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**west virginia department of environmental protection**

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

Early Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

July 1, 2016

CERTIFIED MAIL

91 7199 9991 7034 1376 2830

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Mr. Charles D. Oliver  
Plant Manager  
Longview Power, LLC  
1375 Fort Martin Road  
Maidsville, WV 26541

Re: Longview Power, LLC  
Maidsville  
Permit No. R14-0024F  
Plant ID No. 061-00134

Dear Mr. Oliver:

Your application for a permit as required by Section 5 of 45CSR13 - "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permit, General Permit, and Procedures for Evaluation" has been approved. The enclosed permit R14-0024F is hereby issued pursuant to Subsection 5.7 of 45CSR13. Please be aware of the notification requirements in the permit which pertain to commencement of construction, modification, or relocation activities; startup of operations; and suspension of operations.

In accordance with 45CSR30- Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board

Permit Cover Letter to Mr. Oliver  
July 1, 2016  
Page 2 of 2

pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1214.

Sincerely,



Edward S. Andrews, P.E.  
Engineer

Enclosures

c: WVDEP/Division of Air Quality, NCRO  
Mr. Joseph Douglass, Environmental Manager

*West Virginia Department of Environmental Protection*  
Earl Ray Tomblin  
Governor

*Division of Air Quality*

Randy C. Huffman  
Cabinet Secretary

# Permit to Administratively Update



**R14-0024F**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

*Issued to:*

**Longview Power LLC  
Longview Power/Maidsville  
061-00134**

A handwritten signature in blue ink, appearing to read "William F. Durham", written over a horizontal line.

*William F. Durham*  
Director

*Issued: July 1, 2016*

This permit will supercede and replace Permit R14-0024E.

Facility Location: 1375 Fort Martin Road  
Maidsville, Monongalia County, West Virginia 26541  
Mailing Address: Same as above  
Facility Description: Coal-fired EGU  
NAICS Codes: 221112  
UTM Coordinates: 589.2 km Easting • 4,395.7 km Northing • Zone 17  
Permit Type: Class I Administrative Update]  
Description of Change: This action is to address the methodology used to determine compliance with the heat input limitation in Condition 5.1.1. and correct the annual capacity factor for the auxiliary boiler into terms as specified in 40 CFR §60.41b.

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.*

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*The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.*

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**1.0. Emission Units**

Emission Unit ID	Emission Point ID	Emission Unit Description	Date Construction Commenced	Design Capacity	Control Device
<b>Coal Handling (Section 4.0)</b>					
L-C1	SC-3 or SC-6	Receiving Belt Conveyor	2/1/2007	1000 STPH	FE w/DS
L-C2	SC-4	Stacking Belt Conveyor	2/1/2007	1000 STPH	Telescope Chute (SC-4)
L-C3	SC-7	Reclaim Belt Conveyor (Stockpile Reclaimer to Crusher House)	2/1/2007	700 STPH	FE w/DS
L-C4	SC-6	Emergency Belt Conveyor (Stockpile Reclaimer to Belt Conveyor L-C5)	2/1/2007	700 STPH	FE w/DS
L-C5	SC-12	Transfer Belt Conveyor (Transfer House to Crusher House) (By-passing the stockpile)	2/1/2007	1000 STPH	FE w/DS
L-SB		Crusher Surge Bin	2/1/2007		Crusher House (L-CH)
L-CRA	SC-14, SC16	Crusher A	2/1/2007	700 STPH	Crusher House (L-CH)
L-CRB	SC-13, SC-15	Crusher B	2/1/2007	700 STPH	Crusher House (L-CH)
L-C6A	SC-19	Plant Feed Belt Conveyor A (Crusher A to Tripper Transfer)	2/1/2007	700 STPH	FE w/DS
L-C6B	SC-18	Plant Feed Belt Conveyor B (Crusher B to Tripper Transfer)	2/1/2007	700 STPH	FE w/DS
L-C7A & L-TRA	SC-21A	Tripper Belt Conveyor A (L-C7A) w/traveling tripper A (L-C7A)	2/1/2007	700 STPH	Tripper Transfer/Boiler Building
L-C7B & L-TRB	SC-21B	Tripper Belt Conveyor B (L-C7B) w/traveling tripper B (L-C7B)	2/1/2007	700 STPH	Tripper Transfer/Boiler Building
		Coal Silo No1	1/26/2007		Boiler Building vented L-DC1
		Coal Silo No.2	1/26/2007		
		Coal Silo No. 3	1/26/2007		
		Coal Silo No. 4	1/26/2007		
		Coal Silo No. 5	1/26/2007		
		Coal Silo No. 6	1/26/2007		
<b>PC Boiler (Section 5.0)</b>					
SB1	EA1	Pulverized Coal Fired Steam Generator (PC Boiler)	1/26/2007	6,114 MMBtu/hr	SCR/DSI/FF/W FGD
ST-1	ET-1	Mechanical Draft Cooling Tower	1/26/2007	270,000 gpm	Drift Eliminators

Emission Unit ID	Emission Point ID	Emission Unit Description	Date Construction Commenced	Design Capacity	Control Device
<b>Auxiliary Boiler (Section 6.0)</b>					
SX1	EX1	Natural Gas Fired Boiler (Package Unit)	1/26/2007	225 MMBtu/hr	Low NO <sub>x</sub> Burners
<b>Limestone Handling (Section 7.0)</b>					
L-1	SL-1	Limestone Truck Hopper	1/26/2007	150 TPH	
L-2	SL-2	Truck Feeder Belt Conveyor	1/26/2007	150 TPH	FE
L-3	SL-3 or SL-9	Limestone Bucket Elevator	1/26/2007	150 TPH	FE
L-4	SL-5	Limestone Storage Building Tripper Conveyor	1/26/2007	150 TPH	FE
L-5	SL-5	Limestone Storage Pile	1/26/2007		Limestone Building
L-6	SL-6	Limestone Storage Building Reclaim Hopper	1/26/2007	150 TPH	FE
L-7	SL-10	Limestone Bypass Belt Conveyor	1/26/2007	150 TPH	FE
L-8	SL-6/SL-11	Reclaim Feeder Belt Conveyor	1/26/2007	150 TPH	FE
SL-11	EL-11, SL12a/b	Limestone Day Silo	1/26/2007		FE vented to DC
SL-12a SL-12b	SL-13a/b	Limestone Feeder (A and B)	1/26/2007	82 TPH	FE
SL-13a SL-13b		Ball Mill (A and B)	1/26/2007	82 TPH	FE
<b>Ash Handling System (Section 7.0)</b>					
SA-1	EA-1	Fly Ash Silo	1/26/2007	76 TPH	CA-1
SA-2	EA-2	Fly Ash Loadout	1/26/2007	76 TPH	
SA-3	EA-3	Bottom Ash Grinder	1/26/2007	22 TPH	
SA-4	EA-4	Grinder or By-pass to conveyor	1/26/2007	22 TPH	
SA-6	EA-6	Dry Flight Conveyor	1/26/2007	22 TPH	
SA-7		Bottom Ash Storage Pile	1/26/2007		
SA-8	EA-8	Hopper and Belt Feeder	1/26/2007	22 TPH	
SA-12	EA-12	Belt Conveyor to Bottom Ash Silo	1/26/2007	22 TPH	
SA-9	EA-9	Bottom Ash Silo	1/26/2007		
SA-10	EA-10	Bottom Ash Loadout	1/26/2007	22 TPH	
SA-11a SA-11b SA-11c	EA-11a EA-11b EA-11c	Blowers for the fly ash sweep system (SA-11b is a common spare)	1/26/2007		Fabric Filters (#1 & #2)
<b>Internal Combustion Engines (Section 7.0)</b>					
SG1		Emergency Generator Engine	1/26/2007		N/A

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Emission Unit ID	Emission Point ID	Emission Unit Description	Date Construction Commenced	Design Capacity	Control Device
SP1		Firewater Pump Engine	1/26/2007		N/A

DC – Dust Collector  
 DS – Dust Suppression  
 FE - Full Enclosure

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2.5</sub></b>	Particulate Matter less than 2.5 μm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10μm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>Pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>Ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppmv or ppmv</b>	Parts per Million by Volume
<b>dscm</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>Psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### 2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*
- 2.3.2. 45CSR14 – *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration;*

## **2.4. Term and Renewal**

- 2.4.1. This permit supersedes and replaces previously issued Permit R14-0024E. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

## **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R14-0024, R14-0024A, R14-0024B, R14-0024C, R14-0024D, R14-0024E, R14-0024F, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;  
[45CSR§§13-5.11 and 10.3.]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

## **2.6. Duty to Provide Information**

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

**2.7. Duty to Supplement and Correct Information**

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

**2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.  
[45CSR§13-4.]

**2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.  
[45CSR§13-5.4.]

**2.10 Major Permit Modification**

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.  
[45CSR§13-5.1]

**2.11. Inspection and Entry**

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

**2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable 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.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. 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. 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 must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

### **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

### **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

### **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

**2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

**2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

**2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

**2.19. Credible Evidence**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **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 stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2.]
- 3.1.7. For the purposes of mitigating acid deposition and visibility impacts into the Dolly Sods Wilderness Area, James River Face Wilderness Area, Otter Creek Wilderness Area, and Shenandoah National Park, (collectively the Class I Areas), the permittee shall obtain and permanently retire sulfur dioxide allowances in accordance with the following.
- a. The required number of sulfur dioxide allowances for the respective calendar year shall be determined by the actual sulfur dioxide emission, in tons, emitted from the PC boiler during each calendar year plus 10% and multiplied by the corresponding offset ratio as defined in paragraph b of this condition.

- b. Acceptable sulfur dioxide allowances under this condition shall be from facilities that were allocated sulfur dioxide allowances under 40 CFR 73 and that are located within one of the five quadrants as defined in the following table:

Quadrant	Northeast	Northwest	Southeast	Southwest	Western Area
Offset Ratio	1:4	1:1	1:4	1:1	1:1
	Longitude/ Latitude	Longitude/ Latitude	Longitude/ Latitude	Longitude/ Latitude	Longitude/Latitude
Northeast Corner	-77.528845/ 40.100689	-79.312228/ 40.119496	-77.73267/ 38.570665	-79.338651/ 38.603830	-80.555/39.0836
Northwest Corner	-79.312228/ 40.119496	-80.555022/ 40.151887	-79.338651/ 38.603830	-80.944637/ 38.628678	-82.1306/39.0836
Southeast Corner	-77.73267/ 38.570665	-79.338651/ 38.603830	-77.671583/ 37.077938	-79.393612/ 37.088164	-80.555/38.1983
Southwest Corner	-79.338651/ 38.603830	-80.944637/ 38.628678	-79.393612/ 37.088164	-80.573361/ 37.123911	-82.1306/38.1983

- c. The vintage year of the allowances shall correspond to the calendar year that is being mitigated.
- d. The permittee shall transfer these allowances into an account in the Allowance Tracking System administered by with U.S. EPA for the Acid Rain Program, to be identified by the Director. These retired allowances can never be used to meet any compliance requirement under the Clean Air Act or any State Implementation Plan
- e. The permittee shall submit a report to the Director no later than 60 days after the end of each calendar year, which shall contain the amount of sulfur dioxide emitted; the amount, facility, location of facility, vintage year of allowances retired, proof that allowances have been transferred into account identified by the Director and any applicable serial or other identification associated with the retired allowances.

At any time, but after at least 30 days notice to the public and the Federal Land Managers the Director may approve an alternative mitigation plan in lieu of this condition. At a minimum, such a plan shall result in actual sulfur dioxide reductions from an existing stationary source(s) within one of the four quadrants as defined in b of this condition of at least 2,142 tons per year multiplied by the corresponding offset ratio. Such reductions must be practically enforceable, permanent, and quantifiable, and must be created after March 2, 2004. The reductions must result in the same or greater reduction in acid deposition and visibility impacts to the Class I Areas as the purchase of allowances as set forth in items a through e of this condition.

- 3.1.8. Notwithstanding the specific emission limits of Hazardous Air Pollutants (HAPs) in this permit the facility wide total emissions to the atmosphere of HAPs as defined by Section 112(b) of the 1990

Clean Air Act Amendments shall be less than 10 TPY of any single HAP and less than 25 TPY of combined total of HAPs from the facility.

- a. The permittee shall on a monthly basis determine and keep record of the total amount of HAPs emitted from the facility during the past year on a rolling 12-month total basis. Records of this determination shall be on an individual HAP basis and summing the total amount of HAP emitted during the previous 12-months. All records used to determine the amount of HAPs emitted must include but not be limited to sample calculations and collected data (i.e. fuel consumption, hours operated).

3.1.9. Fugitive dust control measures as proposed in Permit Applications R14-0024 shall be installed, maintained, and operated in such a manner as to minimize dust generation and atmospheric entrainment pursuant to Section 5 of 45 CSR 2. Such measures shall include, but not be limited to, the following:

- a. Water spray systems for the purpose of fugitive particulate dust control shall be designed, installed, operated, and maintained to minimize the generation of fugitive particulate emissions from the wind erosion of stockpiles.

A properly designed, installed, and maintained winterization system on each of the water spray systems shall be in place to functionally maintain all fugitive particulate dust control during periods when ambient temperature falls to or below 32 degrees Fahrenheit.

- b. The permittee shall maintain a fixed water spray system and/or a water truck on site at the facility and in good operating condition, and shall utilize same to apply water, or a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as necessary to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haul roads and other work areas where mobile equipment is used.

The spray bar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the surface being treated.

The pump delivering the water or solution shall be of sufficient size and capacity to be capable of delivering to the spray nozzle(s) an adequate quantity of water, or solution, and at a sufficient pressure.

- c. The permittee shall maintain and operate as needed to minimize fugitive particulate matter from haul roads a street sweeper or other mobile equipment designed to remove debris (road dust) from paved plant roads. This activity shall be conducted daily to minimize fugitive particulate matter from paved plant roadways.
- d. All belt conveyors shall be at a minimum partially enclosed.

3.1.10. All roadways at the permitted facility shall be paved, and maintained in such a way to minimize fugitive particulate matter emissions.

3.1.11. The permittee shall construct and maintain an industrial fence around this permitted facility as defined in the March 3, 2003 submittal of the Air Quality Modeling Analysis Report. This industrial fence shall be constructed in such a manner to reasonably prevent the public from accessing this permitted facility.

### 3.2. Monitoring Requirements

- 3.2.1 For the purpose of condition is establish a standard method in conducting visible emission checks as required in this permit, these checks shall be conducted in accordance with the following:

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source (stack, transfer point, fugitive emission source, etc.) for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 and any other applicable procedure as outlined in **Testing Requirements Subsection** for that particular emission source in this permit as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

### 3.3. Testing Requirements

- 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 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as 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. If a testing method is specified or approved which effectively replaces a test method

specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

- 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 be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  1. The permit or rule evaluated, with the citation number and language;
  2. The result of the test for each permit or rule condition; and,
  3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

### 3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. *State Enforceable Only.*]

### 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**  
Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street  
Charleston, WV 25304-2345

**If to the US EPA:**  
Associate Director  
Office of Air Enforcement and Compliance Assistance  
(3AP20)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

3.5.4. **Operating Fee**

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Source-Specific Requirements for the Coal Handling Equipment

##### 4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to the coal handling operations:

- a. The coal transferred through the facility shall not exceed 2,550,411 tons per calendar year.
- b. Visible emissions from the permanent structures (transfer house L-TH1, Crusher House L-CH, Tripper Transfer L-TH2, and boiler building) that house coal crushers, transfer points of coal conveying equipment and coal storage silos shall not exceed 20% opacity on a 6-minute averaging period. Water vapor is not a visible emission.  
[40 CFR §60.254(a)]
- c. The open stockpile SC-5 shall be limited to a maximum storage capacity of 120,000 tons of coal. Fugitive emissions from the stockpile shall be controlled by the use of water cannon as necessary.
- d. All transfer points shall be fully enclosed and equipped with a dust suppression system except for the transfer points located within the boiler building (tripper floor area) and the transfer point feeding the open stockpile SC-5.
- e. All transfer points and crushers except for the transfer point feeding the stockpile shall be located in permanent structure.
- f. The six (6) coal storage silos shall be enclosed and vent to dust collector CC-21.
  - i. Emissions of PM from dust collector CC-21 emitted to the atmosphere at emission point EC-21 shall not exceed 0.34 lb/hr and 1.35 TPY.
  - ii. Emissions of PM-10 from dust collector CC-21 emitted to the atmosphere at emission point EC-21 shall not exceed 0.29 lb/hr and 1.15 TPY.
  - iii. Visible emissions from emission point EC-21 shall not exceed 20 percent opacity on a 6 minute average. Water vapor is not a visible emission.

4.1.2. **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 1.0 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.  
[45CSR§13-5.11.]

##### 4.2. Monitoring Requirements

4.2.1. The permittee shall conduct visible emission checks in accordance with the Condition 3.2.1. of this permit for the purpose of ongoing compliance with the visible emission standards (4.1.1.b. and 4.1.1.f.iii.) from the coal crushers, conveying equipment and coal storage silos. Refer to Table A in Appendix B of this permit for a list of sources.

- 4.2.2. For the purposes of demonstrating compliance with the requirements in Conditions 4.1.1.a. and 4.1.1.c., the permittee shall monitor and record the daily amount of coal delivered to this facility. Records of such monitor shall be maintained in accordance with Condition 3.4.1. of this permit.

### 4.3. Testing Requirements

- 4.3.1. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility and whenever order by the Director, the permittee shall conduct performance test(s) to determine compliance with items b and f.(iii) of Condition 4.1.1. and 40 CFR §60.254(a). Refer to Table A in Appendix B of this permit for a list of sources. Such performance tests (observations) shall be conducted in accordance with Reference Method 9 of Appendix A-4 of 40 CFR 60, with the exceptions as follows:
- a. The duration of the Method 9 of Appendix A-4 of this part performance test shall be 1 hour (ten 6-minute block averages).
  - b. If, during the initial 30 minutes of the observation of a Method 9 performance test, all of the 6-minute block average opacity readings are less than or equal to half the applicable opacity limit, the observation period may be reduced from one hour to 30 minutes.
  - c. To determine opacity for fugitive coal dust emissions sources, the following measures must be used:
    - i. The minimum distance between the observer and the emission source shall be 16 feet and the sun shall be oriented in the 140-degree sector of the back.
    - ii. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
    - iii. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present.  
[40CFR§§60.8(a) and (b), 60.257(a)]

### 4.4. Recordkeeping Requirements

- 4.4.1. **Record of Monitoring.** The permittee shall keep 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;
  - 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.

- 4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, 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.

#### 4.5. Reporting Requirements

- 4.5.1. Within 60 days after completing performance testing as required in 4.3.1., the permittee shall report the result of such testing to the Director and either successfully enter the test data into EPA's WebFire data base located at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to:

United States Environmental Protection Agency  
Energy Strategies Group - Mail Code: D243-01  
109 TW Alexander Dr  
RTP, NC 27711  
[40 CFR §60.258(d) and 45 CSR §13-6.1]

**5.0. Source-Specific Requirements for the PC Boiler**

**5.1. Limitations and Standards**

- 5.1.1. The following conditions and requirements are specific to the PC Boiler (ID #SB1):
  - a. The annual heat input of the PC Boiler shall not exceed 53,558,640 MMBtu per calendar year basis. The hourly heat input shall be determined as the hourly average heat input for each operating day, as determined via methods in 40 CFR 60.
- 5.1.2. Emissions of nitrogen oxides (NO<sub>x</sub>) shall be controlled with the use of low NO<sub>x</sub> burners and selective catalytic reduction control technologies. NO<sub>x</sub> emissions emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall not exceed the following limits to the corresponding averaging periods.

<b>Table 5.1.2. Limits of Nitrogen Oxides from the PC Boiler</b>		
Limit	Terms (Units)	Averaging Period
489	Pounds/hour	24-hour rolling average
428	Pounds/hour	30-day rolling average
1.0 (NSPS Da Limit)	Pound/MWh	30-day rolling average
397	Pounds/hour	Calendar Year
0.065	Pounds/MMBtu	Calendar Year

Compliance with the NSPS Da limit in Tables 5.1.2. shall be determined by calculating the NO<sub>x</sub> emissions as  $1.194 \times 10^{-7}$  lb/scf –ppm times the average hourly NO<sub>x</sub> output concentration in ppm (measured according to the provisions of 40CFR §60.49Da(c)), times the average hourly flow rate (measured in scfh, according to provision of 40 CFR §60.49Da(m)), divided by the average hourly gross energy output (measured according to the provisions of 40 CFR §60.49Da(k)).  
**[40 CFR §60.48Da(i)]**

- 5.1.3. Emissions of sulfur dioxides (SO<sub>2</sub>) shall be controlled with the use of a wet flue gas desulfurization control technology. SO<sub>2</sub> emissions emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall the following limits to the corresponding averaging periods.

<b>Table 5.1.3. Limits of Sulfur Dioxide from the PC Boiler</b>		
Limit	Terms	Averaging Period
917	Pounds/hour	3-hour rolling average
734	Pounds/hour	24-hour rolling average
1.4 (NSPS Da Limit)	Pound/MWh	30-day rolling average
581	Pounds/hour	Calendar Year

0.095	Pounds/MMBtu	Calendar Year
2,417	Tons/year	Calendar Year

Compliance with the NSPS Da limit in Tables 5.1.3. shall be determined by calculating the SO<sub>2</sub> emissions as  $1.660 \times 10^{-7}$  lb/scf –ppm times the average hourly SO<sub>2</sub> output concentration in ppm (measured according to the provisions of 40CFR §60.49Da(b)), times the average hourly flow rate (measured in scfh, according to provision of 40 CFR §60.49Da(m)), divided by the average hourly gross energy output (measured according to the provisions of 40 CFR §60.49Da(k)).

**[40 CFR §60.48Da(m)]**

Compliance with the 30-day rolling average limits listed in Table 5.1.2. and Table 5.1.3. is determined by calculating the arithmetic average of all hourly emission rates for NO<sub>x</sub> and SO<sub>2</sub> for the 30 successive operating days, except for data obtained during startup, shutdown, or malfunction.

**[40 CFR §60.48Da(a)]**

5.1.4. Emissions of particulate matter (PM) shall be controlled with fabric filter control technology. Emissions to the atmosphere from the PC Boiler Stack (EP #EB1) shall not contain PM in excess of either:

- a. 0.14 lb/Mwh gross energy output; or
- b. 0.015 lb/MMBtu heat input derived from the combustion of solid, liquid, or gaseous fuel.

Compliance with either limit shall be determined by calculating the arithmetic average of all hourly emission rates for PM each operating day, except for data obtained during startup, shutdown, and malfunction. Averages are only calculated for operating days that have valid data for at least 18 hours of unit operation during which the limitation applies. All of the valid hourly emission rates of the operating day(s) not meeting the minimum 18 hours valid data daily average requirements are averaged with all of the valid hourly emission rates of the next operating day with 18 hours or more of valid PM CEMS data to determine compliance.

**[40CFR§§60.42Da(c)(1) and (2); 60.48Da(f)]**

The average hourly PM emission rate shall be calculated by multiplying the average hourly PM output concentration (measured according to 40CFR §60.49Da(t)), by the average hourly flow rate (measured in scfh, according to provision of 40 CFR §60.49Da(m)), and divided by the average hourly gross energy output, as applicable (measured according to the provisions of 40 CFR §60.49Da(k)).

**[40CFR §60.48Da(n)]**

5.1.5. Emissions of particulate matter less than ten microns (PM<sub>10</sub>) shall be controlled with fabric filter control technology. PM<sub>10</sub> emissions (includes the filterable and condensable fractions other than water) emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall not exceed 110 lb/hr based on a six-hour rolling average.

5.1.6. Emissions of carbon monoxide (CO) shall be controlled with the use of good combustion practices control technology. CO emissions emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall not exceed 673 lb/hr (0.11 lb/MMBtu) based on a twenty-four hour rolling average.

5.1.7. Emissions of volatile organic compounds (VOC) shall be controlled with the use of good combustion practices control technology. VOC emissions emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall not exceed 24.5 lb/hr (0.004 lb/MMBtu) based on a three-hour rolling average.

Continuous compliance with this emission limit shall be determined by using the data generated by CO CEMS as a surrogate for VOC. The permittee shall establish through testing the relationship between CO emissions and VOC emissions. An exceedance based on the CEMS data for CO and the relationship between CO and VOCs constitutes an exceedance of this emission limit for VOC. The permittee shall have the option to perform emission testing to verify the relationship between CO and VOC if the CEM data for CO indicates an exceedance of the VOC emission limit. Testing performed after the exceedance to determine whether the underlying relationship between CO and VOC has changed shall not be an absolute defense to the exceedance.

- 5.1.8. Emissions of sulfuric acid mist ( $H_2SO_4$ ) shall be controlled with the use of dry sorbent injection in conjunction with fabric filter control technology.  $H_2SO_4$  emissions emitted to the atmosphere from the PC Boiler Stack (EP #EB1) shall not exceed 45.8 lb/hr (0.0075 lb/MMBtu) based on a 3-hour rolling average.

Continuous compliance with this emission limit shall be determined by using the data generated by  $SO_2$  CEMS as a surrogate for  $H_2SO_4$ . The permittee shall establish through testing the relationship between  $SO_2$  emissions and  $H_2SO_4$  emissions. An exceedance based on the CEMS data for  $SO_2$  and the relationship between  $SO_2$  and  $H_2SO_4$  constitutes an exceedance of this emission limit for  $H_2SO_4$ . The permittee shall have the option to perform emission testing to verify the relationship between  $SO_2$  and  $H_2SO_4$  if the CEM data for  $SO_2$  indicates an exceedance of the  $H_2SO_4$  emission limit. Testing performed after the exceedance to determine whether the underlying relationship between  $SO_2$  and  $H_2SO_4$  has changed shall not be an absolute defense to the exceedance.

- 5.1.9. Emissions of mercury (Hg) from the PC Boiler Stack shall not exceed  $1.3E^{-2}$  pounds per GWh (gross electric power out from the generator based on a thirty 30 boiler operating day rolling average with the 12-month rolling total not to exceed  $4.38E^{-2}$  TPY (equates to 87.6 pounds per year) based on 12 month rolling average. The 30 boiler operating day rolling average limit shall apply at all times except during periods of startup and shutdown. Each 30 boiler operating day rolling average shall be calculated according to Section 6.2 of Appendix A to Subpart UUUUU of Part 63. Compliance with the limit will be demonstrated by using Hg CEMs output data collected during all non-exempt boiler operating hours.

**[40CFR§§63.9991(a)(1); Table 2 to Subpart UUUUU of Part 63; §63.10000(a); and §63.10010(g)]**

- 5.1.10. Emissions of total non-mercury (Hg) HAP metals from the PC Boiler Stack shall not exceed 0.50 pound per GWh (gross electric power out from the generator) based on a thirty boiler operating day rolling average with the 12-month rolling total not to exceed 1.69 tons. The 30 boiler operating day rolling average limit shall apply at all times except during periods of startup and shutdown. Each 30 boiler operating day rolling average shall be calculated according to Table 7 to Subpart UUUUU. Compliance with the limit will be demonstrated by using PMCEMs output data demonstrating compliance with a PM rate at or less than 0.3 lb per MWh on an arithmetic 30-boiler operating day rolling average using the hourly average PM CEMS output data collected during all non-exempt boiler operating hours.

**[40CFR§§63.9991(a)(1); Tables 2 and 7 to Subpart UUUUU of Part 63; §63.10000(a) and §63.10010(g)]**

- 5.1.11. Emissions of hydrochloric acid (HCL) shall be controlled with the use of dry sorbent injection in conjunction with fabric filter control technology. Emissions of HCL from the PC Boiler Stack shall not exceed 0.02 lb/MWh (gross electric power out from the generator) on 30 boiler operating day rolling average with the 12-month rolling total not to exceed 4.46 tons. The 30 boiler operating day rolling average limit shall apply at all times except during periods of startup and shutdown. Compliance with the 30 boiler operating day rolling average shall be demonstrated by using  $SO_2$

CEMS output data demonstrating compliance with a SO<sub>2</sub> rate at or less than 1.5 lb per MWh on a 30 day rolling average basis. Each 30-boiler operating day rolling average emission rate is the average of all of the valid SO<sub>2</sub> emission rates in the preceding 30 boiler operating days.

[40CFR§§63.9991(a)(1), (c); Table 2 to Subpart UUUU of Part 63; §63.10000(a) and §63.10010(f)]

- 5.1.12. Emissions of hydrofluoric acid (HF) shall be controlled with the use of dry sorbent injection in conjunction with fabric filter control technology. Emissions of HF from the PC Boiler Stack shall not exceed a 12-month rolling total of 1.28 tons.
- 5.1.13. Visible emissions from the PC Boiler shall not exceed 10% opacity on a 6-minute block averaging period.  
[45CSR§2-3.1]
- 5.1.14. The stack height for the PC Boiler shall be constructed at a height of 554 feet above ground elevation.
- 5.1.15. The conditions and requirements in the following subdivisions are specific to the mechanical draft cooling tower (ID #ST-1):
  - a. Emissions of PM and PM-10 shall be controlled with a 0.002% drift eliminator or an equivalent control technology. PM/PM<sub>10</sub> emissions emitted to the atmosphere from the Cooling Tower (EP #ET1) shall not exceed 4.1 lb/hr and 13.7 TPY.
- 5.1.16. **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 1.0 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.  
[45CSR§13-5.11.]

## 5.2. Monitoring Requirements

- 5.2.1. *Continuous Monitoring Requirements:* The permittee shall install, calibrate, maintain and operate CEMS, and a diluent monitor to measure and record the emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, Hg and other parameters to determine compliance from the boiler stack in a manner sufficient to demonstrate continuous compliance with the CEMS-based emission standards in Condition 5.1. of this permit. These CEMS shall be installed, calibrated, and properly functioning certified in accordance with the following requirements:
  - a. *PM CEMS:* The PM CEMS shall be installed and operated in accordance with Performance Specification (PS) 11 in appendix B of 40CFR60. During the correlation testing runs as required by PS 11, PM and CO<sub>2</sub> or O<sub>2</sub> data shall be collected concurrently ( or within a 30 to 60 minute period) by both the continuous emissions monitors and performance tests conducted using the following test methods:
    - i. Method 5 or 5B of appendix A-3 of 40CFR60 or Method 17 of appendix A-6 of 40CFR60 shall be used for determining PM emissions;
    - ii. Method 3A or 3B of appendix A-2 of 40CFR60 shall be used for determining either O<sub>2</sub> or CO<sub>2</sub>.

- iii. Quarterly accuracy determinations and daily calibration drift test shall be performed in accordance with Procedure 2 in appendix F of 40CFR60. The permittee shall perform Relative Response Audits on an annual basis and a Response Correlation Audits once every three (3) years. Records of such quarterly accuracy determinations, daily calibration drift tests, relative response audits, and response correlation audits must be maintained in accordance with Condition 3.4.1. of this permit.  
[40 CFR §§60.49a(v)]
- b. *SO<sub>2</sub> CEMS*: The SO<sub>2</sub> CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75 provide that the requirements of 40CFR§60.49a(b)(4)(i – iii) are met. Record keeping and reporting shall be conducted pursuant Subpart F and G in 40 CCFR 75.  
[40 CFR §60.49a(b)(4)]
- c. *NO<sub>x</sub> CEMS*: The NO<sub>x</sub> CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75.  
[40 CFR §60.49a(e)(2)]
- d. *CO CEMS*: The CO CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, to be submitted with respective semi-annual reports required by Condition 5.5.3. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
- e. *Hg CEMS*: The Hg CEMS shall be certified, operated, and maintained in accordance with the requirements of Performance Specifications (PS) 12A in Appendix B of 40CFR Part 60.
  - i. The permittee must conduct a performance evaluation of the Hg CEMS according to the requirements of 40CFR§60.13 and PS 12A.
  - ii. The CEMS must complete a minimum of one cycle of operation (samplings, analyzing, and data recording) for each successive 15-minute period.
  - iii. The permittee shall use all valid data points collected during the hour to calculate the hourly average Hg concentration.
  - iv. The CEMS shall be operated and maintained in a manner to obtain data for at least 75 percent of the unit operating hours (PC Boiler) in the month.
  - v. After April 16, 2015, the Hg CEMs must be certified, operated, maintained and quality-assure the date from the monitoring system in accordance with b Appendix A of 40 CFR Part 63.  
[40 CFR §63.10010(g)]
- f. *Diluent Monitor*: The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where CO and NO<sub>x</sub> are monitored. The O<sub>2</sub> monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.
- g. *Flow Monitor*: The volumetric flow rate of the flue gas shall be monitored at the location where CO and NO<sub>x</sub> are monitored. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.  
[40 CFR §60.49Da(m)]

- h. *Gross Output*: A wattmeter, device to measure gross amount of electricity generator by the STG, shall be installed, calibrated, maintained, and operated on a continuous basis.  
[40 CFR §60.49Da(k)(1)]  
[40 CFR §60.49Da; 45 CSR §2-8.2.a.; 45CSR §2A-6.3.; and 45 CSR §13-6.2.]
- 5.2.2. The permittee shall conduct initial CEMS performance evaluation for the purpose of certifying the CEMS as required in this permit. Such evaluation(s) or certification test(s) shall be conducted in accordance application procedure(s) as listed or method(s) reference in Condition 5.2.1. and completed within one of the following timing requirements:
- a. The earlier of 90 operating days or 180 days after the unit commenced commercial operation; or  
[40 CFR §75.4]
- b. The permittee shall perform a verification of operational status of the CEMS prior to initial performance test as required in Condition 5.3.2. At the minimum, verification of the operational status shall include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the CEMS. Certification of the Part 60 CEMS shall be conducted during the same period as initial performance testing.  
[40 CFR §§60.8 and 60.13(b)]
- 5.2.3. The permittee shall install, certify, operate, and maintain the SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub> or O<sub>2</sub> CEMS as specified in 40CFR§§60.49Da(w)(1) through (w)(5).
- 5.2.4. Data reported to meet the requirements of 40 CFR §60.51Da shall not include data substituted using the missing data procedures in Subpart D of 40 CFR 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR 75.  
[40 CFR §§60.49Da(b)(4)(iii) and (c)(2)]
- 5.2.5. The permittee shall sample the coal consumed by the PC Boiler on a biweekly basis. These sample(s) shall be analyzed to determine the concentrations of beryllium, chlorine, fluorine, and lead. Records of such analyses shall be maintained in accordance with Condition 3.4.1 of this permit.
- 5.2.6. For the purpose of determining compliance with this emission limit in Condition 5.1.15., the permittee shall monitor flow and either the concentration of total dissolved solids contained in the circulating water of the cooling tower or specific conductivity on a daily basis. If the permittee uses a correlation curve or ratio between total dissolve solids concentration and specific conductivity, the Director or his/her representative may request the permittee to verify the correlation at any reasonable time with just cause. The permittee shall determine the PM, and PM<sub>10</sub> emissions from the cooling towers using a method that accuracy predicts these specific pollutants from mechanical draft cooling towers. Such determination shall be conduct on a monthly basis. Records of such monitoring and determinations shall be maintained in accordance with Condition 3.4.1. of this permit.
- 5.2.7. Should the permittee have to use other data systems other than PM CEMS data to satisfy the 75 percent of total operating hours per 30 day rolling average, at the minimum the permittee shall determine the opacity from PC boiler stack in accordance with Method 9 to demonstrate compliance with the visible emission standard of Condition 5.1.13. within the 30 day reporting period that other data systems are used. Records of the said observations shall be maintained in accordance with Condition 3.4.1. of this permit.
- 5.2.8. Whenever any 24-hour block average PM rate based on PM CEM data indicates an excursion of the hourly PM limit of 5.1.4., the permittee shall conduct an visible emission observation in accordance

with Method 9 of appendix A-4 of 40CFR Part 60 for a minimum of six minutes as soon as practical but no later than 24 hours of the last hour of the excursion. Such observation shall continue for each hour until four (4 ) successive six-minute block observations demonstrate compliance or two (2) successive observations demonstrate compliance and PM CEM data during the same two hours indicating compliance with the hourly PM limit of 5.1.4. Records of such observations and PM CEM data shall be maintained in accordance with Condition 3.4.1 of this permit.  
**[45 CSR §2A-6.3a.]**

**5.3. Testing Requirements**

- 5.3.1. *Initial Stack Tests:* In accordance with test methods specified in this permit, the PC boiler stack emissions shall be tested to demonstrate initial compliance with the emission standards for PM, PM<sub>10</sub>, (includes filterable and condensable fractions), CO, VOCs, Pb, H<sub>2</sub>SO<sub>4</sub>, , selected HAPs (Be, HCl, HF, Hg and visible emissions. These tests shall be conducted not until a verification of operational status of CEMS has been performed (See Condition 5.2.2), but not later than 180 days after the unit commenced commercial operation. Tests shall be conducted at a heat input rate of no less than 90 % of the maximum permitted heat input rate of the unit. CEMS data for PM, NO<sub>x</sub>, SO<sub>2</sub>, CO, Hg, volumetric flow and O<sub>2</sub> or CO<sub>2</sub> shall be reported for each run of the required tests. The hourly heat input of PC boiler and electric output of the generator shall be measured and recorded for each test run. The Director may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. Such testing shall be conducted in accordance with Condition 3.3.1. of this permit.
- 5.3.2. *Initial Performance Test for Subpart Da:* The permittee shall conduct an initial performance test(s) for the purpose of demonstrating compliance with the 30-day rolling average output standard for NO<sub>x</sub> and SO<sub>2</sub> emissions. The initial performance test (the first test) is to be scheduled in accordance with the timing of 40 CFR §§60.8 and 60.48Da while meeting the requirements of §60.13(b). This test is a 30 successive boiler operating days test for NO<sub>x</sub> and SO<sub>2</sub>. Such test(s) shall use the appropriate procedures of Method 19 of Appendix A of 40 CFR 60 to determine the emission rate. The CEMS in 40 CFR §§60.49Da(b), (c) and (d) shall be used to determine the concentrations of SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>, or O<sub>2</sub>. The requirements of 40 CFR §60.8(f) do not apply for this performance testing. Such testing shall be conducted in accordance with Condition 3.3.1. of this permit.  
**[40 CFR §§60.50Da(a), (c)(4 and 5), and (d)(1 and 2)]**
- 5.3.3. *Test Methods:* Any required test shall be performed in accordance with the following methods unless an alternative method is approved by the Director or unless otherwise specified:

<b>Table 5.3.2. Tests Methods for the Boiler Stack</b>	
<b>EPA Method</b>	<b>Description of Method and Comments</b>
1 - 4	Determination of Traverse Point, Velocity and Flow Rate, Gas Analysis, and Moisture Content  {Notes: Methods shall be performed as necessary to support other methods.}
5, 5B, 5I	Measurement of PM
6C	Measurement of SO <sub>2</sub> Emission (Instrumental)
7E	Measurement of NO <sub>x</sub> Emissions (Instrumental)
9	Visual Determination of the Opacity

10	Measurement of CO Emission (Instrumental)
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography) {For concurrent use with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.}
19	Calculation Method for NO <sub>x</sub> , PM, and SO <sub>2</sub> Emission Rate
25	Determination of Total Gaseous Non-methane Organic Emission as Carbon
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)
26A	Determination of Hydrogen Halide And Halogen Emissions From Stationary Sources Isokinetic Method
29	Determination of Metals Emissions From Stationary Sources
201, 201A, 202	Measurement of PM <sub>10</sub> and Condensable PM
320	Measurement of Vapor Phase Organic and Inorganic Emissions By Extractive Fourier Transform Infrared (FTIR) Spectroscopy (may be used in lieu of 26A to measure HCL and HF)
OTM27	Determination of PM <sub>10</sub> and PM <sub>2.5</sub> Emissions From Stationary Sources
OTM28	Dry Impinger Method for Determining Condensable PM Emissions From Stationary Sources
ASTM D6348-03	Standard Test Method for Determination of Gaseous Compounds by Extractive Director Fourier Transform Infrared (FTIR) (may be used in lieu of 26A to measure HCL and HF)
ASTM D6784-02	Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)
CTM-13B	Modified Controlled Condensation Method for Measuring Sulfuric Acid Emissions from Kraft Recovery Furnaces and Boilers with Wet Particulate Matter Control Devices

- 5.3.3. The permittee shall verify compliance with emission limits for PM<sub>10</sub>, VOCs, and H<sub>2</sub>SO<sub>4</sub> by conducting performance testing once every twelve (12) months thereafter from the initial compliance determination as required in Condition 5.3.1.of this permit. “Once every twelve months” is defined as to be within 11 to 13 calendar months after the previous performance test. Such testing shall be conducted in accordance with Conditions 3.3.1., 5.3.1., and 5.3.3. of this permit. Records of such testing shall be maintained in accordance with Condition 3.4.1 of this permit.
- 5.3.4. The permittee shall perform an initial drift test within 180 days after startup and periodic drift testing once every five years thereafter on the cooling towers. Such testing shall be conducted in accordance with Condition 3.3.1. of this permit. Records of such testing shall be maintained in accordance with Condition 3.4.1 of this permit.

- 5.3.5. The permittee shall determine the overall removal efficiency for HCl, and HF by conducting performance testing twelve (12) months from the initial compliance determination as required in Condition 5.3.1. of this permit. "Twelve months" is defined as to be within 11 to 13 calendar months after the previous performance test. After such testing, the timing for follow-up testing shall be determined on actual 12-month rolling total of HCL and HF emission. If the 12-month rolling total is above 80% of the permitted 12-month rolling total limit after 12 months from the most recent testing, then the permittee shall repeat such testing. Such testing shall be conducted in accordance with Conditions 3.3.1., 5.3.1., and 5.3.3. of this permit. Records of such testing shall be maintained in accordance with Condition 3.4.1 of this permit.

#### **5.4. Recordkeeping Requirements**

- 5.4.1. **Record of Monitoring.** The permittee shall keep 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;
- 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.

- 5.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

- 5.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, 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.
- 5.4.4. The permittee shall record the amounts of each fuel consumed by the PC boiler during each operating. Such records shall be maintained in accordance with Condition 3.4.1. of this permit. [45CSR§2A-7.1.a.]
- 5.4.5. The permittee shall determine and record the ash and Btu content of the coal received at the facility. Such records shall be maintained in accordance with Condition 3.4.1. of this permit. [45CSR§2A-7.1.a.4.]

## 5.5. Reporting Requirements

- 5.5.1. After July 1, 2011, within 90 days after completing a PM CEMS performance evaluation as required by 40 CFR 60.49Da(v), the permittee shall either successfully enter the test data into EPA's WebFire data base located at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main> or mail a copy to:  
United States Environmental Protection Agency  
Energy Strategies Group - Mail Code: D243-01  
109 TW Alexander Dr  
RTP, NC 27711  
[40 CFR §60.49Da(v)(4)]
- 5.5.2. Within 60 calendar days after completing of any testing as required in Section 5.3. or performance evaluation of a CEMS as required in Section 5.2. of this permit, the permittee shall report the results or findings of such testing or evaluation to the Director.  
[40 CFR §60.51Da(a) and 45CSR§§13-6.1 and 2.]
- 5.5.3. The permittee shall submit semiannual reports to the Director concerning emissions from the PC Boiler. The reporting periods for such reports shall be for the 1<sup>st</sup> half of the calendar year is from January 1<sup>st</sup> to June 30<sup>th</sup> and the 2<sup>nd</sup> half of the year is July 1<sup>st</sup> to December 31<sup>st</sup>. These reports shall be postmarked no later than 30<sup>th</sup> day after the end of the reporting period. Such reports shall contain the following information:

For each 24 hour period:

- a. Calendar date;
- b. The average SO<sub>2</sub> and NO<sub>x</sub> (lb/MWh) for each 30 successive unit operating days, ending with the last 30 day period in the quarter; reason for non-compliance with the emission standards; and , description of corrective actions taken.
- c. Identification of the unit operating date for which pollutant or diluents 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. Identification of the times when emission data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
- d. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted.
- e. Identification of the times when hourly averages have been obtained based on manual sampling methods.

- f. Identification of the times when the pollutant concentration exceeded full span of the CEMS.
  - g. Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3
  - h. If the minimum quantity of emissions data as required by 40 CFR §60.49Da is not obtained for any 30 successive unit operating days, the following information shall be included in the quarterly report of the respective reporting period.
    - i. The number of hourly average available for outlet emission rates.
    - ii. The standard deviation of hourly averages for outlet emission rates.
    - iii. The lower confidence limit for the mean outlet emission rate.
    - iv. The applicable potential combustion concentration.
    - v. The ratio of the upper confidence limit for the mean outlet emission rate ( $E_o^*$ ) and the allowable emission rate ( $E_{std}$ ) as applicable.
  - i. If any standard under 40 CFR §60.43Da (SO<sub>2</sub> NSPS Da standard) is exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement indicating if emergency conditions existed and requirements under 40 CFR §60.48Da(d) were met during each period, and including the following information.
    - i. Times periods the emergency condition existed;
    - ii. Electrical output and demand on the permittee's electric utility system and the affected facility;
    - iii. Amount of power purchased from interconnected neighboring utility companies during the emergency period;
    - iv. Percent reduction in emissions achieved;
    - v. Atmospheric emission rate (ng/J and lb/MWh) of the pollutant discharged; and
    - vi. Actions taken to correct control system malfunction.
  - j. For periods for which SO<sub>2</sub> or NO<sub>x</sub> emissions data are not available, the permittee shall submit a signed stated 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 the pc boiler during the periods of data unavailability are to be compared with operation of the control system and pc boiler before and following the period of data unavailability. **[40 CFR §60.51Da(f)]**
- 5.5.4. *Quarterly PM, CO, Hg Emission Report:* Within 30 days following the end of each quarter, the permittee shall submit a report to the Director summarizing PM, CO, and Hg emissions including periods of startups, shutdowns, malfunctions, and CEMS system monitor availability for the previous quarter. Any emissions data that indicates that the limits as stated in Section 5.1. were exceeded during the corresponding reporting period must be noted in this summary report. At the minimum, the date and time, length of the exceedances(s), magnitude, the limit

that was exceeded, the cause of the exceedances, and the corrective action taken shall be included in the summary report.

**[45CSR§2A-7.2.c. and 45CSR§13-3]**

## 6.0. Source-Specific Requirements for the Auxiliary Boiler (ID #SX1)

### 6.1. Limitations and Standards

6.1.1. The following conditions and requirements are specific to the Auxiliary Boiler (ID #SX1):

- a. The hourly heat input of the Auxiliary Boiler shall not exceed 225 million British Thermal Units (MMBtu) per hour.
- b. The permittee shall limit the annual capacity factor of the boiler to no more than 10 percent by limiting the total annual heat input of the boiler to 197,100 MMBtu per year. Compliance with this limit shall be satisfied through compliance with the annual fuel usage limit in item c of this condition.  
[40 CFR §60.44b(c) and 45 CSR §2-8.4.a.1.]
- c. The Auxiliary Boiler shall not consume more than 197.1 million cubic feet of natural gas on an annual basis.
- d. The permittee shall perform annual maintenance of the Auxiliary Boiler.

6.1.2. Emissions of nitrogen oxides (NO<sub>x</sub>) shall be controlled with the use of low NO<sub>x</sub> burners and good combustion practices control technologies. NO<sub>x</sub> emissions emitted to the atmosphere from the Auxiliary Boiler Stack (EP #EX1) shall not exceed 22.1 lb/hr based on a three-hour block average.

6.1.3. Emissions of SO<sub>2</sub> shall be controlled with the use of clean fuels (i.e. natural gas) control technology. SO<sub>2</sub> emissions to the atmosphere from the Auxiliary Boiler Stack (EP #EX1) shall not exceed 0.133 lb/hr based on a three-hour block average.

- a. The auxiliary boiler shall not consume any natural gas with a sulfur content greater than 0.15 grains per 100 cubic feet of natural gas.

6.1.4. PM and PM-10 emissions emitted to the atmosphere from the Auxiliary Boiler Stack (EP #EX1) shall not exceed 1.26 lb/hr based on a six-hour block average.

6.1.5. CO emissions emitted to the atmosphere from the Auxiliary Boiler Stack (EP #EX1) shall not exceed 9 lb/hr based on a three-hour block average.

6.1.6. VOC emissions emitted to the atmosphere from the Auxiliary Boiler Stack (EP #EX1) shall not exceed 1.22 lb/hr based on a three-hour block average.

6.1.7. The auxiliary boiler stack shall not exhibit visible emission greater than 10% opacity on a 6-minute block averaging period.  
[45CSR§2-3.1]

6.1.8. **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 1.0 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.  
[45CSR§13-5.11.]

## 6.2. Monitoring Requirements

- 6.2.1. For each operating day, the permittee shall record the calendar date, amount of fuel consumed, number of hours operated, and the hourly steam load. Using the amount of fuel consumed, the appropriate Higher Heating Value (HHV) of the fuel and engineering calculations, the permittee shall determine the hourly heat input of the Auxiliary Boiler on a daily basis. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.  
[40CFR§60.49b(p) and 45CSR§2A-7.1.a.1.]

## 6.3. Testing Requirements

- 6.3.1. *Maximum Heat Input Capacity Demonstration:* This demonstration shall be conducted within 60 days after achieving the maximum heat input rate to the boiler, but not later than 180 days after initial startup of the boiler. This demonstration shall determine the maximum heat input capacity for 24 hours using the heat loss method or heat input method described in section 5 and 7.3 of the ASME Power Test Codes 4.1. This demonstration requirement shall not be construed to require the permittee to operate the boiler at a heat input exceeding the maximum heat input specified by the manufacturer.  
[40CFR§60.46b(g)]
- 6.3.2. *Initial Stack Tests:* In accordance with test methods specified in this permit, the auxiliary boiler stack shall be tested to demonstrate initial compliance with the emission standards for CO, and NO<sub>x</sub>. The test(s) shall be conducted within 60 days after achieving the maximum heat input rate to the boiler, but not later than 180 days after initial startup of the boiler. Such testing shall be conducted in accordance with U.S.EPA Methods 10B and 7 or alternative methods approved by the Director. Tests shall be conducted between 90 and 100% of the maximum permitted heat input rate. The Director may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. Such testing shall be conducted in accordance with Condition 3.3.1. of this permit.

## 6.4. Recordkeeping Requirements

- 6.4.1. **Record of Monitoring.** The permittee shall keep 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;
  - 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.
- 6.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
- 6.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, 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.

- 6.4.4. The permittee shall maintain records of all maintenance performed on the auxiliary boiler in accordance with 3.4.1. of this permit.

## **6.5. Reporting Requirements**

- 6.5.1. The permittee shall report the results of any test conducted as required in Section 6.3. of this permit to the Director within 60 days after completing such testing.
- 6.5.2. The permittee shall submit to the Director on or before March 15 an annual compliance report of the previous calendar year ending on December 31. Such report shall include the following:
  - a. Annual capacity factor over the previous calendar year;
  - b. The result of any NO<sub>x</sub> emission tests required during the reporting period; and
  - c. Hours of operation for the previous calendar year.  
[40 CFR §60.49b(q)]

**7.0. Source-Specific Requirements for Limestone and Ash Handling Systems**

**7.1. Limitations and Standards**

7.1.1. The following conditions and requirements are specific to the limestone handling operations:

- a. The material (limestone) transferred through the facility shall not exceed the maximum material throughputs as shown in Table 3 - "Limestone Handling Transfer Limits" on of this permit.
- b. Pollution control mechanisms/measures shall be installed and maintained on all material transfer points in accordance with Table 3 - "Limestone Handling Transfer Limits" of this permit.

Transfer Point		Pollution Control Device	Maximum Throughput	
ID	Description		Tons/Hour	Tons/Year
L-1	Truck Dump to Limestone Hopper Feeder	Partial Enclosure with dust suppression	150	275,000
L-2	Feeder Transfer to Bucket Elevator	Full Enclosure w/dust suppression	150	275,000
L-3	Bucket Elevator Discharge to Pile Tripper Belt	Full Enclosure w/dust suppression	150	275,000
L-4	Belt Transfer to Limestone Pile	Partial Enclosure and Telescopic Chute	150	275,000
L-6	Reclaim Transfer to Reclaim Hopper/Belt	Partial Enclosure	150	275,000
L-9	Bucket Elevator Discharge to Conveyor	Partial Enclosure w/dust suppression	150	275,000
L-10	Conveyor to Storage Conveyor	Partial Enclosure w/dust suppression	150	275,000
L-12a	Silo Drop to Weigh Feeder	Full Enclosure	82	275,000
L-12b	Silo Drop to Weigh Feeder	Full Enclosure		
L-13a	Ball Mill	Partial Enclosure	82	275,000
L-13b	Ball Mill	Partial Enclosure		

- c. Stockpile L-5 shall be limited to a maximum storage capacity of 13,680 tons of limestone.
- d. Stockpile L-5 shall be located in an structure with a roof, three full walls and one partial wall.. Fugitive emissions from opening (except for vents as defined in 40CFR§60.671) of the limestone storage structure and the building enclosing the ball mill shall not exhibit opacity greater than 7%.  
**[40CFR§60.672(e)(1)]**

- d. Any transfer point or any source of fugitive emissions that handles or process limestone that is not located inside a fully enclosed structure shall not exhibit visible emissions greater than 10% opacity on a 6 minute average. This limitation does not apply to visible emissions generated from truck dump (ID L-1).  
[40CFR§§60.672(b) and (d)]
- e. The limestone day silo (SL-11) shall be enclosed and vent to a dust collector (EL-11).
  - i. PM from emission point EL-11 shall not exceed 0.69 lb/hr based on a three-hour block averaging period and 0.86 TPY.
  - ii. PM<sub>10</sub> from emission point EL-11 shall not exceed 0.58 lb/hr based on a three-hour block averaging period and 0.73 TPY.
  - iii. Visible emissions from emission point EL-11 shall not exceed 7% opacity on a six-minute block averaging period.  
[40CFR §60.672(f)]

7.1.2. The following conditions and requirements are specific to the ash handling operations:

- a. The permittee shall use a negative pressure (vacuum) system to transfer all fly ash. Such system shall include up to three exhausters (SA-11a, SA-11b, SA-11c) that discharge to the atmosphere through emission points EA-11a, EA-11b, and EA-11c. Emissions from these exhausters shall not exceed the following limits:
  - i. PM emissions from each shall not exceed 0.65 pounds per hour and combined total from all three emission points shall not exceed 5.72 TPY.
  - ii. PM<sub>10</sub> emissions from each shall not exceed 0.31 pounds per hour and combined total from all three emission points shall not exceed 2.74TPY.
  - iii. The permittee shall only operate two of the three exhausters at any given time.
- b. The permittee shall install, operate, and maintain bin exhaust filters to control PM emissions from the fly ash storage silos (CA-1).
- c. The bottom ash storage pile SA-7 shall be limited to a maximum storage capacity of 1,170 tons of bottom ash.
- d. The gypsum storage pile SG-1 shall be limited to a maximum storage capacity of 13,680 tons of gypsum.

7.1.3. The following conditions and requirements are specific to the internal combustion engines powering the emergency generator (ID #SG1) and fire pump (ID #SP1):

- a. The hours of operation for the engines of the emergency generator and fire pump shall be limited to 500 hours per rolling 12 month time period for each engine.
- b. The sulfur content of the fuel used in the emergency generator and fire pump engines shall not exceed 0.05% sulfur by weight.
- c. The emergency generator engine (ID #SG1) shall not consume more than 14,750 gallons of fuel on an annual basis.

- d. The fire pump engine (ID #SP1) shall not consume more than 7,380 gallons of fuel on an annual basis.
- e. Emissions from the emergency generator and fire pump engines shall not exceed the following limits:

Pollutants	Emergency Generator		Fire Pump	
	lb/hr	tons per year*	lb/hr	tons per year*
SO <sub>2</sub>	6.5	1.6	3.3	0.825
PM <sub>10</sub>	1.13	0.28	0.56	0.14
CO	8.85	2.21	4.43	1.11
NO <sub>x</sub>	20.9	5.23	10.5	2.6
VOC	1.21	0.30	0.64	0.16

- f. The permittee shall perform annual maintenance of the emergency generator and fire pump engine and shall keep records of this maintenance.

7.1.4. **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 1.0 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.  
 [45CSR§13-5.11.]

**7.2. Monitoring Requirements**

7.2.1. The permittee shall conduct visible emission checks in accordance with Condition 3.2.1. of this permit for the purpose of determining ongoing compliance with the visible emission standards (7.1.1.d. and 7.1.1.e.) from the limestone structures, limestone silo, and any other transfer point not located within a structure. Refer to Table B in Appendix B of this permit for a list of sources.

**7.3. Testing Requirements**

7.3.1. For demonstrating initial compliance with the visible emission standards of 7.3.1., the permittee shall conduct performance testing to determine the opacity from the point and fugitive emission sources associated with limestone handling and processing at the facility. Refer to Table B in Appendix B of this permit for a list of sources. Such testing shall be conducted in accordance with Method 9 of Appendix A-4 of 40CFR 60, and the procedures in 40CFR§60.11. and Condition 3.4.1 of this permit and the following additions:

- a. The minimum distance between the observer and the emission source shall be 15 feet. The observer shall, when possible, select a position that minimizes interference from other fugitive

sources (e.g. road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR 60, Section 2.1.) must be followed.

- b. The observer shall, when possible, select a position that minimizes interference from other fugitive sources (e.g. road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of 40 CFR 60, Section 2.1.) must be followed.
- c. For determining compliance with the opacity limit for the limestone silo (SL-11), the duration of the Method 9 observations shall be one hour (ten 6-minute averages).
  - i. If the limestone silo is operated less than one hour at a time, then the duration of the observation may be reduced but not less than 30 minutes.
- d. The duration of the Method 9 observations for the structures and any fugitive source not located within a structure must be 30 minutes (five 6-minute averages). Performance test must be conducted while all affected units inside the structures are operating.  
**[40CFR §§60.675(c) and (d)]**

The permittee may use the following as alternatives to the reference methods and procedures listed in the above:

- e. If visible emissions from two or more facilities (affected sources) continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
  - i. Use for the combined emission stream the highest fugitive opacity standard application to any of the individual affected contributing to the emission stream.
  - ii. Separate the emissions so that the opacity of emissions from each affected can be read.
- f. A single visible emission observer may conduct visible emissions observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
  - i. No more than three emission points may be read concurrently.
  - ii. All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
  - iii. If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.
- g. The permittee may reduce the 30-day advance notification of performance test in 40CFR §§60.7(a)(6), 60.8(d) and 15-day notification of Condition 3.3.1.c. to a 7-day advance notification.  
**[40CFR §§60.675(e) and (g)]**

#### 7.4. Recordkeeping Requirements

7.4.1. **Record of Monitoring.** The permittee shall keep 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;
- 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.

7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, 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.

7.4.4. The permittee shall record the amount of limestone received, and bottom and fly ash shipped from the facility on a monthly basis. Such records shall be maintained in accordance with Condition 3.4.1. of this permit.

7.4.5. The permittee shall keep monthly records of hours of operation and a 12-month rolling total for each engine. If the engine is equipped with a non-resettable hour meter, the permittee shall only be required to record the number of hours of operation at the end of the calendar year. Such records shall be maintained in accordance with Condition 3.4.1 of this permit.

**7.5. Reporting Requirements**

- 7.5.1. The permittee shall report the results of any test conducted as required in Section 7.3. of this permit to the Director within 60 days after completing such testing.  
[40CFR§60.676(k)]



**APPENDIX B**

<b>Table A- Coal Handling Emission Points Subject to a Visible Emission Standard</b>			
Emission Point Id	Equipment Description	Emission Unit/Source located in structure	Limit (% Opacity)
SC-3	Discharge of Receiving Belt to Stacking Belt	Transfer House (L-TH-1)	20
SC-6	Discharge of Receiving Belt to Transfer Belt		
SC-4	Discharge of Stacking Belt to Stockpile	None	20
SC-7	Discharge of Reclaim Conveyor to Surge Bin	Crusher House (L-CH)	20
SC-13	Feeder to Crusher B		
SC-14	Feeder to Crusher A		
SC-15	Discharge from Crusher B		
SC-16	Discharge from Crusher A		
SC-18	Discharge from Plant Feed Belt B	Tripper Transfer (L-TH2)	20
SC-19	Discharge from Plant Feed Belt A		
SC-21A (EC-21)	Discharge from Tripper Belt A	Boiler Building (Emission Point EC-21)	20
SC-21B (EC-21)	Discharge from Tripper Belt B		

<b>Table B- Limestone Handling Emission Points Subject to a Visible Emission Standard</b>			
Emission Point Id	Equipment Description	Structure Source located in	Limit (% Opacity)
SL-2	Discharge from the Truck Feeder Conveyor	Limestone Building (A-frame)	10
SL-3	Discharge from the Limestone Bucker Elevator to Bypass Conveyor		
SL-9	Discharge from the Limestone Bucker Elevator to Tripper Conveyor		
SL-6	Reclaim Hopper		
SL-10	Discharge from the Bypass Conveyor	Day Silo (Emission Point EL-11)	7
SL-11	Discharge from Day Silo Feed Conveyor to Day Silo		
SL-12a	Discharge from Day Silo to Feeder A	Ball Mill Building	10
SL-12b	Discharge from Day Silo to Feeder A		
SL-13a	Discharge from Feeder A to Mill A		
SL-13b	Discharge from Feeder B to Mill B		

### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> \_\_\_\_\_ Date \_\_\_\_\_  
(please use blue ink) Responsible Official or Authorized Representative

Name & Title \_\_\_\_\_ Title \_\_\_\_\_  
(please print or type) Name

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

- <sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:
- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
    - (ii) the delegation of authority to such representative is approved in advance by the Director;
  - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
  - d. The designated representative delegated with such authority and approved in advance by the Director.