat input and/or maximum horsepower rating: N/A Type and Btu/hr rating of burners: N/A | | | | | | | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | | | | | | | |
| | | | | | | | | | |
| Describe each fuel expected to be use | | M. Alg | D/DIXI 1 | | | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | | | | | |
| N/A | N/A | N/A | N/A | | | | | | |
| | | | | | | | | | |
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| Potential Emissions | | | | |
|---------------------|--|--|--|--|
| PPH ¹ | TPY ² | | | |
| N/A | N/A | | | |
| 0.028 | 0.12 | | | |
| N/A | N/A | | | |
| N/A | N/A | | | |
| Potential Emissions | | | | |
| PPH | TPY | | | |
| N/A | N/A | | | |
| | | | | |
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| | | | | |
| Potential Emissions | | | | |
| PPH | TPY | | | |
| N/A | N/A | | | |
| | | | | |
| | | | | |
| | PPH¹ N/A N/A N/A N/A N/A N/A N/A 0.028 N/A N/A Potentia PPH N/A Potentia | | | |

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

| Permit Shield | | | |
|-------------------|--|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

- Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. [45CSR§30-5.1.c.]
- If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition. [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS):

(1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. Title V permit condition 5.3.1.)

| For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | | | | |
|---|--|--|--|--|--|
| Recordkeeping Requirements | | | | | |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | | | | | |
| Reporting Requirements | | | | | |
| Reserved (Title V permit condition 5.5.1.) | | | | | |
| Compliance Plan | | | | | |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | | | | | |
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| Are you in compliance with all applicable requirements for this emission unit? YesNo | | | | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . | | | | | |
| in no, complete the schedule of compliance form as ATTACHIVIENT F. | | | | | |

| ATTACHMENT E - Emission Unit Form | | | | | |
|--|--|---|--|--|--|
| Emission Unit Description | | | | | |
| Emission unit ID number: | Emission unit name: | List any control devices associated | | | |
| S011A thru S011L | Sources for Vent 10 Buildin Convey | | with this emission unit: Building Enclosure 3/ Vacuum Conveying System A, B, & C/ Filter Separator A, B, & C | | |
| Provide a description of the emission unit (type, method of operation, design parameters, etc.): The Emission Units S011A-C discharge bottom ash from the holding bin to Vacuum Conveying Systems A-C. The Emission Units S011D-E transfer fly ash from CFB #1 and CFB #2 Air Heater Hoppers to Vacuum Conveying System A and C respectively. The Emission Units S011F-I transfer fly ash from CFB #1 and CFB #2 Baghouses to Vacuum Conveying Systems A, B, and C. The Emission Units S011J-L are the Filter/Separators A, B, and C for the respective Vacuum Conveying Systems A, B, and C. All emissions units are enclosed. | | | | | |
| Manufacturer: | Model number: | Serial number: | | | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s): | | | |
| Design Capacity (examples: furnaces - tons/hr, tanks - gallons): S011A-L have a design capacity of 50 TPH/unit | | | | | |
| Maximum Hourly Throughput: S011A thru S011L – 50 TPH/unit | Maximum Annual Throughput: S011A thru S011L – 438,000 TPY | Maximum Operating Schedule: 8760 hours per year | | | |
| Fuel Usage Data (fill out all applicable fields) | | | | | |
| Does this emission unit combust fuel? Yes ✓ No | | If yes, is it? | | | |
| | | Indirect FiredDirect Fired | | | |
| | | Type and Btu/hr rating of burners: N/A | | | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | | | |
| Describe each fuel expected to be used during the term of the permit. | | | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value | | |
| N/A | N/A | N/A | N/A | | |
| | | | | | |
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| | | | Emissions Data | |
|---|------------------|------------------|---|--|
| | ential Emissions | Potenti | Criteria Pollutants | |
| 2 | TPY ² | PPH ¹ | | |
| | N/A | N/A | Carbon Monoxide (CO) | |
| | N/A | N/A | Nitrogen Oxides (NO _X) | |
| | N/A | N/A | Lead (Pb) | |
| | N/A | N/A | Particulate Matter (PM _{2.5}) | |
| | N/A | N/A | Particulate Matter (PM ₁₀) | |
| | 0.12 | 0.028 | Total Particulate Matter (TSP) | |
| | N/A | N/A | Sulfur Dioxide (SO ₂) | |
| | N/A | N/A | Volatile Organic Compounds (VOC) | |
| | ential Emissions | Potenti | Hazardous Air Pollutants | |
| | TPY | РРН | | |
| | N/A | N/A | N/A | |
| | | | | |
| | | | | |
| | | | | |
| | ential Emissions | Potenti | Regulated Pollutants other than | |
| | TPY | PPH | Criteria and HAP | |
| | N/A | N/A | N/A | |
| | | | | |
| | | | | |
| | TPY | РРН | Criteria and HAP | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

| _ | Permit Shield | | |
|---|---------------|--|--|

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5)*:

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- (b) Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

 [45CSR§30-5.1.c.]
- (c) If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition.

 [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS): (1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. Title V permit condition 5.3.1.)

| be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) |
|--|
| Recordkeeping Requirements |
| A record of each visible emissions observation shall be maintained on site, including any data required by 40 C.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the mission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 45CSR§30-5.1.c.] (Title V permit condition 5.4.1.) |
| Reporting Requirements |
| Reserved (Title V permit condition 5.5.1.) |
| Compliance Plan |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) |
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| Are you in compliance with all applicable requirements for this emission unit? ✓ YesNo |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F . |
| ^ |

 $For all \ applicable \ requirements \ listed \ above, \ provide \ monitoring/testing/record keeping/reporting \ which \ shall$

| ATTACHMENT E - Emission Unit Form | | | |
|---|---|---------------------------------------|--------------------|
| Emission Unit Description | | | |
| Emission unit ID number: | Emission unit name: | List any control dew | |
| S012A thru S012F | Sources for Vent 11 | Enclosed System 9/ | |
| | | Conditioner 1&2/Bu | ilding Enclosure 4 |
| Provide a description of the emission The Emission Units S012A-C transfer Emission Units S012E-F transfer ash f mixed with approximately 15% water | ash from Filter/Separators A, B, and Crom the Ash Silo, thru Ash Condition | C to the Ash Silo (S01 | 2D). The |
| Manufacturer: | Model number: | Serial number: | |
| Construction date: 1989 | Installation date: 1989 | Modification date(s | s): |
| Design Capacity (examples: furnace S012A-C have a design capacity of 50 S012D has a design capacity of 1300 to S012E-F have a design capacity of 300 | TPH/unit ons | | |
| Maximum Hourly Throughput: S012A-C 50 TPH/unit S012D – 1300 tons S012E-F – 300 TPH/unit | Maximum Annual Throughput: S012A-C – 438,000 TPY S012D – 2,628,000 TPY S012E-F – 2,628,000 TPY | Maximum Operation 8760 hours per year | ng Schedule: |
| Fuel Usage Data (fill out all applicab | ole fields) | | |
| Does this emission unit combust fuel? Yes ✓ No If yes, is it? | | | |
| | | Indirect Fired | Direct Fired |
| $\begin{array}{c} \textbf{Maximum design heat input and/or maximum horsepower rating:} \\ N/A \end{array} \qquad \begin{array}{c} \textbf{Type and Btu/hr rating of but N/A} \end{array}$ | | ting of burners: | |
| List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each. $\rm N/A$ | | | |
| | | | |
| Describe each fuel expected to be used during the term of the permit. | | | |
| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
| N/A | N/A | N/A | N/A |
| | | | |
| | | | |

| Emissions Data | | | |
|---|------------------|---------------------|--|
| Criteria Pollutants | Potentia | al Emissions | |
| | PPH ¹ | TPY ² | |
| Carbon Monoxide (CO) | N/A | N/A | |
| Nitrogen Oxides (NO _X) | N/A | N/A | |
| Lead (Pb) | N/A | N/A | |
| Particulate Matter (PM _{2.5}) | N/A | N/A | |
| Particulate Matter (PM ₁₀) | N/A | N/A | |
| Total Particulate Matter (TSP) | 0.184 | 0.81 | |
| Sulfur Dioxide (SO ₂) | N/A | N/A | |
| Volatile Organic Compounds (VOC) | N/A | N/A | |
| Hazardous Air Pollutants | Potentia | Potential Emissions | |
| | PPH | TPY | |
| N/A | N/A | N/A | |
| | | | |
| | | | |
| | | | |
| Regulated Pollutants other than | Potentia | l Emissions | |
| Criteria and HAP | PPH | TPY | |
| N/A | N/A | N/A | |
| | | | |
| | | | |

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

¹ PPH emissions based on permit limit.

 $^{^2\,}TPY\ emissions = (PPH\ permit\ limit\ x\ 8760\ hr/yr) \div 2000\ lb/ton$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Coal/coal refuse and limestone handling/storage facilities shall consist of the following, and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|--|--|--|
| Coal/Gob Receiving Hoppers (Truck) | Enclosure and Water/Chemical Dust Suppression System | |
| Coal/Gob Receiving Hopper (Emergency Use) | Minimize Drop Height | |
| Elevating Transfer Conveyor No. 1, Two Fuel Silos, Reversible Silo Feed Conveyor, Hopper Transfer Conveyor, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Elevating (Tripper) Conveyor No. 2 (top), Two Fuel Day Bins, and Transfer Points | Enclosure and Evacuation to Baghouse | .0002 |
| Mill Collecting Conveyor, Elevating Conveyor No. 2 base | Enclosure and Evacuation to Baghouse | .0002 |
| Two Coal/Gob Crushers (Grinding Mill, Hammer Mill), Emergency Fuel Feed Conveyor, Weigh Belt Conveyor | Enclosure and Evacuation to Baghouse | .099 |
| One 1,160 Ton Limestone Storage Silo | Baghouse | .014 |
| Limestone Truck Unloading Hopper | Enclosure and Evacuation to Baghouse | .027 |
| One Limestone Day Bin | Baghouse | .005 |

[45CSR14, R14-0007, 5.1.1] (Title V permit condition 5.1.1.)

Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal (*Vents 1-5*) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[40 C.F.R. §§ 60.254(a) and 60.11(c); 45CSR16] (Title V permit condition 5.1.2.)

At all times, including periods of startup, shutdown, and malfunction, any affected facility [coal processing and conveying equipment as defined in 40 C.F.R. Subpart Y] including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 C.F.R. § 60.11(d)] (Title V permit condition 5.1.3.)

✓ Permit Shield

Ash transfer, storage and loading facilities shall consist of the following and particulate emissions from the entire system shall be controlled as specified with maximum particulate emissions not to exceed the following:

| | Type/Identity of Particulate Matter Control Equipment | Particulate Emission Limitation for Control Equipment Discharge lb/hr |
|---|--|---|
| Pneumatic System for Collected Flyash and Bottom Ash Handling, One 1300 Ton Ash Silo, Vacuum Blowers | Enclosure and Evacuation to Baghouse | 0.028 |
| Fully Sealed Mechanical System for Bottom Ash/Cooler Rejects, One 85 Ton Bottom Ash Silo | Baghouse | 0.028 |
| Flyash Transport (Silo Vent) | Baghouse | 0.184 |
| Wet Ash Loadout (Flyash and Bottom Ash) | Rotary dustless (wet) unloaders shall thoroughly wet ash prior to loading and handling. Ash loadout(s) shall be fully enclosed and evacuated to an ash silo baghouse during all ash loading. | |

[45CSR14, R14-0007, 5.1.2.] (Title V permit condition 5.1.4.)

There shall be no open stockpiling or storage of coal or coal refuse at the permitted facility.

[45CSR14, R14-0007, 3.1.8.; 45CSR§2-4.1.a.] (Title V permit condition 5.1.5.)

All trucks delivering coal or coal refuse and trucks removing ash from the plant shall be fully covered or enclosed.

[45CSR14, R14-0007, 3.1.9.; 45CSR§2-5.1.b.] (Title V permit condition 5.1.6.)

Monitoring Requirements

Reserved (Title V permit condition 5.2.1.)

Testing Requirements

In order to demonstrate compliance with the opacity limitation in condition 5.1.2., the permittee shall conduct visible emission evaluations as follows for "affected facility" *Baghouse Vents (Vents 1-5):*

(a) A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9, or as provided in 40 C.F.R. §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR§30-5.1.c.]

- Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this sub-section (5.3.1.b.) if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded. [45CSR§30-5.1.c.]
- If the initial, or any subsequent, visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of sub-section 5.3.1.b. above, in lieu of those established in this condition. [45CSR§30-5.1.c.]

Note: The term "Affected Facility" used in this permit means any of the following (NSPS or non-NSPS):

(1) Coal Processing and conveying equipment (including breakers and crushers) (2) Coal Storage Systems. (3) Coal Transfer and Loading Systems. (Title V permit condition 5.3.1.)

| be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.) | | |
|---|--|--|
| Recordkeeping Requirements | | |
| record of each visible emissions observation shall be maintained on site, including any data required by 40 a.F.R. Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the mission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly aspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. 15CSR§30-5.1.c.] (Title V permit condition 5.4.1.) | | |
| Reporting Requirements | | |
| Reserved (Title V permit condition 5.5.1.) | | |
| Compliance Plan | | |
| There is no compliance plan since a responsible official certified compliance with all applicable requirements in the renewal application for this Title V operating permit. (Title V permit condition 5.6.1.) | | |
| | | |
| | | |
| Are you in compliance with all applicable requirements for this emission unit? YesNo | | |
| If no, complete the Schedule of Compliance Form as ATTACHMENT F. | | |
| | | |

ATTACHMENT G CONTROL DEVICE FORM(S)

| ATTACHMENT G - Air Pollution Control Device Form | | | |
|---|--|--------------------------------------|--|
| Control device ID number: D005—Baghouse #1 | List all emission units associated with this control device. S001A through S001F | | |
| Manufacturer: | Model number: | Installation date: | |
| W.W. SLY Inc. | "PC-100" Pactecon | 1989 | |
| Type of Air Pollution Control Device: | | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone | |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone | |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank | |
| Catalytic Incinerator | Condenser | Settling Chamber | |
| Thermal Incinerator | Flare | Other (describe) | |
| Wet Plate Electrostatic Precipitator |] | Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. | |
| Pollutant | Capture Efficiency | Control Efficiency | |
| Particulate Matter | 100 % | > 99 % | |
| | | | |
| | | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #1 is designed to capture particulate matter from coal receiving operations (EC #1 to Coal Silo). There are five modules in the baghouse, and each module contains six bags. The bags are made out of 16 ounce polyester material, and provide a total cloth area of 666 ft². The baghouse operates at ambient temperature and is designed for flow rate of 4000 CFM. Thus, the Air to Cloth ratio is 6:1. The baghouse cleaning cycle is based on differential pressure across the entire baghouse. When the differential pressure set point is reached, a single module isolates and pulse cleans. This sequence continues through the rest of the modules. | | | |
| Is this device subject to the CAM requ | virements of 40 C.F.R. 64?Ye | s 🗹 No | |
| If Yes, Complete ATTACHMENT H If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | | |
| Visible emission checks are performed weekly during periods of normal facility operation. | | | |

| ATTACHMENT G - Air Pollution Control Device Form | | | |
|--|--|--------------------------------------|--|
| Control device ID number: D006—Baghouse #2 | List all emission units associated with this control device. S001A-C, S001F, and S002A-B | | |
| Manufacturer: | Model number: | Installation date: | |
| W.W. SLY Inc. | "PC-100" Pactecon | Original in 1989/Replaced in 2001 | |
| Type of Air Pollution Control Device: | | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone | |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone | |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank | |
| Catalytic Incinerator | Condenser | Settling Chamber | |
| Thermal Incinerator | Flare | Other (describe) | |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. | |
| Pollutant | Capture Efficiency | Control Efficiency | |
| Particulate Matter | 100 % | > 99 % | |
| | | | |
| | | | |
| | | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #2 is designed to capture particulate matter from gob (waste coal) receiving operations (EC #1 to Gob Silo). There are five modules in the baghouse, and each module contains six bags. The bags are made out of 16 ounce polyester material, and provide a total cloth area of 666 ft². The baghouse operates at ambient temperature and is designed for flow rate of 4000 CFM. Thus, the Air to Cloth ratio is 6:1. The baghouse cleaning cycle is based on differential pressure across the entire baghouse. When the differential pressure set point is reached, a single module isolates and pulse cleans. This sequence continues through the rest of the modules. | | | |
| Is this device subject to the CAM requ | virements of 40 C.F.R. 64?Ye | s <u>✓</u> No | |
| If Yes, Complete ATTACHMENT H | | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | | |
| Visible emission checks are performed weekly during periods of normal facility operation. | | | |
| | | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|---|--------------------------------------|
| Control device ID number: D011—Baghouse #3 | List all emission units associated with this control device. S003A through S003K | |
| Manufacturer: | Model number: | Installation date: |
| AMEREX | RP-12-504 D4 | Original in 1989/Replaced in 2001 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). | | |
| Baghouse #3 captures raw fuel fugitives from the silo's feed to weigh belts, through either the grinding mill or hammermill and also includes fugitives from the emergency feed system and en-mass elevating conveyor. There are 504 14 oz. polyproplene bags, each 4 5/8" x 145.75". The baghouse is designed to operate at 180 deg. F, with an air flow of 37000 CFM, and a cloth area of 7596 ft ² giving a 5:1 air to cloth ratio. Maximum DP is 20" WC. The on-line pulse cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requ | irements of 40 C.F.R. 64?Ye | s <u>✓</u> No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during periods of normal facility operation. | | |
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| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|---|--------------------------------------|
| Control device ID number: D013—Baghouse #4 | List all emission units associated with this control device. S004A through S004G | |
| Manufacturer: | Model number: | Installation date: |
| AMEREX | RP-12-110 D4 | Original in 1989/Replaced in 2001 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). | | |
| Baghouse #4 captures fugitives from the discharge of the grinding mill or the hammermill, the mill collecting conveyor and the bottom half of elevating conveyor #2. There are 110 14 oz. polyproplene bags, each 4 5/8" x 145.75". The baghouse is designed to operate at 180 deg. F, with an air flow of 8300 CFM, and a cloth area of 1658 ft ² giving a 5:1 air to cloth ratio. Maximum DP is 20" WC. The on-line pulse cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requ | irements of 40 C.F.R. 64?Yes | ✓No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during periods of normal facility operation. | | |
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| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|--|--------------------------------------|
| Control device ID number: D015—Baghouse #5 | List all emission units associated with this control device. S005A through S005F | |
| Manufacturer: | Model number: | Installation date: |
| W.W. SLY Inc. | "PC-100" Pactecon | 1998 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #5 is designed to capture particulate matter from blended fuel operations (Top Half of EC #2 to Fuel Day Bins, and Emergency Bypass Conveyor). There are five modules in the baghouse, and each module contains six bags. The bags are made out of 16 ounce polyester material, and provide a total cloth area of 666 ft ² . The baghouse operates at ambient temperature and is designed for flow rate of 4000 CFM. Thus, the Air to Cloth ratio is 6:1. The baghouse cleaning cycle is based on differential pressure across the entire baghouse. When the differential pressure set point is reached, a single module isolates and pulse cleans. This sequence continues through the rest of the modules. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64?YesNo | | |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|---|--------------------------------------|
| Control device ID number: D017—Baghouse #6 | List all emission units associated with this control device. S006A through S006D | |
| Manufacturer: Flex-Kleen Corporation | Model number: 120 WMWC 495 III | Installation date: |
| Type of Air Pollution Control Device: | | 1770 |
| | | Multiclone |
| | | Single Cyclone |
| | | |
| | | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #6 is designed to capture particulate matter from limestone receiving operations (Truck to Unloading Hoppers). The baghouse contains a total of 495 bags. The bags are made out of 16 ounce polyester material, and each bag is 5.75" x 145.75". This provides an approximate total cloth area of 9035 ft². The baghouse operates at ambient temperature and is designed for flow rate of 30000 CFM. Thus, the Air to Cloth ratio is 3.32:1. The online cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requ | nirements of 40 C.F.R. 64?Ye | s <u>✓</u> No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | | |
|--|---|---------------------------------------|--|
| Control device ID number: D025—Baghouse #7 | List all emission units associated with this control device. S009A through S009H and S009K | | |
| Manufacturer: Brandt Environmental Corporation | Model number: | Installation date: 1998 | |
| Type of Air Pollution Control Device: | | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | _Multiclone | |
| Carbon Bed Adsorber | Packed Tower Scrubber | _Single Cyclone | |
| Carbon Drum(s) | Other Wet Scrubber | _Cyclone Bank | |
| Catalytic Incinerator | Condenser | _Settling Chamber | |
| Thermal Incinerator | Flare | Other (describe) | |
| Wet Plate Electrostatic Precipitator | | _Dry Plate Electrostatic Precipitator | |
| List the pollutants for which this device | ce is intended to control and the c | apture and control efficiencies. | |
| Pollutant | Capture Efficiency | Control Efficiency | |
| Particulate Matter | 100 % | > 99 % | |
| | | | |
| | | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #7 (for CFB #2) removes fugitives (fly ash) from the gas created by burning fuel in CFB #2. The baghouse consists of 8 compartments each containing 256 Gortex Sureflex bags for a total of 2048 bags. Each bag is 6" x 16', which provides a total cloth area of 51,472 ft². The average 2006 flow through the baghouse was 87,660 SCFM which yields an air to cloth ratio of 1.7:1. The baghouse operates in a temperature range of 425 to 450 deg. F and has an upset temperature of 550 deg. F. A cleaning cycle begins when a DP reaches a set point. Cleaning then proceeds automatically by pulsing rows of bags in each compartment until the DP drops to a set point. | | | |
| Is this device subject to the CAM requ | Is this device subject to the CAM requirements of 40 C.F.R. 64? ✓ YesNo | | |
| If Yes, Complete ATTACHMENT H - CAM Plan was submitted and approved in 2008 and is part of the current Title V Permit in Condition Nos. 4.2.4 through 4.2.10, 4.4.3, 4.4.4, and 4.5.6. | | | |
| If No, Provide justification. Describe the parameters monitored an | nd/or methods used to indicate ne | rformance of this control device | |
| Visible emissions are continuously monitored by a certified Continuous Opacity Monitoring System (COMS). There is a preventive maintenance plan procedure that is performed on the baghouse on a quarterly basis. | | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|---|--------------------------------------|
| Control device ID number: D026—Baghouse #8 | List all emission units associated with this control device. S009A through S009J | |
| Manufacturer: Brandt Environmental Corporation | Model number: | Installation date: 1998 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #8 (for CFB #1) removes fugitives (fly ash) from the gas created by burning fuel in CFB #1. The baghouse consists of 8 compartments each containing 256 Gortex Sureflex bags for a total of 2048 bags. Each bag is 6" x 16', which provides a total cloth area of 51,472 ft². The average 2006 flow through the baghouse was 87,660 SCFM which yields an air to cloth ratio of 1.7:1. The baghouse operates in a temperature range of 425 to 450 deg. F and has an upset temperature of 550 deg. F. A cleaning cycle begins when a DP reaches a set point. Cleaning then proceeds automatically by pulsing rows of bags in each compartment until the DP drops to a set point. | | |
| Is this device subject to the CAM requ | uirements of 40 C.F.R. 64? ✓ Y | es <u>N</u> o |
| If Yes, Complete ATTACHMENT H - CAM Plan was submitted and approved in 2008 and is part of the current Title V Permit in Condition Nos. 4.2.4 through 4.2.10, 4.4.3, 4.4.4, and 4.5.6. | | |
| If No, Provide justification. | | |
| Describe the parameters monitored an | nd/or methods used to indicate per | formance of this control device. |
| Visible emissions are continuously monitored by a certified Continuous Opacity Monitoring System (COMS). There is a preventive maintenance plan procedure that is performed on the baghouse on a quarterly basis. | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|---|--------------------------------------|
| Control device ID number: D037—Baghouse #9 | List all emission units associated with this control device. S012A through S012F | |
| Manufacturer: | Model number: | Installation date: |
| United Conveyor Corporation | 1965-10-20 TRH | 1998 |
| Type of Air Pollution Control Device: | | |
| ✓_Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | <u> </u> | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Baghouse #9 is designed to handle fugitives from ash truck loading and bottom and fly ash fugitives from the filter/separators. There are 196 16 oz. HCE polyester bags, each measuring 4 5/8" x 124". The baghouse is designed to operate at 210 deg. F with a max DP of -20" WC. It is designed to have a flow of 7755 CFM with a cloth area of 2309 ft² yielding an air to cloth ratio of 3.36:1. The on-line pulse cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64?Yes ✓No | | |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification . The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|---|--|--------------------------------------|
| Control device ID number: D020—Bin Vent Filter #1 | List all emission units associated with this control device. S007D through S007E | |
| Manufacturer: | Model number: | Installation date: |
| Flex-Kleen Corporation | 100 WSBS 121 IIG | 1998 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | apture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Bin Vent Filter #1 is designed to capture particulate matter from limestone conveying operations (Limestone Pneumatic Conveying System 1 to Limestone Silo). The bin vent filter bags are made out of 16 ounce polyester material, each 5.75" x 103", and the bin vent filter contains a total of 121 bags. This provides a total cloth area of 1537 ft². The bin vent filter operates at ambient temperature and is designed for flow rate of 6700 CFM. Thus, the Air to Cloth ratio is 4.36:1. The on-line cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requ | irements of 40 C.F.R. 64?Ye | es <u>✓</u> No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored an | nd/or methods used to indicate per | rformance of this control device. |
| Visible emission checks are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|--|--------------------------------------|
| Control device ID number: D022—Bin Vent Filter #2 | List all emission units associated with this control device. S008B through S008I | |
| Manufacturer: | Model number: | Installation date: |
| Flex-Kleen Corporation | #30-PSTL-81 IIG | 1998 |
| Type of Air Pollution Control Device: | | |
| ✓Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Bin Vent Filter #2 is designed to capture particulate matter from limestone conveying operations (Limestone Pneumatic Conveying System 1 to Limestone Bin to Gravimetric Feeders). The bin vent filter consists of pleated filter bags, and the bin vent filter contains a total of 81 bags. This provides a total cloth area of 2430 ft ² . The bin vent filter operates at ambient temperature and is designed for flow rate of 6200 CFM. Thus, the Air to Cloth ratio is 2.6:1. The bin vent filter operates under negative pressure, and the on-line pulse cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requ | rirements of 40 C.F.R. 64?Ye | s <u></u> ✓No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|--|--------------------------------------|
| Control device ID number: D028—Bin Vent Filter #3 | List all emission units associated with this control device. S010A through S010O | |
| Manufacturer: | Model number: | Installation date: |
| Mikropul Environmental Systems | Type BB, Model 8BV | 1998 |
| Type of Air Pollution Control Device: | | |
| ✓Baghouse/Fabric Filter | Venturi Scrubber | Multiclone |
| Carbon Bed Adsorber | Packed Tower Scrubber | Single Cyclone |
| Carbon Drum(s) | Other Wet Scrubber | Cyclone Bank |
| Catalytic Incinerator | Condenser | Settling Chamber |
| Thermal Incinerator | Flare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | ce is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Bin Vent Filter #3 is designed to handle fugitives from the discharge of the two clinker grinders and two backup clinker grinders into the Bottom Ash Holding Bin 1. The bin vent filter contains nine 16 oz. HCE Nomex bags, each bag is 4 5/8" x approx 8'. This provides a cloth area of 85 ft². It is designed to operate at 400 deg. F and a pressure of 30" WC. The on-line cleaning cycle is initiated by a timing card when the ash removal system is in service. | | |
| Is this device subject to the CAM requ | nirements of 40 C.F.R. 64?Ye | es <u>✓</u> No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Visible emission checks are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |
| | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|---|--------------------------------------|
| Control device ID number: D031, D033, D035—Filter/Separator A, B, C | List all emission units associated with this control device. S011A thru S011L | |
| Manufacturer: | Model number: | Installation date: |
| United Conveyor Corporation | 126-B-82 | 1998 |
| Type of Air Pollution Control Device: | | |
| <u>✓</u> Baghouse/Fabric FilterV | enturi Scrubber | Multiclone |
| Carbon Bed AdsorberP | acked Tower Scrubber | Single Cyclone |
| Carbon Drum(s)C | Other Wet Scrubber | Cyclone Bank |
| Catalytic IncineratorC | Condenser | Settling Chamber |
| Thermal IncineratorF | lare | Other (describe) |
| Wet Plate Electrostatic Precipitator | | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | e is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture | Control Efficiency |
| Particulate Matter | 100 % | > 99 % |
| | | |
| | | |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Ash Filter/Separators capture the bottom ash and fly ash from the vacuum conveying systems and discharge the resultant ash mixture into Ash Silo 1. The filter/separators consist of three units each containing 126 14 oz. NOMEX bags, each 5 3/4" x 83 1/2". Each filter/separator is designed to operate at 425 deg F with a DP of 20" WC. Each filter/separator has a cloth area of 1249 ft ² . The on-line pulse cleaning cycle is initiated by differential pressure. | | |
| Is this device subject to the CAM requi | rements of 40 C.F.R. 64?Ye | s <u>✓</u> No |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| Filter Separator A, B, C vent to Baghouse 9. Baghouse 9 has visible emission checks that are performed weekly during NO_X Ozone Season, and monthly outside of NO_X Ozone Season during periods of normal facility operation. | | |

| ATTACHMENT G - Air Pollution Control Device Form | | |
|--|--|--------------------------------------|
| Control device ID number: SNCR | List all emission units associated with this control device. S009J and S009K | |
| Manufacturer: NA | Model number: | Installation date: |
| Turns of Air Pollution Control Posico | NA | 2016 |
| Type of Air Pollution Control Device: | | |
| ✓ Baghouse/Fabric FilterV | enturi Scrubber | Multiclone |
| Carbon Bed AdsorberP | acked Tower Scrubber | Single Cyclone |
| Carbon Drum(s)C | other Wet Scrubber | Cyclone Bank |
| Catalytic IncineratorC | ondenser | Settling Chamber |
| Thermal IncineratorF | Thermal Incinerator Flare ✓ Other (describe) SNCR | |
| Wet Plate Electrostatic Precipitator |] | Dry Plate Electrostatic Precipitator |
| List the pollutants for which this device | is intended to control and the ca | pture and control efficiencies. |
| Pollutant | Capture Efficiency | Control Efficiency |
| NO _x | NA | * |
| | | |
| *Used in conjunction with the NO_{x} CEMS | to trim NO _x emissions to the perm | it limits. |
| Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Up to 10 gpm to allow for 5 gpm to each CFB unit. | | |
| Is this device subject to the CAM requirements of 40 C.F.R. 64?Yes ✓_No | | |
| If Yes, Complete ATTACHMENT H | | |
| If No, Provide justification. The unit does not have potential pre-control emissions of regulated pollutants above the Title V major source thresholds. | | |
| Describe the parameters monitored and/or methods used to indicate performance of this control device. | | |
| NO _x CEMS is used to prove compliance and SNCR performance. | | |

APPENDIX A TRANSPORT RULE REQUIREMENTS

Transport Rule (TR) Trading Program Title V Requirements

| Plant Name: Morgantown Energy Associates West Virginia ID Number: 061-00027 ORIS/Facility Code: 10743 |
|---|
|---|

The TR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following table(s). These unit(s) are subject to the requirements for the TR NO_X Annual Trading Program, TR NO_X Ozone Season Trading Program, and the TR SO₂ Group 1 Trading Program.

| <u>Unit ID:</u> S009J, S009K | | | | | | |
|-------------------------------------|--|---|---|---|---|--|
| <u>Parameter</u> | Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _X monitoring) | Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D | Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E | Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19 | EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E | |
| <u>SO</u> ₂ | <u>X</u> | | | | | |
| $\underline{NO}_{\underline{X}}$ | <u>X</u> | | | | | |
| Heat input | X | | | | | |

- 1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435, (TR NO_X Annual Trading Program), 97.530 through 97.535 (TR NO_X Ozone Season Trading Program) and, 97.630 through 97.635 (TR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- 2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NOX Annual Trading Program), 97.535 (TR NOX Ozone Season Trading Program) and/or, 97.635 (TR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NOX Annual Trading Program), 97.530 through 97.534 (TR NOX Ozone Season Trading Program) and/or, 97.630 through 97.634 (TR SO2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NOX Annual Trading Program), 97.535 (TR NOX Ozone Season Trading Program) and/or 97.635 (TR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NOX Annual Trading Program), 97.530 through 97.534 (TR NOX Ozone Season Trading Program) and/or, 97.630 through 97.634 (TR SO2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

TR NOx Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NO_X Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NOx emissions requirements.

- (1) TR NO_X Annual emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall hold, in the source's compliance account, TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Annual units at the source.
 - (ii). If total NO_X emissions during a control period in a given year from the TR NO_X Annual units at a TR NO_X Annual source are in excess of the TR NO_X Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_X Annual unit at the source shall hold the TR NO_X Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each TR NO_X Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NO_X Annual assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all TR NO_X Annual units at TR NO_X Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying—(A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total

- NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_X Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO_X emissions from all TR NO_X Annual units at TR NO_X Annual sources in the State during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the state NO_X Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all TR NO_x Annual units at TR NO_x Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the TR NO_x Annual units at TR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO_X Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

- (i). A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (ii). A TR NO_X Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) <u>Vintage of allowances held for compliance.</u>
 - (i). A TR NO_X Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_X Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- (6) <u>Limited authorization</u>. A TR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the TR NOx Annual Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO_X Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOx Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part

75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each TR NO_X Annual source and each TR NO_X Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NO_X Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Annual Trading Program.
- (2) The designated representative of a TR NO_X Annual source and each TR NO_X Annual unit at the source shall make all submissions required under the TR NO_X Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual source or the designated representative of a TR NO_X Annual source shall also apply to the owners and operators of such source and of the TR NO_X Annual units at the source.
- (2) Any provision of the TR NO_X Annual Trading Program that applies to a TR NO_X Annual unit or the designated representative of a TR NO_X Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_X Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Annual source or TR NO_X Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR NOx Ozone Season Trading Program Requirements (40 CFR 97.506)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR NO_x Ozone Season source and each TR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate allocations of TR NO_X Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NO_X Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NOx emissions requirements.

- (1) TR NO_X Ozone Season emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NO_X emissions for such control period from all TR NO_X Ozone Season units at the source.
 - (ii). If total NO_X emissions during a control period in a given year from the TR NO_X Ozone Season units at a TR NO_X Ozone Season source are in excess of the TR NO_X Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall hold the TR NO_X Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
 - (B). The owners and operators of the source and each TR NO_X Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NO_X Ozone Season assurance provisions.

- (i). If total NO_X emissions during a control period in a given year from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NO_X Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state

- for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and
- (B). The amount by which total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR NO_X Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period in a given year exceed the state assurance level if such total NO_X emissions exceed the sum, for such control period, of the State NO_X Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NO_X emissions from all TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_X emissions from the TR NO_X Ozone Season units at TR NO_X Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR NO_X Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR NO_X Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.
- (3) Compliance periods.
 - (i). A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
 - (ii). A TR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i). A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR NO_X Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NO_X Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR NO_X Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.
- (6) <u>Limited authorization. A TR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:</u>
 - (i). Such authorization shall only be used in accordance with the TR NO_X Ozone Season Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR NO_X Ozone Season allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NO_X Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.
- (2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements

- (1) <u>Unless otherwise provided, the owners and operators of each TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.</u>
 - (i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NO_X Ozone Season Trading Program.
- (2) The designated representative of a TR NO_X Ozone Season source and each TR NO_X Ozone Season unit at the source shall make all submissions required under the TR NO_X Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

- (1) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season source or the designated representative of a TR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the TR NO_X Ozone Season units at the source.
- (2) Any provision of the TR NO_X Ozone Season Trading Program that applies to a TR NO_X Ozone Season unit or the designated representative of a TR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the TR NO_X Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NO_X Ozone Season source or TR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

TR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

- (1) TR SO₂ Group 1 emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO₂ Group 1 source and each TR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all TR SO₂ Group 1 units at the source.
 - (ii). If total SO₂ emissions during a control period in a given year from the TR SO₂ Group 1 units at a TR SO₂ Group 1 source are in excess of the TR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall hold the TR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - (B). The owners and operators of the source and each TR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) TR SO₂ Group 1 assurance provisions.

- (i). If total SO₂ emissions during a control period in a given year from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and

- (B). The amount by which total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- (ii). The owners and operators shall hold the TR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (iii). Total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
- (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the TR SO₂ Group 1 units at TR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- (v). To the extent the owners and operators fail to hold TR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each TR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) Compliance periods.
 - (i). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (ii). A TR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) <u>Vintage of allowances held for compliance.</u>
 - (i). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A TR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each TR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.
- (6) <u>Limited authorization</u>. A TR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the TR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A TR SO₂ Group 1 allowance does not constitute a property right.

APPENDIX B

MATS COMPLIANCE EXTENSION LETTER (DECEMBER 15, 2014)



west virginia department of environmental protection

Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone 304/926-0475 • FAX: 304/926-0479 Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.wydep.org

December 15, 2014

<u>CERTIFIED MAIL</u> 91 7199 9991 7031 5495 7960

Mr. Todd Shirley Projects General Manager Morgantown Energy Associates 555 Beechurst Avenue Morgantown, West Virginia 26505

Re: Conditional Approval for Extension of Compliance

NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units

40 CFR 63, Subpart UUUUU (Utility MACT)

Morgantown Energy Associates - CFB Boilers #1 and 2 Plant ID No. 061-00027

Mr. Shirley:

The West Virginia Department of Environmental Protection's Division of Air Quality received a request via letter dated November 17, 2014 and received November 18, 2014 from Morgantown Energy Associates (MEA) for a one-year compliance extension from the emission standards, work practice, and performance testing provisions of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (Utility MACT) for the two (2) waste coal and coal-fired circulating fluidized bed (CFB) combustion units (375 MMBTU/hr each) with a combined total of 60 MW design located at the Morgantown, WV facility. MEA's letter states that compliance with the sulfur dioxide emission limit will be accomplished by increasing the limestone injection rates. Based on operational data, the increased limestone injection rate will increase nitrogen oxide generation, thereby requiring the installation of an air pollution control device to continue to meet existing nitrogen oxide permit limits. MEA provides cogeneration services that supply steam to West Virginia University and electricity to FirstEnergy.

Pursuant to the Division of Air Quality's Title V permitting authority and as the delegated NESHAP authority, a conditional one-year compliance extension to the requirements of the Utility MACT until April 16, 2016 is hearby granted to the following units at MEA's Morgantown plant:

Ahlstrom Pyroflow CFB Boiler/Cyclone #1 S009J, 375 MMBTU/hr, 30 MW design Ahlstrom Pyroflow CFB Boiler/Cyclone #2 S009K, 375 MMBTU/hr, 30 MW design

Promoting a healthy environment.

This extension will enable MEA to install a new selective non-catalytic reduction (SNCR) to control nitrogen oxide emissions. Based on previous stack testing and analyses, MEA anticipates the CFBs at this facility will quality as a low emitting electric generating units (LEE) for mercury and filterable particulate matter under the Utility MACT, and therefore, emissions of air pollutants will be minimized during the compliance extension.

The compliance schedule required under 40 CFR 63.6.(i).6(i)(B), including activity dates, is listed below:

- Preliminary internal engineering of SNCR to be completed by last quarter 2014
- Evaluate SNCR bids by second quarter 2015
- Award SNCR bid and procurement of materials by last quarter 2015
- On-site construction and installation of emission control system will begin by fourth quarter
 2015
- On-site construction and installation of emission control equipment will be completed by April 16, 2016
- Final Compliance to be achieved for CFB Boilers #1 and #2 by April 16, 2016

Please be aware that any activities that trigger a permitting requirement of this agency must obtain appropriate approval(s) from those program(s) in a timely manner.

This approval for a compliance extension is subject to the following conditions:

- 1. During the period of this compliance extension, MEA shall maintain and operate all existing control equipment, monitoring equipment, and perform work practice standards in a manner consistent with safety and good air pollution control practices for minimizing emissions of hazardous air pollutants (HAPs) and criteria pollutants.
- During the period of this compliance extension, MEA shall operate in compliance with all
 other applicable local, state, and federal regulations.
- All activities required for construction and installation of equipment necessary to comply
 with the Utility MACT shall be completed as soon as practicable, but not later than the dates
 provided by MEA.
- 4. Performance testing, along with related monitoring, recordkeeping and reporting requirements for Utility MACT are extended commensurate with the conditional approval for extended compliance in this letter.
- 5. Progress reports shall be submitted to the DAQ on a semi-annual basis and shall continue until the completion of this compliance extension. The first reporting period shall encompass the reporting period January 1 June 30. Reports shall be submitted to the DAQ no later than thirty (30) days from the end of each period, and contain the operational status of the units and progress towards meeting the milestone dates listed in this letter.

6. If MEA is unable to meet the activity dates listed in this letter, the agency shall be notified as soon as possible, but not to exceed seven (7) calendar days after becoming aware of delays. This notice must explain the delay and propose a revised compliance timeline with milestone dates in order to meet the April 16, 2016 extended Utility MACT compliance date.

Please be aware the agency may terminate an extension of compliance at an earlier date than designated if any specification regarding the dates by which steps toward compliance are to be taken, or other applicable requirements to which the compliance extension applies (for example, performance tests, notifications) are not being met.

Any compliance extension requests beyond April 16, 2016 must be made to the Administrator of the United States Environmental Protection Agency. Should you need any further assistance or additional information, please contact Renu Chakrabarty at (304) 926-0499, extension 1246 or Renu.M.Chakrabarty@wv.gov, or you may contact me at (304) 926-0499, extension 1966.

Sincerely,

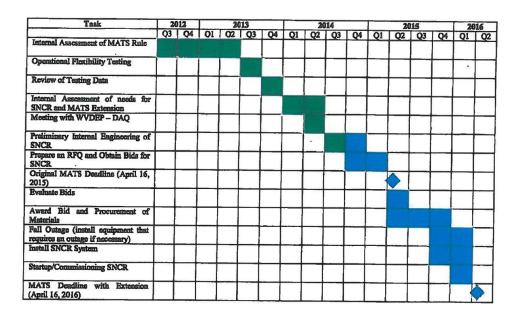
William F. Durham

Director

Enclosure: Morgantown plant Gantt Chart compliance schedule attachment to November 17,

2014 MEA letter

Figure 1
Compliance Schedule



Any permitting modifications or changes will be coordinated with the WV DEP.

APPENDIX C

MATS HCL REQUIREMENTS COMPLIANCE EXTENSION LETTER (APRIL 15, 2016)



west virginia department of environmental protection

Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone 304/926-0475 • FAX: 304/926-0479

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov/daq

April 15, 2016

<u>CERTIFIED MAIL</u> 91 7199 9991 7035 6692 9517

Mr. Todd Shirley Projects General Manager Morgantown Energy Associates 555 Beechurst Avenue Morgantown, West Virginia 26505

Re: §112(i)(3)(B) Conditional Approval for Extension of Compliance from HCl

Requirements

NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units

40 CFR 63, Subpart UUUUU (Utility MACT)

Morgantown Energy Associates - CFB Boilers #1 and 2 Plant ID No. 061-00027

Mr. Shirley:

The West Virginia Department of Environmental Protection's Division of Air Quality received a request via letter dated April 14, 2016 from Morgantown Energy Associates (MEA) for an additional one-year compliance extension from the hydrochloric acid (HCl) emission standards, work practice, and performance testing provisions, along with related monitoring, recordkeeping and reporting requirements, of the National Emission Standards for Hazardous Air Pollutants: Coal-and Oil-Fired Electric Utility Steam Generating Units (Utility MACT) for the two (2) waste coal and coal-fired circulating fluidized bed (CFB) combustion units (375 MMBTU/hr each) with a combined total of 60 MW design located at the Morgantown, WV facility. MEA's letter requests additional time to work with its suppliers to dry and cover mining waste in order to reduce emissions of certain substances listed as Hazardous Air Pollutants (HAPs). While §112(i)(3)(B) provides for up to three additional years, only one additional year has been requested.

As allowed by §112(i)(3)(B) and pursuant to the DAQ's Title V permitting authority and as the delegated NESHAP authority, a conditional additional one-year compliance extension to the HCl requirements of the Utility MACT until April 16, 2017 is hearby granted to the following units at MEA's Morgantown plant:

Ahlstrom Pyroflow CFB Boiler/Cyclone #1 S009J, 375 MMBTU/hr, 30 MW design Ahlstrom Pyroflow CFB Boiler/Cyclone #2 S009K, 375 MMBTU/hr, 30 MW design

Promoting a healthy environment.

Please be aware that any activities that trigger a permitting requirement of this agency, or modify an existing permit condition, must obtain appropriate prior approval(s) from those program(s) in a timely manner.

Commensurate with this extension, the following permit conditions in R14-0007C are extended by one additional year (as shown in the below strikethrough/underline revisions):

4.1.2.d.

Effective April 16, 2016 2017, the SO₂ emission rate shall not exceed 0.20 lb/MMBtu or 1.5 lb/MWh (gross basis) on a 30 boiler operating day rolling average. [40 CFR §§63.9991(c), §63.10005(a)(2)(i), Row 1b of Table 2 to Subpart UUUUU of Part 63 - Emission Limits for Existing EGUs, 45 CSR §10-3.1.]

4.1.14.

Before October 13, 2016 2017, the permittee shall demonstrate initial and continuous compliance of the applicable hydrogen chloride (HCl) standard in Subpart UUUUU to Part 63 or the alternative to the HCl standard, which is the SO₂ standard (Condition 4.1.2.c), using SO₂ CEMS in accordance with Condition 4.2.1.

[40 CFR §63.9984(f), 63.10000(c)(1), (c)(1)(i) & (c)(1)(v)]

This approval for a compliance extension is subject to the following conditions:

- 1. Final Compliance for all other emission limits and work practice provisions must be achieved for CFB Boilers #1 and #2 by April 16, 2016; performance testing, along with related monitoring, recordkeeping and reporting requirements to be completed within 120 days of this date.
- During the period of this compliance extension, MEA shall maintain and operate all existing
 control equipment, monitoring equipment, and perform work practice standards in a manner
 consistent with safety and good air pollution control practices for minimizing emissions of
 hazardous air pollutants (HAPs) and criteria pollutants.
- During the period of this compliance extension, MEA shall operate in compliance with all other applicable local, state, and federal regulations.
- 4. All activities required for construction and installation of equipment necessary to comply with the Utility MACT shall be completed as soon as practicable, but not later than the dates herein:
 - On-site construction and installation and/or modification of emission control equipment and control system must be completed no later than April 16, 2017.
 - Final Compliance with the HCl provisions of the Utility MACT must be achieved for CFB Boilers #1 and #2 by April 16, 2017.

- 5. Performance testing, along with related monitoring, recordkeeping and reporting requirements for the HCl provisions of the Utility MACT are extended commensurate with the conditional approval for extended compliance in this letter (that is, by 120 days from April 16, 2017).
- 6. Progress reports shall be submitted to the DAQ on a semi-annual basis and shall continue until the completion of this compliance extension. The first reporting period shall encompass the reporting period January 1 June 30. Reports shall be submitted to the DAQ no later than thirty (30) days from the end of each period, and contain the operational status of the units and progress towards meeting the milestone dates listed in this letter.
- 7. If MEA is unable to meet the activities listed in this letter, the agency shall be notified as soon as possible, but not to exceed seven (7) calendar days after becoming aware of delays. This notice must explain the delay and propose a revised compliance timeline with milestone dates in order to meet the April 16, 2017 extended Utility MACT compliance date.

Please be aware the agency may terminate an extension of compliance at an earlier date than designated if any specification regarding the dates by which steps toward compliance are to be taken, or other conditions to the compliance extension are not being met.

Should you need any further assistance or additional information, please contact Renu Chakrabarty at (304) 926-0499, extension 1246 or Renu.M.Chakrabarty@wv.gov, or you may contact me at (304) 926-0499, extension 1966.

Sincerely,

William F. Durham

Director

cc: Josh Manley, Environmental Specialist, MEA - <u>josh.manley@nrg.com</u>
Nikos Singelis, Acting Division Director, Air Protection Division, US EPA Region III
David Campbell, Assoc. Dir., Office of Permits & State Programs, APD, US EPA Region
III - <u>campbell.dave@epa.gov</u>

Ray Chalmers, Air Toxics Lead, Ofc. Permits & State Prog., ADP, US EPA Region III - chalmers.ray@epa.gov