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west virginia department of environmental protection

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**Attachment 2:  
Documentation of  
Federally Enforceable Requirements  
to limit SO<sub>2</sub> emissions to under 2,000 tpy**

West Virginia Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

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Promoting a healthy environment.

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## Documentation of Federally Enforceable Requirements to limit SO<sub>2</sub> emissions to under 2,000 tpy

Permit R14-0005F for the American Bituminous Power Partners, L.P., Grant Town Power Plant limits the aggregate annual SO<sub>2</sub> emissions from the two CFB boilers (1S and 2S) to limit facility-wide annual SO<sub>2</sub> emissions below 2,000 tons per year.

Specific Requirement 1.b sets forth the SO<sub>2</sub> emission limits for stack 1E, serving the two CFB boilers (1S and 2S) (see page 1 of R14-0005F).

Table A.1(b): Additional CFB Combined Stack 1E Emission Limits for SO<sub>2</sub>

SO <sub>2</sub> Emissions	Averaging Period
163.6 Tons	30-Day Rolling Average <sup>(1)</sup>
0.41 lb/mmBtu	30-Day Rolling Average <sup>(1)</sup>
1,990 tons	12 Month Rolling Total <sup>(2)</sup>

<sup>(1)</sup> Compliance with this limit will first be determined thirty days after January 13, 2017 and thereafter in perpetuity.

<sup>(2)</sup> Compliance with this limit will first be determined twelve (12) months after January 13, 2017 and thereafter in perpetuity.

In addition to the two CFB boilers, the facility is equipped with the Prep Plant Gob Hopper Boiler (22S), a small kerosene-fired boiler rated at 0.794 mmBtu/hr. The facility is also equipped with 2 emergency diesel engines: the Emergency Diesel Feed Pump (DFP) rated at 235 horsepower (hp) and the Diesel Fire Pump (DFP2) rated at 350 hp. These sources are permitted in Section 8 of the Title V permit for the source. (See Title V Permit R-30-04900026-2014)

The maximum annual SO<sub>2</sub> emissions for these three (3) units can be calculated assuming they operate for 8760 hours/year, and using the appropriate AP-42 emission factors.

AP42, Fifth Edition, Volume I, Chapter 1: External Combustion Sources, Section 1.3 Fuel Oil Combustion, Table 1.3-1 (<https://www3.epa.gov/ttn/chief/ap42/ch01/final/c01s03.pdf>) provides the SO<sub>2</sub> emission factor for Kerosene for a boiler rate < 100 MMBtu/hr as 142S lb/1000 gallons, where S is the percent sulfur.

Maximum Annual SO<sub>2</sub> Emissions from Prep Plant Gob Hopper Boiler (22S):

$$= \frac{0.794 \text{ mmBtu/hr}}{135,000 \frac{\text{Btu}}{\text{gal Kerosene}}} * \frac{142 * (0.05\% \text{ Sulfur content}) \text{ lb}}{1,000 \text{ gallons}} * \frac{8760 \text{ hours}}{2000 \text{ lbs/ton}} = 0.18 \text{ tpy}$$

AP42, Fifth Edition, Volume I, Chapter 3: Stationary Internal Combustion Sources, Section 3.3 Gasoline and Diesel Industrial Engines, Table 3.3-1 (<https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf>) provides the SO<sub>x</sub> emission factor for diesel fired internal combustion engines as 0.00205 lb/hp-hr.

Maximum Annual SO<sub>2</sub> Emissions from 235 hp Emergency Diesel Feed Pump (DFP):

$$\left(235 \text{ hp} * 0.00205 \frac{\text{lb}}{\text{hp} - \text{hr}}\right) * \left(\frac{8760 \text{ hours}}{2000 \frac{\text{lbs}}{\text{hr}}}\right) = 2.16 \text{ tpy}$$

Maximum Annual SO<sub>2</sub> Emissions from 350 hp Diesel Fire Pump (DFP2):

$$\left(350 \text{ hp} * 0.00205 \frac{\text{lb}}{\text{hp} - \text{hr}}\right) * \left(\frac{8760 \text{ hours}}{2000 \frac{\text{lbs}}{\text{hr}}}\right) = 3.22 \text{ tpy}$$

The maximum potential annual SO<sub>2</sub> emissions from the Gob Hopper boiler and the two diesel engines is 5.56 tpy, which when added to the allowable emission rate for the two CFB boilers of 1,990 tpy, is still below the 2,000 tpy trigger for modeling under the SO<sub>2</sub> data requirements rule.



west virginia department of environmental protection

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

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

September 21, 2016

CERTIFIED MAIL  
91 7199 9991 7034 1380 3090

Mr. Steve Friend, Plant Manager  
American Bituminous Power Partners, L.P.  
PO Box 159  
Grant Town, WV 26754

RE: **Permit Issuance**  
American Bituminous Power Partners, L.P.  
Grant Town Power Station  
Permit No. R14-0005F  
Plant ID No. 049-00026

Dear Mr. Friend:

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 R14-0005F 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.

Please note, the source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit to reflect the changes permitted herein.

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.

Should you have any questions or comments, please contact me at (304) 926-0499, extension 1219.

Sincerely,

Joe Kessler, PE  
Engineer

Enclosures



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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

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

**PERMIT FOR A MODIFICATION TO  
A COAL FIRED POWER PLANT**

IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL LAW (W. Va. Code §§22-5-1 et seq.), AND REGULATIONS PROMULGATED THEREUNDER, THE FOLLOWING PERMITTEE IS AUTHORIZED TO CONSTRUCT, SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, THE SOURCE DESCRIBED BELOW.

*This permit supersedes and replaces Permit Number R14-0005E issued on August 6, 2010.*

Name of Permittee: American Bituminous Power Partners, L.P.

Name of Facility: Grant Town Power Plant

Permit No.: R14-0005F

Plant ID No.: 049-00026

Effective Date of Permit: September 21, 2016

Permit Writer: Joseph Kessler

Facility Mailing Address: P.O. Box 159  
Grant Town, WV 26574

County: Marion

Nearest City or Town: Grant Town

UTM Coordinates: Easting: 572.4 km Northing: 4,379.25 km Zone: 17

Directions to Exact Location: US Route 19 north from Fairmont, turn left in Rivesville and follow Paw Paw Creek for four (4) miles.

Type of Facility or Modification: Modification to add an aggregate annual SO<sub>2</sub> limit of 1,990 tons/year for the two CFB Boilers (1S and 2S) so as to limit facility-wide annual SO<sub>2</sub> emissions below the Data Requirements Rule (DRR) applicability level.

*The source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit to reflect the changes permitted herein.*

**Promoting a Healthy Environment**

IN ACCORDANCE WITH THE PERMIT APPLICATION AND ITS AMENDMENTS, THIS PERMIT IS LIMITED AS FOLLOWS:

## A. SPECIFIC REQUIREMENTS

1. Air pollutant emissions from the stack (1E) serving the two permitted circulating fluidized bed boilers, identified as 1S and 2S, shall not exceed any of the following limitations:

a. **Table A.1(a): CFB Combined Stack 1E Emission Limits**

Pollutant	lb/hr	lb/mmBtu	Concentration @ 3.5% O <sub>2</sub>
Particulate Matter	33.1	0.03	0.016 gr/dscf
Sulfur Dioxide <sup>(1)</sup>	915.84	0.83	342 ppm <sub>v</sub>
Nitrogen Oxides <sup>(2)</sup>	441.5	0.40	230 ppm <sub>v</sub>
VOCs	8.8	0.008	-----
CO	187.6	0.17	160 ppm <sub>v</sub>
Pb <sup>(3)</sup>	0.136	1.22 x 10 <sup>-4</sup>	-----
Hg <sup>(3)</sup>	0.02	1.8 x 10 <sup>-5</sup>	-----
Fluorides <sup>(3)</sup>	0.671	6.08 x 10 <sup>-4</sup>	-----
Be <sup>(3)</sup>	9.0 x 10 <sup>-5</sup>	8.18 x 10 <sup>-8</sup>	-----

- (1) For the purpose of determining compliance with provisions of emission limitations under Specific Requirements A.1 a three hour averaging time shall be utilized. For the purpose of determining compliance with the provisions of 45CSR10 and 45CSR16 (40 CFR 60) a thirty day rolling average shall be utilized.
- (2) For the purpose of determining compliance with provisions of emission limitations under Specific Requirements A.1 and 45CSR16 (40 CFR 60) a 30 day rolling averaging time is to be utilized.
- (3) Maximum permissible levels of lead, mercury, fluorides and beryllium may be established below the levels specified above based upon test data obtained in accordance with Other Requirements B.17-B.20 of the permit following start-up of the permitted facility.

- b. The following limitations will become effective on January 13, 2017:

**Table A.1(b): Additional CFB Combined Stack 1E Emission Limits for SO<sub>2</sub>**

SO <sub>2</sub> Emissions	Averaging Period
163.6 Tons	30-Day Rolling Average <sup>(1)</sup>
0.41 lb/mmBtu	30-Day Rolling Average <sup>(1)</sup>
1,990 Tons	12 Month Rolling Total <sup>(2)</sup>

- (1) Compliance with this limit will first be determined thirty (30) days after January 13, 2017 and thereafter in perpetuity.
- (2) Compliance with this limit will first be determined twelve (12) months after January 13, 2017 and thereafter in perpetuity.

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American Bituminous Power Partners, L.P.  
Grant Town Facility

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

**Table A.2: Coal Refuse Handling/Storage**

Equipment	Control Equipment	PM limitation for control equipment discharge lb/hr (gr/SCF)
Gob Receiving Hoppers	Partial Enclosure with water/chemical dust suppression system	-----
Transfer Point/Feeder Fuel Preparation Building Feed Belt Conveyor	Full enclosure	-----
Gob Belt Conveyors to Fuel Preparation Building	Partial enclosure	-----
Gob Fuel Preparation Building: 1 Double Deck Screen, 3 Crushers, and Equipment Transfer Points	Full enclosure of all equipment and transfer points. Gob is immersed in water upon entering building	-----
2 Thermal-Disc-Type Coal Fines Dryer	Scrubber 11C	0.90 (0.009)
Transfer Belt Conveyor from Crusher Building to Gob Bunker Feed Conveyor	Full enclosure and ventilation into main boiler building	-----
Transfer Point from Fuel Preparation Building Belt Conveyor to Gob Storage Bin Feed Conveyors, Bin Feed Conveyors at Transfer Building	Full enclosure and evacuation to Baghouse 4C	0.85 (0.02)
Two (2) 950 Ton gob Bins and Two (2) 150 Ton High Btu Fuel Bins, Bin Feed Conveyors and Transfer Points	Full enclosure and evacuation to Baghouse 5C	1.03 (0.01)

3. Limestone receiving, handling, and storage facilities shall consist of the following and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

**Table A.3: Limestone Handling/Storage**

Equipment	Control Equipment	PM limitation for control equipment discharge lb/hr (gr/SCF)
Limestone Receiving Hopper	Enclosure and water/chemical dust suppression system	-----
Limestone Surge Hopper	Baghouse 7C	0.35 (0.01)

Equipment	Control Equipment	PM limitation for control equipment discharge lb/hr (gr/SCF)
Two (2) 70 TPH Limestone Mills (One DFM Mill and one Back-up Hammermill)	Baghouse 6C	2.1 (0.02)
One (1) 3600 Ton Limestone Storage Silo	Baghouse 8C	0.34 (0.01)

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

**Table A.4: Ash Handling/Storage**

Equipment	Control Equipment	PM limitation for control equipment discharge lb/hr (gr/SCF)
Vacuum System for Collected Flyash in Baghouses and Air Preheater Hoppers (separate system for each boiler)	Two cyclones ID Nos. 14-C/A & 15-C/A and two Baghouses ID Nos. 14C & 15C	14C - 0.61 (0.018) 15C - 0.61 (0.018)
Vacuum System for Bottom Ash/Cooler Rejects (separate system for each boiler) 3100 ton 44 foot I.D. Ash Silo Emergency Dry Ash Loadout	Baghouse 9C	0.52 (0.016)
Wet Ash Loadout	Rotary-wet unloader to thoroughly wet ash prior to loading and handling.	-----

5. All unpaved roads used for coal and/or ash haulage shall be surfaced with red dog or suitable aggregate and shall be treated at least twice per month with properly mixed Coherex or Soil-Sement dust suppressants. Other chemical dust suppressants as effective as the above brands may be used after receiving prior approval from the Division of Air Quality.
6. All paved roadways or haulways on the premises and serving the permitted facility shall be vacuum swept five (5) days per week. Berms along these roads or haulways shall be treated with Coherex or Soil-Sement once per calendar quarter. Other chemical dust suppressants as effective as the above brands may be used after receiving prior approval from the Division of Air Quality.
7. Open stockpile of gob shall be limited to not more than 170,000 tons located adjacent to the gob loading hoppers, 4,000 tons of processed fuel located adjacent to the fuel/limestone conveyor transfer buildings, 11,000 tons of processed fuel located adjacent to the truck weigh station, 10,000 tons of high

BTU fuel located adjacent to the truck weigh station, and 70,000 tons of silt located immediately east of the gob storage area and 3,000 tons of silt located under/adjacent to the silt storage barn. Dust entrainment or emissions from the stockpiling of gob, processed fuel, high BTU fuel or silt, and wind erosion shall be minimized by treating with a dust suppressant.

8. In addition to that limestone stored within the limestone silo, an open stockpile adjacent to the limestone feed hoppers shall be restricted to 5,000 tons. A single additional open stockpile of limestone located on property shall be restricted to an eleven (11) day supply or no more than 10,000 tons. Total open stockpiling of limestone on property shall be limited to no more than 15,000 tons at any one time. Dust entrainment or emissions from the stockpiling shall be minimized by a chemical dust suppressant system.
9. The aggregate sulfur dioxide reduction efficiency of the two (2) circulating fluidized bed boilers shall be as follows for each operating 24-hour period:
  - a. Prior to January 13, 2017:

**Table A.9(a): SO<sub>2</sub> Reduction Requirements**

24-hr Potential SO <sub>2</sub> Emission Rate (lb/mmBtu)	Reduction Efficiency Required (%)
15.96	94.8
6.0 or less	90.0

The required SO<sub>2</sub> reduction efficiency for each 24 hour period in which the potential SO<sub>2</sub> emission rate falls between 6 lb/mmbtu and 15.96 lb/mmbtu shall be determined by linear interpolation.

- b. As determined for the first 24-hour period beginning on January 13, 2017 and thereafter in perpetuity:

**Table A.9(b): SO<sub>2</sub> Reduction Requirements**

24-hr Potential SO <sub>2</sub> Emission Rate (lb/mmBtu)	Reduction Efficiency Required (%)
15.96	97.4
4.1 or less	90.0

The required SO<sub>2</sub> reduction efficiency for each 24 hour period in which the potential SO<sub>2</sub> emission rate falls between 4.1 lb/mmbtu and 15.96 lb/mmbtu shall be determined by linear interpolation.

10. The throughput of fuel into the Ro-Pro Roll Crusher identified in permit application R14-0005C as 18S shall not exceed 75 tons per hour nor 657,000 tons per year. Compliance with the throughput limit shall be determined using a rolling yearly total. The Ro-Pro Roll Crusher shall be fully enclosed.

## **B. OTHER REQUIREMENTS**

1. The permittee shall comply with all applicable provisions of 45CSR2, 45CSR10, 45CSR13, 45CSR16, 45CSR30, 40 CFR 60 Subpart Y, 40 CFR 60 Subpart Da and 40 CFR 60 Subpart OOO provided that the permittee shall comply with any more stringent requirements as may be forth under Specific Requirements, Section (A) of this permit.
2. The facility is subject to the requirements of 45CSR2. Pertinent sections applying to these operations include, but are not limited to:

### **§45-2-3.1**

No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

### **§45-2-3.2**

Compliance with the visible emission requirements of subsection 3.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of subsection 3.1.

### **§45-2-3.3**

If the owner or operator of a fuel burning unit can demonstrate to the satisfaction of the Director that compliance with subsection 3.1 cannot practically be achieved with respect to soot blowing operations or during the cleaning of a fire box, the Director may formally approve an alternative visible emissions standard applicable to the fuel burning unit for soot blowing periods; provided that the exception period shall not exceed a total of six (6) six minute periods in a calender day with visible emissions limited to thirty percent (30%) opacity, as determined in accordance with 40 CFR 60, Appendix A, Method 9, or by using measurements from a certified continuous opacity monitoring system.

### **§45-2-4.1**

No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:

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§45-2-4.1.a

For type 'a' fuel burning units, the product of 0.05 and the total design heat inputs for such units in million British Thermal Units (B.T.U.'s) per hour, provided however that no more than twelve hundred (1200) pounds per hour of particulate matter shall be discharged into the open air from all such units.

§45-2-5.1

No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

§45-2-5.1.a

Stockpiling of ash or fuel either in the open or in enclosures such as silos;

§45-2-5.1.b

Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and

§45-2-5.1.c

Ash or fuel handling systems and ash disposal areas.

§45-2-9.1

The visible emission standards set forth in section 3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.

3. The facility is subject to the requirements of 45CSR10. Pertinent sections applying to these operations include, but are not limited to:

§45-10-7.1

No person shall construct, modify or relocate any source of sulfur dioxide without first obtaining a permit in accordance with the provisions of W. Va. Code §22-5-1 et seq., and Series 13, 14, 19 and 30 of Title 45.

4. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance.

§45-13-10.2

The Secretary may suspend or revoke a permit or general permit registration if, after (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit or general permit registration.

§45-13-10.3

The Secretary may suspend or revoke a permit or general permit registration if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W. Va. Code § 22-5-5 to show cause why the permit or general permit registration should not be suspended, modified or revoked.

5. The facility is subject to the requirements of 40 CFR 60, Subpart Y. Pertinent sections applying to these operations include, but are not limited to:

§60.254(a)

On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.

§60.255(a)

An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.

§60.257(a)

The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

- (1) Method 9 of appendix A-4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).
  - (i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).
  - (ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.
- (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.
  - (i) The minimum distance between the observer and the emission source shall be 5.0 meters (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. Water vapor is not considered a visible emission.
- (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.
  - (i) No more than three emissions points may be read concurrently.
  - (ii) All three emissions 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 emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

6. The facility is subject to the requirements of 40 CFR 60, Subpart Da. Pertinent sections applying to these operations include, but are not limited to:

§60.42a(a)

On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction, or modification commenced before or on February 28, 2005, any gases that contain PM in excess of:

- (1) 13 ng/J (0.03 lb/million BTU) heat input derived from the combustion of solid, liquid, or gaseous fuel;
- (2) 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel;

§60.42a(b)

On and after the date the initial PM performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart are exempt from the opacity standard specified in this paragraph b.

§60.43a(a)

On and after the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility which combusts solid fuel or solid-derived fuel and for which construction, reconstruction, or modification commenced before or on February 28, 2005, except as provided under paragraphs (c), (d), (f) or (h) of this section, any gases that contain SO<sub>2</sub> in excess of:

- (1) 520 ng/J (1.20 lb/million Btu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or
- (2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 260 ng/J (0.60 lb/million Btu) heat input.

7. The facility is subject to the requirements of 40 CFR 60, Subpart OOO. Pertinent sections applying to these operations include, but are not limited to:

§60.672(a)

Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of Subpart OOO 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 as required under §60.8. The requirements in Table 2 of Subpart OOO apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

§60.672(b)

Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of Subpart OOO 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 as required under §60.11. The requirements in Table 3 of Subpart OOO apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

§60.672(d)

Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

§60.672(e)

If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in 40 CFR §60.672(a) and (b), or the building enclosing the affected facility or facilities must comply with the following emission limits:

- (1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and
- (2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of Subpart OOO.

§60.672(f)

Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of Subpart OOO but must meet the applicable stack opacity limit and compliance requirements in Table 2 of Subpart OOO. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

8. All notifications and reports required pursuant to 40 CFR 60 under §60.7 shall be forwarded to:

Director  
WVDEP  
Division of Air Quality  
601 57th Street, SE  
Charleston, WV 25304-2345

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

9. Compliance with the particulate matter emission limitations under Specific Requirement A.1 and 40 CFR 60.42Da shall be demonstrated in accordance with all applicable requirements under 40 CFR 60 and 45CSR2.
10. The permittee shall meet the following compliance requirements:
- a. Compliance with the sulfur dioxide emission limitations (i.e.,  $\text{lb}_m/\text{MMBtu}$ ,  $\text{lb}_m/\text{hr}$ , and  $\text{ppm}_v$ ) and sulfur dioxide reduction requirements under Specific Requirement A.1 and A.9 of this permit and as required by 40 CFR 60.43Da shall be demonstrated in accordance with all applicable requirements under 40 CFR 60 provided, however, that compliance with the maximum emission limitation shall be demonstrated for all three (3) hour periods listed under Specific Requirement A.1 and  $\text{SO}_2$  reduction requirements under Specific Requirement A.9 shall be demonstrated for all fixed twenty-four hour periods. In the event that the permittee obtains coal or coal refuse supplies which can be burned with a continuous  $\text{SO}_2$  emission rate no greater than 0.41  $\text{lb}/\text{mmBtu}$  or 6.0  $\text{lb}/\text{mmBtu}$  (depending on the limit in effect at the time), the permittee may request that the Director of the Division of Air Quality, Department of Environmental Protection approve an  $\text{SO}_2$  reduction requirement less than that required under Specific Requirement A.9. The approval of such a request would be contingent upon an acceptable demonstration by the permittee that the lower  $\text{SO}_2$  reduction efficiency provides control to a level which represents BACT.
  - b. Compliance with the sulfur dioxide emission limitations under A.1(b) shall be determined using an  $\text{SO}_2$  Continuous Emission Monitoring System (CEMS) installed, calibrated, maintained, and operated according to the provisions of 40 CFR 60.
11. The permittee shall install, calibrate, maintain and operate a continuous opacity monitoring system in accordance with 40 CFR 60.49Da and 40 CFR 60.13.
12. Visible emissions shall not exceed twenty percent (20%) opacity from the coal refuse receiving hoppers, coal refuse crushers, coal refuse feeders, coal refuse conveyors, coal refuse screen, coal refuse dryer, coal refuse storage bins, all associated coal refuse transfer points, and/or particulate matter capture and control devices associated with this equipment.

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American Bituminous Power Partners, L.P.  
Grant Town Facility

13. All fugitive particulate matter control systems shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter.
14. In regard to nitrogen oxides, the Company shall install, calibrate, maintain and operate a continuous nitrogen oxide monitoring system complying with performance specifications as set forth under 40 CFR Appendix B Performance Specification 2 - Specifications and Test Procedures for SO<sub>2</sub> and NO<sub>x</sub> Continuous Emission Monitoring Systems in Stationary Sources. Compliance with emission limitations for nitrogen oxides (i.e., lb<sub>m</sub>/MMBtu, lb<sub>m</sub>/hr and ppm<sub>v</sub>) under Specific Requirement A.1 shall be demonstrated in accordance with all applicable requirements under 40 CFR 60. Contrary to the aforementioned provisions, fuels containing more than 25% by weight of coal refuse shall not be exempted from NO<sub>x</sub> monitoring requirements and in the absence of any emission limitation set forth under 40 CFR 60 the emission limitations set forth under Specific Requirement A.1 shall apply. Compliance with provisions under Specific Requirement A.1 shall be based on a 30 day rolling average.
15. Compliance with the emission limitations for volatile organic compounds under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 25A.
16. Compliance with the emission limitations for carbon monoxide under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 25A.
17. Compliance with the emission limitations for lead under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 12.
18. Compliance with the emission limitations for mercury under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 61 Appendix B, Method 101A.
19. Compliance with the emission limitations for fluorides under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 13.
20. Compliance with the emission limitations for beryllium under Specific Requirement A.1 of this permit shall be demonstrated in accordance with 40 CFR 61 Appendix B, Method 104.
21. For the purposes of determining compliance with maximum throughput limits set forth in Specific Requirement A.10 the applicant shall maintain certified daily and monthly records of the amount of fuel through the Ro-Pro Roll Crusher 18S.

22. The permittee shall submit a report to the Secretary within 60 days after the end of each year during which records must be generated as required under §45-14-19.8(c) setting out the unit's annual emissions during the calendar year that preceded submission of the report.

### **C. GENERAL REQUIREMENTS**

1. In accordance with 45CSR30 - "Operating Permit Program", the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first filing a Certified Emissions Statement (CES) and paying the appropriate fee. Such Certified Emissions Statement (CES) shall be filed and the appropriate fee paid annually. 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.
2. 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.
3. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R14-0005 through R14-0005F and any 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.
4. At such reasonable time(s) as the Secretary may designate, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in the permit application and/or applicable regulations. Test(s) shall be conducted in such a manner as the Secretary may specify or approve and shall be filed in a manner acceptable to the Secretary. The Secretary, or his/her duly authorized representative, may at his option witness or conduct such test. Should the Secretary exercise his option to conduct such test(s), the permittee shall provide all the 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. For any tests to be conducted by the permittee, a test protocol shall be submitted to the DAQ by the permittee at least thirty (30) days prior to the test and shall be approved by the Secretary. The Secretary shall be notified at least fifteen (15) days in advance of the actual dates and times during which the test will be conducted.
5. In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations, either in whole

or in part, 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.

6. 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.
7. The permittee shall notify the Secretary, in writing, within fifteen (15) calendar days of the commencement of the construction, modification, or relocation activities authorized under this permit.
8. The permittee shall notify the Secretary, in writing, at least fifteen (15) calendar days prior to actual startup of the operations authorized under this permit.
9. This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.
10. 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.
11. At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous calendar 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 submittal frequency other than on an annual basis.

ISSUED BY:



WILLIAM F. DURHAM, DIRECTOR  
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY

DATE SIGNED: September 21, 2016

West Virginia Department of Environmental Protection  
Division of Air Quality

Earl Ray Tomblin  
Governor

Randy C. Huffman  
Cabinet Secretary

# Permit to Operate



Pursuant to  
Title V  
of the Clean Air Act

Issued to:  
**American Bituminous Power Partners, L.P.**  
Grant Town Power Plant  
R30-04900026-2014

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*William F. Durham*  
Director

Issued: September 30, 2014 • Effective: October 14, 2014  
Expiration: September 30, 2019 • Renewal Application Due: March 30, 2019

Permit Number: **R30-04900026-2014**  
Permittee: **American Bituminous Power Partners, L.P.**  
Facility Name: **Grant Town Power Plant**  
Permittee Mailing Address: **P. O. Box 159, Grant Town, WV 26574**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location:	Grant Town, Marion County, West Virginia
Telephone Number:	(304) 278-7449
Type of Business Entity:	Limited Partnership
Facility Description:	Coal refuse fired electric generation facility
SIC Codes:	4911
UTM Coordinates:	572.40 km Easting • 4,379.25 km Northing • Zone 17

Permit Writer: Bobbie Scroggie

*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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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
<i>Boilers</i>					
1S	1E	Boiler #1A: Ahlstrom Pyropower Coal Refuse-Fired Circulating Fluidized Bed Combustion Unit	1992	551.9 MMBTU/hr	Baghouse 1C
2S	1E	Boiler #1B: Ahlstrom Pyropower Coal Refuse-Fired Circulating Fluidized Bed Combustion Unit	1992	551.9 MMBTU/hr	Baghouse 2C
<i>Fuel Group</i>					
3S A	2E	Raw Gob Hopper w/vibratory feeder	1992	36 Ton	Common wind enclosure, wet/chemical suppression 3C
3S B	2E	Raw Gob Hopper w/vibratory feeder	1992	36 Ton	
3S C	2E	Gob fines Hopper w/vibratory feeder (currently not in use)	1992	5 cu. yds	
3S D	2E	Raw Gob Conveyor FH-BC-1 (36") and transfer points (from Raw Gob Hoppers to Fuel Prep building)	1992	280 TPH	Hemispherical rain/wind enclosure
19S A	18E	Silt Feed Hopper	1992	12 Tons	Common wind enclosure
19S B	18E	Silt Feed Conveyor FH-BC-8 (24") and transfer points (from Silt Feed Hopper to Conveyor FH-BC-9)	1992	150 TPH	Partial enclosure
19S C	18E	Silt Feed Conveyor FH-BC-9 (24"), Shredder, and transfer points (from Conveyor FH-BC-9 to Conveyor FH-BC-10)	1992	150 TPH	Partial enclosure
19S D	18E	Silt Screen	1992	150 TPH	Partial enclosure
18S A	17E	Ro-Pro Hopper	1995	20 ton	None
18S B	17E	Ro-Pro Feed Conveyor FH-BC-11 (36") and transfer points (from Ro-Pro Hopper to Ro-Pro Scalping Screen)	1995	200 TPH	Partial enclosure
18S C	17E	Ro-Pro Scalping Screen	1995	200 TPH	Full enclosure
18S D	17E	Gundlach Ro-Pro Unit (rotating probability screen)	1995	140 TPH	Full enclosure
18S E	17E	Ro-Pro Roll Crusher	2001	75 TPH	Full enclosure

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
18S F	17E	Ro-Pro Reversing Conveyor FH-BC-12 (30") and transfer points (from Gundlach Ro-Pro Unit to Ro-Pro Hammermill, Radial Stacking Conveyor, and Ro-Pro Coarse Transfer Conveyor)	1995	85 TPH	Full enclosure
18S G	17E	Ro-Pro Reversible Hammermill	1992/1996	85 TPH	Full enclosure
18S H	17E	Radial Stacking Conveyor FH-BC-14 (32") and transfer points (from Ro-Pro Reversing Conveyor to Stockpile)	1995	200 TPH	Partial enclosure
18S I	17E	Ro-Pro Coarse Transfer Conveyor FH-BC-13 (30") and transfer points (from Ro-Pro Reversing Conveyor to Raw Gob Hoppers)	1995	200 TPH	Partial enclosure
18S J	17E	Ro-Pro Processed Fuel Transfer Conveyor FH-BC-15 (36") and transfer points (from Gundlach Ro-Pro Unit and Ro-Pro Hammermill to FH-BC-10 and Boiler Day Bins)	1995	200 TPH	Partial enclosure
19S E	18E	Conveyor FH-BC-10 (24") and transfer points (from Silt Feed Hopper and Ro-Pro Building FH-BC-15 to Conveyor FH-BC-2)	1992	200 TPH	Partial enclosure
4S A	3E	Double Deck Screen	1992	230 HPH	Full enclosure <sup>1</sup>
4S B	3E	Coarse Gob Impactor	1992	90 TPH	Full enclosure
4S C	3E	Hammermill Feed Hopper w/vibratory Feeder	1992	80 tons	Full enclosure, Baghouse 4C
4S D	3E	Reversible Hammermill "A"	1992	85 TPH	Full enclosure
4S E	3E	Final Product Belt Conveyor FH-BC-2 (24") and transfer points (from Fuel Prep Building to Transfer House)	1992	160 TPH	Full enclosure, Baghouse 4C
4S G	3E	Fuel Prep Stack Out Conveyor FH-BC-16 (24") and transfer points (from Transfer House Discharging to Ground)	1992	200 TPH	Baghouse 4C
4S F	3E, 6E	Fuel Storage Belt Conveyor FH-BC-3 (24") and transfer points (from Transfer House to Boiler Day Bins)	1992	280 TPH	Full enclosure, Baghouse 4C, 7C
5S A	4E	Weigh belt scale FH-BC-4 (24") and transfer points (from Covered Tube Conveyors to Cross Conveyor FH-BC-5)	1992	280 TPH	Full enclosure, Baghouse 5C

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
5S B	4E	Cross Conveyor FH-BC-5 (24") and transfer points (from Weigh belt scale to Day Bin #1 and FH-BC-6)	1992	280 TPH	Full enclosure, Baghouse 5C
5S C	4E	Cross Conveyor FH-BC-6 (24") and transfer points (from FH-BC-5 to Day Bin #2 and FH-BC-7)	1992	280 TPH	Full enclosure, Baghouse 5C
5S D	4E	Cross Conveyor FH-BC-7 (24") and transfer points (from FH-BC-6 to Day Bin #3)	1992	280 TPH	Full enclosure, Baghouse 5C
5S E	4E	Boiler Day Bin #1	1992	950 tons	Full enclosure, Baghouse 5C
5S F	4E	Boiler Day Bin #2	1992	950 tons	Full enclosure, Baghouse 5C
5S G	4E	Boiler Day Bin #3	1992	300 tons	Full enclosure, Baghouse 5C
16S A	15E	Gob Storage Pile	1992/1995	170,000 tons	Chemical Suppression 16C
16S B	15E	Process Fuel N Pile	1992/1995	4,000 tons	Chemical Suppression 16C
16S C	15E	Process Fuel S Pile	1992/1995	11,000 tons	Chemical Suppression 16C
16S D	15E	High BTU Pile	1992/1995	10,000 tons	Chemical Suppression 16C
16S E	15E	Silt Pile	1992/1995	70,000 tons	Chemical Suppression 16C
16S F	15E	Fines Day Pile	1992/1995	3,000 tons	Chemical Suppression 16C
7S A	3E	Limestone Reclaim Conveyor LH-BC-1 (24") (from Unloading Hopper to Transfer Building)	1992	300 TPH	Enclosure, Baghouse 4C
7S B	3E, 6E	Limestone Storage Belt Conveyor LH-BC-2 (24") (from Transfer Building to Surge Hopper – Limestone Prep Building)	1992	300 TPH	Enclosure, Baghouses 4C, 7C

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
7S C	6E	Surge Hopper (uncrushed limestone prior to injection into Mills) - two feed cones each w/vibratory feeder	1992	1,200 tons	Baghouse 7C
6S A	5E	Limestone Mill (DFM Mill)	1992	70 TPH	Baghouse 6C
6S B	5E	Limestone Mill (Backup Hammermill)	1992	70 TPH	Baghouse 6C
7S D	6E	003-06 Limestone Mill Burner (Indirect contact heat used to dry limestone)	1992	N/A	N/A
8S A	7E	Pneumatic Conveyor (from limestone mills to limestone storage silo)	1992	70 TPH	Baghouse 8C
8S B	7E	Silo (stores crushed limestone prior to injection into boilers)	1992	3,600 tons	Baghouse 8C, bin vent filter
8S C	7E	Pneumatic Conveyor (from limestone storage silo to Boiler #1A) w/volumetric feeder	1992	50 TPH	Full enclosure
8S D	7E	Pneumatic Conveyor (from limestone storage silo to Boiler #1A) w/volumetric feeder	1992	50 TPH	Full enclosure
8S E	7E	Pneumatic Conveyor (from limestone storage silo to Boiler #1B) w/volumetric feeder	1992	50 TPH	Full enclosure
8S F	7E	Pneumatic Conveyor (from limestone storage silo to Boiler #1B) w/volumetric feeder	1992	50 TPH	Full enclosure
10S A	9E	Limestone Pile #1	1992/1995	5,000 tons	Wet/Chemical Suppression 10C
10S B	9E	Limestone Pile #2	1992/1995	10,000 tons	Wet/Chemical Suppression 10C
17S	16E	Limestone Unloading Hopper (stores uncrushed limestone prior to being fed to surge hopper)	1992	25 tons	Partial enclosure, Wet/Chemical Suppression 17C
<b>Ash Group</b>					
9S A	8E	Ash Silo (stores ash from boiler baghouses)	1992	3,100 tons	Enclosure, Baghouse 9C, bin vent filter
9S B	8E	Ash Telescoping Dry Unloader Chute (Emergency unloading)	1992	86.9 TPH	Vent Fan, Baghouse 9C, bin vent filter

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
9S C	8E	Wet Ash Rotary Unloader System (dustless unloader includes a wetting step prior to discharge to trucks)	1992	86.9 TPH	N/A
9S D	8E	Vacuum Pneumatic Conveyor (Fly Ash Handling System from Boiler #1A to Silo)	1992	40 TPH	Enclosure, Baghouse 9C, bin vent filter
9S E	8E	Vacuum Pneumatic Conveyor (Fly Ash Handling System from Boiler #1B to Silo)	1992	40 TPH	Enclosure, Baghouse 9C, bin vent filter
14S A	13E	Pressurized Pneumatic Conveyor (bottom ash handling system from Boiler #1A to Silo)	1992	40 TPH	Enclosure, Cyclone Separator 14-C/A, Baghouse 14C
14S B	13E	Backup pressurized Pneumatic Conveyor (bottom ash handling system from Boiler #1A to Silo)	1992	40 TPH	
15S A	14E	Pressurized Pneumatic Conveyor (bottom ash handling system from Boiler #1B to Silo)	1992	40 TPH	Enclosure, Cyclone Separator 15-C/A, Baghouse 15C
15S B	14E	Backup pressurized Pneumatic Conveyor (bottom ash handling system from Boiler #1B to Silo)	1992	40 TPH	
<b><i>Transport Group</i></b>					
12S	11E	Paved Roads (limestone trucks, ash trucks, autos)	1992	N/A	Vacuum sweeping 12C/Chemical Suppression 13C
13S	12E	Unpaved Roads (coal trucks, ash trucks, front end loaders)	1992	N/A	Chemical Suppression 13C
<b><i>Support Group</i></b>					
20S	002	Morpholine usage (007-07) to Boiler Feedwater	1992	N/A	N/A
21S	002	Cooling Tower Operations (007-01)	1992	N/A	N/A
22S	00H	Prep Plant Gob Hopper Boiler (007-08)	1992	0.794 mmBtu/hr	N/A

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
Tank #1	Tank #1	Kerosene Storage Tank - Fuel Prep unloading hoppers	1992	1,000 gal	N/A
Tank #2	Tank #2	Kerosene Storage Tank - Gob Hopper Boiler	1992	1,000 gal	N/A
Tank #3	Tank #3	Kerosene Storage Tank - Fuel Prep	1992	500 gal	N/A
Tank #4	Tank #4	Kerosene Storage Tank - Fuel Prep	1992	2,000 gal	N/A
Tank #5	Tank #5	Kerosene Storage Tank - Cooling Tower	1992	500 gal	N/A
Tank #6A	Tank #6A	Gasoline Storage Tank - Cooling Tower	1992	500 gal	N/A
Tank #6B	Tank #6B	Diesel Storage Tank - Cooling Tower	1992	500 gal	N/A
Tank #7	Tank #7	Diesel Storage Tank - Diesel Fire Pump	1992	250 gal	N/A
Tank #11	Tank #11	Diesel Storage Tank - Site Civil Contractor	2001	4,000 gal	N/A
Tank #12	Tank #12	Diesel Storage Tank - Site Civil Contractor	2001	1,000 gal	N/A
DFP	DFP	Emergency Diesel Feed Pump	1992	235 hp	N/A
DFP2	DFP2	Diesel Fire Pump	1992	350 hp	N/A

<sup>1</sup> Gob is immersed in water upon entering the Fuel Preparation Building.

## 1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

<b>Permit Number</b>	<b>Date of Issuance</b>
<b>R14-0005E</b>	<b>August 6, 2010</b>

## 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.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants
<b>CBI</b>	Confidential Business Information	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CEM</b>	Continuous Emission Monitor	<b>NSPS</b>	New Source Performance Standards
<b>CES</b>	Certified Emission Statement	<b>PM</b>	Particulate Matter
<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>pph</b>	Pounds per Hour
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>ppm</b>	Parts per Million
<b>DAQ</b>	Division of Air Quality	<b>PSD</b>	Prevention of Significant Deterioration
<b>DEP</b>	Department of Environmental Protection	<b>psi</b>	Pounds per Square Inch
<b>FOIA</b>	Freedom of Information Act	<b>SIC</b>	Standard Industrial Classification
<b>HAP</b>	Hazardous Air Pollutant	<b>SIP</b>	State Implementation Plan
<b>HON</b>	Hazardous Organic NESHAP	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>HP</b>	Horsepower	<b>TAP</b>	Toxic Air Pollutant
<b>lbs/hr</b>	Pounds per Hour	<b>TPY</b>	Tons per Year
<b>LDAR</b>	Leak Detection and Repair	<b>TRS</b>	Total Reduced Sulfur
<b>m</b>	Thousand	<b>TSP</b>	Total Suspended Particulate
<b>MACT</b>	Maximum Achievable Control Technology	<b>USEPA</b>	United States Environmental Protection Agency
<b>mm</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>mmBtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>mmft<sup>3</sup>/hr</b>	Million Cubic Feet Burned per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.  
**[45CSR§30-6.6.a.]**

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.  
**[45CSR§30-6.4.]**

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.  
**[45CSR§30-6.5.a.]**

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.  
**[45CSR§30-6.5.b.]**

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.  
**[45CSR§30-5.1.h.]**

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
  - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
  - c. The change shall not qualify for the permit shield.
  - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
  - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

**[45CSR§30-2.39]**

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.
- [45CSR§30-5.1.i.]**

### **2.13. Duty to Comply**

- 2.13.1. 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; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- [45CSR§30-5.1.f.1.]**

### **2.14. Inspection and Entry**

- 2.14.1. 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;
    - 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.
- [45CSR§30-5.3.b.]**

### **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the 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.

[45CSR§30-5.1.f.2.]

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. 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 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. 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. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.  
[45CSR§30-5.7.e.]

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.  
[45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. 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 modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required 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 CFR Part 2.  
[45CSR§30-5.1.f.5.]

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. 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.  
[45CSR§30-4.2.]

## **2.21. Permit Shield**

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.  
[45CSR§30-5.6.a.]
- 2.21.2. Nothing in this permit shall alter or affect the following:
- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
  - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

## **2.22. Credible Evidence**

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

[45CSR§30-5.3.e.3.B. and 45CSR38]

## **2.23. Severability**

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

## **2.24. Property Rights**

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

[45CSR§30-5.1.f.4]

## **2.25. Acid Deposition Control**

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person 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 or allow 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 CFR § 61.145, 40 CFR § 61.148, and 40 CFR § 61.150. The permittee 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 CFR § 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.  
[40 CFR §61.145(b) and 45CSR34]
- 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. **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]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 CFR §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR § 82.161.
- [40 CFR 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 CFR § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.  
**[40 CFR 68]**
- 3.1.9. **CAIR NO<sub>x</sub> Annual Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR39 for each CAIR NO<sub>x</sub> Annual source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.  
**[45CSR§§39-6.1.b. and 20.1.]**
- a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§39-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Annual allowance to or from the compliance account of the CAIR NO<sub>x</sub> Annual source covered by the permit.  
**[45CSR§39-23.2.]**
- b. Except as provided in 45CSR§39-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.  
**[45CSR§39-24.1.]**
- 3.1.10. **CAIR NO<sub>x</sub> Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO<sub>x</sub> Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.  
**[45CSR§§40-6.1.b. and 20.1.]**
- a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from the compliance account of the CAIR NO<sub>x</sub> Ozone Season source covered by the permit.  
**[45CSR§40-23.2.]**
- b. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.  
**[45CSR§40-24.1.]**
- 3.1.11. **CAIR SO<sub>2</sub> Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR41 for each CAIR SO<sub>2</sub> source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.  
**[45CSR§§41-6.1.b. and 20.1.]**
- a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§41-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from the compliance account of the CAIR SO<sub>2</sub> source covered by the permit.  
**[45CSR§41-23.2.]**

- b. Except as provided in 45CSR§41-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§41-24.1.]

- 3.1.12. **Fugitive Particulate Matter Control.** No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
- b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and
- c. Ash or fuel handling systems and ash disposal areas.

[45CSR14, R14-0005, B.1, B.2, and B.13; 45CSR§2-5.1]

- 3.1.13. All unpaved roads used for coal and/or ash haulage shall be surfaced with red dog or suitable aggregate and shall be treated at least twice per month with properly mixed Coherex or Soil-Sement dust suppressants. Other chemical dust suppressants as effective as the above brands may be used after receiving prior approval from the Division of Air Quality.

[45CSR14, R14-0005, A.5]

- 3.1.14. All paved roadways or haulways on the premises and serving the permitted facility shall be vacuum swept five (5) days per week. Berms along these roads or haulways shall be treated with Coherex or Soil-Sement once per calendar quarter. Other chemical dust suppressants as effective as the above brands may be used after receiving prior approval from the Division of Air Quality.

[45CSR14, R14-0005, A.6]

## 3.2. Monitoring Requirements

- 3.2.1. None.

## 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 CFR Parts 60, 61, and

- 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall 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 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.
    3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15)]

### 3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** 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.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required

by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

**[45CSR§30-5.1.c.2.B.]**

- 3.4.3. **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§30-5.1.c. State-Enforceable only.]**

- 3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in good working order. The permittee shall maintain records of all scheduled and nonscheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken.

**[45CSR§30-5.1.c]**

### **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.

**[45CSR§30-4.4. and 5.1.c.3.D.]**

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

**[45CSR§30-5.1.c.3.E.]**

- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, 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, mailed first class, or by private carrier 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 57th Street SE  
Charleston, WV 25304  
Phone: 304/926-0475  
FAX: 304/926-0478

**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. **Certified emissions statement.** 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.

**[45CSR§30-8.]**

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3\_APD\_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. [45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. [45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
  2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
  3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
  4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken. [45CSR§30-5.1.c.3.C.]
- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. [45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.  
**[45CSR§30-4.3.h.1.B.]**

### 3.6. Compliance Plan

- 3.6.1. None.

### 3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. **45CSR5 – To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas.** According to 45CSR§§5-2.4.b and 2.14, coal preparation plants and coal handling facilities subject to the requirements of 45CSR2 are not subject to the requirements of 45CSR5. Since the Fuel Group is subject to the fugitive particulate matter emission limitations of 45CSR§2-5.1, the requirements of 45CSR5 do not apply.
- b. **45CSR7 – To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.** Per 45CSR§7-10.1, the requirements of 45CSR7 do not apply to particulate matter emissions regulated by 45CSR2. Since the Limestone Group is subject to the fugitive particulate matter emission limitations of 45CSR§2-5.1, the requirements of 45CSR7 do not apply.
- c. **45CSR33 – Acid Rain Provision and Permits and the Acid Rain Program Requirements of 40 CFR 72, 73, 74, 76, 77, and 78.** American Bituminous has the following type of unit specified under 40 CFR §72.6(b)(6) which is not an affected unit subject to the requirements of the Acid Rain Program: An independent power production facility that has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of its total planned net output capacity.

The requirements of 40 CFR 75 apply to the CEMS as specified in 40 CFR §60.49Da.

- d. **40 CFR 60, Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971.** Per 40 CFR §60.40(e), any facility covered under 40 CFR 60, Subpart Da is not covered under 40 CFR 60, Subpart D. Since the boilers are subject to 40 CFR 60, Subpart Da, they are not subject to 40 CFR 60, Subpart D.
- e. **40 CFR 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.** Per 40 CFR §60.40b(e), any facility covered under 40 CFR 60, Subpart Da is not covered under 40 CFR 60, Subpart Db. Since the boilers are subject to 40 CFR 60, Subpart Da, they are not subject to 40 CFR 60, Subpart Db.

- f. **40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.** 40 CFR 60, Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 MW (100 MMBTU/hr) or less, but greater than or equal to 2.9 MW (10 MMBTU/hr). Since both boilers have a maximum design heat input of 551.9 MMBTU/hr, they are not subject to the requirements of 40 CFR 60, Subpart Dc.
  
- g. **40 CFR 60, Subpart K - Standards of Performance For Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.** 40 CFR 60, Subpart K applies to petroleum liquid storage tanks constructed between June 11, 1973 and May 19, 1978 with a storage capacity greater than 40,000 gallons. This facility has no petroleum liquid storage tanks meeting the applicability requirements of this rule.
  
- h. **40 CFR 60, Subpart Ka - Standards of Performance for Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.** 40 CFR 60, Subpart Ka applies to petroleum liquid storage tanks constructed between May 18, 1978 and July 23, 1984 with a storage capacity greater than 40,000 gallons. This facility has no petroleum liquid storage tanks meeting the applicability requirements of this rule.
  
- i. **40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.** 40 CFR 60, Subpart Kb applies to volatile organic liquid storage tanks constructed after July 23, 1984 with a storage capacity greater than 75 m<sup>3</sup> (19,812 gallons). All volatile organic liquid storage tanks at this facility have a storage capacity of less than 75 m<sup>3</sup> (19,812 gallons).
  
- j. **40 CFR 63, Subpart Q – National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.** Per 40 CFR §63.400(a), 40 CFR 63, Subpart Q only applies to cooling towers operated with chromium-based water treatment chemicals. American Bituminous does not use chromium-based water treatment chemicals, so this rule does not apply.

#### 4.0. Boiler Requirements [Emission Points 1E, 00H]

##### 4.1. Limitations and Standards

###### Emission Point 1E:

- 4.1.1. Visible emissions from the stack shall not exceed ten (10) percent opacity based on a six minute block average. Compliance with this streamlined visible emission limit assures compliance with 40 CFR §60.42Da(b).  
**[45CSR14, R14-0005, B.1, B.2, and B.6; 45CSR§2-3.1; 45CSR16; 40 CFR §60.42Da(b)]**
- 4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 shall be determined in accordance with 40 CFR 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems as described in the approved monitoring plan (attached in Appendix B of this permit).  
**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-3.2, 45CSR§2A-6]**
- 4.1.3. Air pollutant emissions from the stack serving the two permitted circulating fluidized bed boilers shall not exceed any of the following limitations:

Pollutant	lb/hr	lb/MMBTU	Concentration @ 3.5% O <sub>2</sub>
Particulate Matter (PM)	33.1	0.03	0.016 gr/dscf
Sulfur Dioxide (SO <sub>2</sub> ) <sup>1</sup>	915.84	0.83	342 ppm <sub>v</sub>
Nitrogen Oxides (NO <sub>x</sub> ) <sup>2</sup>	441.5	0.40	230 ppm <sub>v</sub>
Volatile Organic Compounds (VOCs)	8.8	0.008	-----
Carbon Monoxide (CO)	187.6	0.17	160 ppm <sub>v</sub>
Lead (Pb)	0.136	1.22 x 10 <sup>-4</sup>	-----
Mercury (Hg) <sup>3</sup>	0.02	1.8 x 10 <sup>-5</sup>	-----
Fluorides <sup>3</sup>	0.671	6.08 x 10 <sup>-4</sup>	-----
Beryllium (Be) <sup>3</sup>	9.0 x 10 <sup>-5</sup>	8.18 x 10 <sup>-8</sup>	-----

<sup>1</sup>For the purpose of determining compliance with provisions of emission limitations under 4.1.3, a three hour averaging time shall be utilized. For the purpose of determining compliance with the provisions of 45CSR10 and 45CSR16 (40 CFR 60) a thirty day rolling average shall be utilized.

<sup>2</sup>For the purpose of determining compliance with provisions of emission limitations under 4.1.3 and 45CSR16 (40 CFR 60) a 30 day rolling averaging time is to be utilized.

<sup>3</sup>Maximum permissible levels of lead, mercury, fluorides, and beryllium may be established below the levels specified above based upon test data obtained in accordance with provisions 4.3.5 through 4.3.8 of this permit following start-up of the permitted facility.

Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1.a. Compliance with these streamlined PM, SO<sub>2</sub>, and NO<sub>x</sub> limits assures compliance with 40 CFR §§60.42Da(a)(1), 60.43Da(a)(1), and 60.44Da(a)(1).  
**[45CSR14, R14-0005, A.1, B.1, B.2, and B.6; 45CSR§2-4.1.a; 45CSR16; 40 CFR §§60.42Da(a)(1), 60.43Da(a)(1), 60.43Da(g), 60.44Da(a), and 60.44Da(a)(1)]**

- 4.1.4. The aggregate sulfur dioxide reduction efficiency of the two (2) circulating fluidized bed boilers shall be as follows for each operating 24-hour period:

<b>24-hour Potential SO<sub>2</sub> Emission Rate (lb/MMBTU)</b>	<b>Reduction Efficiency Required (%)</b>
15.96	94.8
6.0 or less	90.0

The required SO<sub>2</sub> reduction efficiency for each 24 hour period in which the potential SO<sub>2</sub> emission rate falls between 6 lb/MMBTU and 15.96 lb/MMBTU shall be determined by linear interpolation. Compliance with these streamlined SO<sub>2</sub> limits assures compliance with 40 CFR §60.43Da(a).

**[45CSR14, R14-0005, A.9, B.1, and B.6; 45CSR16; 40 CFR §60.43Da(a)]**

- 4.1.5. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency is prohibited unless written approval for such addition is provided by the Director.  
**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-4.4]**
- 4.1.6. The visible emission standards of condition 4.1.1 shall apply at all times except in periods of start-ups, shutdowns, and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.  
**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-9.1]**
- 4.1.7. Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.  
**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-9.2; 45CSR16; 40 CFR §60.11(d)]**
- 4.1.8. The particulate matter reduction of potential combustion concentration from each of the two (2) circulating fluidized bed boilers shall be no less than 99%.  
**[45CSR14, R14-0005, B.1 and B.6; 45CSR16; 40 CFR §60.42Da(a)(2)]**
- 4.1.9. Compliance with the particulate matter emission limitation of 40 CFR §60.42Da(a)(1) [0.03 lb/mmBtu, (specified in condition 4.1.3)] for the two circulating fluidized bed boilers constitutes compliance with the percent reduction requirement for particulate matter under 4.1.8.  
**[45CSR14, R14-0005, B.1 and B.6; 45CSR16; 40 CFR §60.48Da(a)]**
- 4.1.10. The NO<sub>x</sub> reduction of potential combustion concentration from each of the two (2) circulating fluidized bed boilers shall be no less than 65%.  
**[45CSR14, R14-0005, B.1 and B.6; 45CSR16; 40 CFR §60.44Da(a)(2)]**
- 4.1.11. Compliance with the streamlined NO<sub>x</sub> emission limitation of 40 CFR §60.44Da(a)(1) [0.40 lb/mmBtu (specified in condition 4.1.3)] for the two (2) circulating fluidized bed boilers constitutes compliance with the percent reduction requirement for NO<sub>x</sub> under 4.1.10.  
**[45CSR14, R14-0005, B.1 and B.6; 45CSR16; 40 CFR §60.48Da(b)]**

- 4.1.12. The PM emission standards under 40 CFR §60.42Da and the NO<sub>x</sub> emission standards under 40 CFR §60.44Da apply at all times except during periods of startup, shutdown, or malfunction.  
**[45CSR14, R14-0005, B.1 and B.6; 45CSR16; 40 CFR §60.48Da(c)]**
- 4.1.13. Electric Utility Steam Generating Units (EGU) MACT, 40 CFR 63, Subpart UUUUU:
- a. The circulating fluidized bed combustion units 1S and 2S shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart UUUUU “National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units” no later than the existing source compliance date of April 16, 2015, or as amended by US EPA.
  - b. If required to conduct an initial compliance demonstration by performance testing as specified in 40 CFR §63.10011(a), you must submit a Notification of Compliance Status (NOCS) report according to 40 CFR §63.9(h)(2)(ii). The NOCS report must contain all of the information specified in 40 CFR §63.10030(e)(1)-(7), as applicable. If required to submit a Notification of Compliance Status pursuant to 40 CFR 63, Subpart UUUUU, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.10030(e). If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.  
**[45CSR34; 40 CFR 63, Subpart UUUUU, 45CSR§30-6.5.b.]**

**Emission Point 00H:**

- 4.1.14. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.  
**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-3.1]**
- 4.1.15. Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD:
- a. The prep plant gob hopper boiler, emission point 00H, shall comply with all applicable requirements for existing affected sources pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source compliance date of January 31, 2016, or as amended by US EPA.
  - b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

**[45CSR34; 40 CFR §§63.7495(b) and 63.7545(e); 45CSR§30-6.5.b.]**

**4.2. Monitoring Requirements**

- 4.2.1. The owner or operator shall install, calibrate, certify, operate, maintain, and record the output from continuous monitoring systems that measure all opacity, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> emissions from emission point 1E as specified

in 40 CFR §60.49Da for the boilers. Compliance with this streamlined provision assures compliance with R14-0005D, B.11.

**[45CSR14, R14-0005, B.1, B.6, and B.11; 45CSR16; 40 CFR §60.13; 40 CFR §60.49Da]**

- 4.2.2. Compliance with the visible emission requirements for emission point 1E shall be monitored as outlined in the American Bituminous Power Partners, L.P., Grant Town Power Plant, Revised Air Emissions Monitoring Plan, dated March 10, 2009 and which is attached as Appendix B of this permit. (Monitoring Plan Approval Date – March 18, 2009)

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§§2-3.2 and 8.2; 45CSR§§2A-6.1 and 6.2]**

- 4.2.3. In regard to nitrogen oxides, the Company shall install, calibrate, maintain, and operate a continuous nitrogen oxide monitoring system complying with performance specifications as set forth under 40 CFR 60, Appendix B, Performance Specification 2 - "Specifications and Test Procedures for SO<sub>2</sub> and NO<sub>x</sub> Continuous Emission Monitoring Systems in Stationary Sources". Compliance with emission limitations for nitrogen oxides (i.e., lb<sub>m</sub>/mmBtu, lb<sub>m</sub>/hr, and ppm<sub>v</sub>) under Specific Requirement 4.1.3. shall be demonstrated in accordance with all applicable requirements under 40 CFR 60. Contrary to the aforementioned provisions, fuels containing more than 25% by weight of coal refuse shall not be exempted from NO<sub>x</sub> monitoring requirements and in the absence of any emission limitation set forth under 40 CFR 60 the emission limitations set forth under 4.1.3 shall apply. Compliance with provisions under 4.1.3 shall be based on a 30 day rolling average.

**[45CSR14, R14-0005, B.14]**

- 4.2.4. To demonstrate compliance with the particulate matter emission limitations for emission point 1E specified in Condition 4.1.3, the permittee shall monitor the baghouse system in accordance with the Baghouse Inspection & Maintenance Plan, dated June 24, 2002, which is attached as Appendix C of this permit. The Baghouse Inspection & Maintenance Plan shall be maintained as a separate document and shall be subject to routine review and updating.

**[45CSR§30-5.1.c]**

### **4.3. Testing Requirements**

- 4.3.1. Compliance with the visible emission limit shall be demonstrated by periodic testing in accordance with 40 CFR 60, Appendix A, Method 9, or a certified continuous opacity monitoring system, as approved by the Director. Compliance with the weight emission limit shall be demonstrated by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director.

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.1.a]**

- 4.3.2. Compliance with the particulate matter emission limitations under 4.1.3 and 40 CFR §60.42Da(a)(1) shall be demonstrated in accordance with all applicable requirements under 40 CFR 60 and 45CSR2.

Note: 45CSR2, Appendix, Section 4.1 and 40 CFR §60.50Da(e)(1) allow the use of 40 CFR 60, Appendix A, Method 17 under certain conditions as specified in the rules.

**[45CSR14, R14-0005, B.9]**

- 4.3.3. Compliance with the sulfur dioxide emission limitation (i.e., lb<sub>m</sub>/mmBtu, lb<sub>m</sub>/hr, and ppm<sub>v</sub>) and sulfur dioxide reduction requirements under 4.1.3 and 4.1.4 and as required by 40 CFR §60.43Da(a) shall be demonstrated in accordance with all applicable requirements under 40 CFR 60, provided, however, that compliance with the maximum emission limitation shall be demonstrated for all three (3) hour periods listed under 4.1.3 and SO<sub>2</sub> reduction requirements under 4.1.4 shall be demonstrated for all fixed twenty-four hour periods. In the event

that the permittee obtains coal or coal refuse supplies which can be burned with a continuous SO<sub>2</sub> emission rate no greater than 0.60 lb/mmBtu, the permittee may request that the Director of the Division of Air Quality, Department of Environmental Protection approve an SO<sub>2</sub> reduction requirement less than that required under 4.1.4. The approval of such a request would be contingent upon an acceptable demonstration by the permittee that the lower SO<sub>2</sub> reduction efficiency provides control to a level which represents BACT.

**[45CSR14, R14-0005, B.10]**

- 4.3.4. Compliance with the emission limitations for volatile organic compounds under 4.1.3 of this permit shall be demonstrated in accordance with 40 CFR 60, Appendix A, Method 25A.

**[45CSR14, R14-0005, B.15]**

- 4.3.5. Compliance with the emission limitations for lead under 4.1.3 shall be demonstrated in accordance with 40 CFR 60, Appendix A, Method 12.

**[45CSR14, R14-0005, B.17]**

- 4.3.6. Compliance with the emission limitations for mercury under 4.1.3 shall be demonstrated in accordance with 40 CFR 61, Appendix B, Method 101A.

**[45CSR14, R14-0005, B.18]**

- 4.3.7. Compliance with the emission limitations for fluorides under 4.1.3 shall be demonstrated in accordance with 40 CFR 60, Appendix A, Method 13.

**[45CSR14, R14-0005, B.19]**

- 4.3.8. Compliance with the emission limitations for beryllium under 4.1.3 shall be demonstrated in accordance with 40 CFR 61, Appendix B, Method 104.

**[45CSR14, R14-0005, B.20]**

- 4.3.9. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Boilers #1A and #1B with the particulate matter mass emission limitations of Condition 4.1.3. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix of 45CSR 2 – “Compliance Test Procedures for 45CSR2” or other equivalent EPA approved method approved by the Director. Such tests shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Annual	After three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	After two successive tests indicate mass emission rates <80% of weight emission standard	Once/2 years
Annual	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	After two successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Once/2 years	Any test indicates a mass emission rate <80% of weight emission standard	Once/2 years
Once/2 years	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual

Test	Test Results	Testing Frequency
Once/3 years	Any test indicate a mass emission rate $\leq$ 50% of weight emission standard	Once/3 years
Once/3 years	Any test indicate a mass emission rate between 50% and 80% of weight emission standard	Once/2 years
Once/3 years	Any test indicate a mass emission rate $\geq$ 80% of weight emission standard	Annual

Note: 45CSR2, Appendix, Section 4.1 and 40 CFR §60.50Da(e)(1) allow the use of 40 CFR 60, Appendix A, Method 17 under certain conditions as specified in the rules.

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.1; 45CSR§§2A-2.6 and 5.2]**

- 4.3.10. The permittee shall conduct performance testing at least once every five (5) years in order to determine compliance with the carbon monoxide (CO) emission limits under 4.1.3. Such tests shall be conducted in accordance with 40 CFR 60, Appendix A, Method 10. The initial compliance test shall be conducted within six (6) months of the effective date of this permit. An emission factor (lb/MMBTU) shall be determined from the test results and updated from the results of each subsequent test. The emission factor (lb/MMBTU) shall be used for compliance demonstration for periods between tests.

**[45CSR14, R14-0005, B.16; 45CSR§30-5.1.c.]**

#### 4.4. Recordkeeping Requirements

- 4.4.1. Records of monitored data established in the Revised Air Emissions Monitoring Plan, attached as Appendix B, shall be maintained on site and shall be made available to the Director or his duly authorized representative upon request.

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.3.a]**

- 4.4.2. Records of the operating schedule and quantity and quality of fuel consumed shall be maintained on site for each fuel burning unit. Such records shall include, but not be limited to the date and time of start-up and shutdown; and for coal, an ash and BTU analysis for each shipment and the quantity of fuel consumed on a daily basis.

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.3.c; 45CSR§2A-7.1.a.4]**

- 4.4.3. The permittee shall record the output from the NO<sub>x</sub> continuous emissions monitoring system specified in Condition 4.2.3. These records shall be maintained in accordance with Condition 3.4.2.

**[45CSR§30-5.1.c]**

- 4.4.4. Records of monitored data established in the Baghouse Inspection and Maintenance Plan, attached as Appendix C, shall be maintained in accordance with Condition 3.4.2.

**[45CSR§30-5.1.c]**

- 4.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

**[45CSR§30-5.1.c]**

- 4.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or

operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR§30-5.1.c]

#### **4.5. Reporting Requirements**

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

[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.3.b]

- 4.5.2. Compliance with the periodic exception reporting of condition 4.5.1 shall be demonstrated by quarterly reports in accordance with 40 CFR §60.7.

[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-8.3.b; 45CSR§2A-7.2.b; 45CSR16; 40 CFR §60.7]

- 4.5.3. The permittee may report to the Director any malfunction of Boiler #1A or Boiler #1B or their associated air pollution control equipment, which results in any excess periods meeting the following conditions, on a quarterly basis unless otherwise required by the Director:

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

[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-9.3.a]

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

- a. A detailed explanation of the factors involved or causes of the malfunction;
- b. The date, and time of duration (with starting and ending times) of the period of excess emissions;
- c. An estimate of the mass of excess emissions discharged during the malfunction period;
- d. The maximum opacity measured or observed during the malfunction;

- e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- f. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

**[45CSR14, R14-0005, B.1 and B.2; 45CSR§2-9.3.b]**

#### **4.6. Compliance Plan**

- 4.6.1. None.

**5.0. Fuel Group Requirements [Emission points 2E, 3E, 4E, 6E, 15E, 17E, 18E]**

**5.1. Limitations and Standards**

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

<b>Equipment</b>	<b>Type/Identity of Particulate Matter Control Equipment</b>	<b>Particulate Matter Emission Limitation for Control Equipment Discharge lb/hr (gr/scf)</b>
Gob Receiving Hoppers	Partial enclosure with water/chemical dust suppression system	-----
Transfer Point/Feeder Fuel Preparation Building Feed Belt Conveyor	Full enclosure	-----
Gob Belt Conveyors to Fuel Preparation Building	Partial enclosure	-----
Gob Fuel Preparation Building: 1 Double Deck Screen, 2 Crushers <sup>1</sup> , and Equipment Transfer Points	Full enclosure of all equipment and transfer points. Gob is immersed in water upon entering the building	-----
Ro-Pro Hopper, Associated Conveyors and Transfer Points <sup>2</sup>	None/Partial Enclosure	-----
Ro-Pro Screening Plant <sup>2</sup> : Scalping Screen, Ro-Pro Unit, Roll Crusher <sup>3</sup> , Hammermill <sup>1</sup> , Associated Conveyors and Transfer Points	Full Enclosure	-----
Transfer Belt Conveyor from Crusher Building to Gob Bunker Feed Conveyor	Full enclosure and ventilation into main boiler building	-----
Transfer Point from Fuel Preparation Building Belt Conveyor to Gob Storage Bin Feed Conveyors, Bin Feed Conveyors at Transfer Building	Full enclosure and evacuation to Baghouse 4C	0.85 (0.02)
Two (2) 950 ton Gob Bins, One (1) 300 Ton Gob Bin <sup>4</sup> , Bin Feed Conveyors and Transfer Points	Full enclosure and evacuation to Baghouse 5C	1.03 (0.01)

<sup>1</sup> “B” hammermill crusher was relocated from the Gob Fuel Preparation Building to the Ro-Pro Screening Plant. There are now 2 crushers in the Gob Fuel Preparation Building that used to house 3 crushers. (Permit Determination PD96-005)

<sup>2</sup> Addition of the Ro-Pro system to the fuel preparation process. (Permit Determination dated August 24, 1995)

<sup>3</sup> The roll crusher was installed in 2001. (Permit Determination PD03-076)

<sup>4</sup> The Two (2) 150 Ton High BTU Fuel Bins are actually One (1) 300 Ton Gob Bin that has two outlets.

<sup>5</sup> This table has been revised to reflect the deletion of the 2 Thermal Disc Type Coal Fines Dryers and the associated Scrubber 11C which were removed from the facility and outlined in a letter to the Chief of the Office of Air Quality dated August 25, 1993.

**[45CSR14, R14-0005, A.2]**

- 5.1.2. Open stockpile of gob shall be limited to not more than 170,000 tons located adjacent to the gob loading hoppers, 4,000 tons of processed fuel located adjacent to the fuel/limestone conveyor transfer buildings, 11,000 tons of processed fuel located adjacent to the truck weigh station, 10,000 tons of high BTU fuel located adjacent to the truck weigh station, 70,000 tons of silt located immediately east of the gob storage area, and 3,000 tons of silt located under/adjacent to the silt storage barn. Dust entrainment or emissions from the stockpiling of gob, processed fuel, high BTU fuel or silt, and wind erosion shall be minimized by treating with a dust suppressant. **[45CSR14, R14-0005, A.7]**
- 5.1.3. The throughput of fuel into the Ro-Pro Roll Crusher identified as 18S E shall not exceed 75 tons per hour nor 657,000 tons per year. Compliance with the throughput limit shall be determined using a rolling yearly total. The Ro-Pro Roll Crusher shall be fully enclosed. **[45CSR14, R14-0005, A.10]**
- 5.1.4. The fuel handling group is subject to 45CSR§2-5.1 as outlined in the Facility-Wide Requirements, Condition 3.1.12, regarding a fugitive dust control system.
- 5.1.5. Visible emissions from coal processing and conveying equipment, coal storage systems, or coal transfer and loading systems processing coal (Emission Points 2E, 3E, 4E, 6E, 17E, and 18E) shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, and malfunction. This requirement includes, but is not limited to the coal refuse receiving hoppers, coal refuse crushers, coal refuse feeders, coal refuse conveyors, coal refuse screens, coal refuse dryers, coal refuse storage bins, all associated coal refuse transfer points, and/or particulate matter capture and control devices associated with this equipment. **[45CSR14, R14-0005, B.1, B.5, and B.12; 45CSR16; 40 CFR §60.11(c); 40 CFR §60.254(a)]**
- 5.1.6. At all times, including periods of startup, shutdown, and malfunction, any affected facility (including associated air pollution control equipment) shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. **[45CSR14, R14-0005, B.1 and B.5; 45CSR16; 40 CFR §60.11(d)]**

## **5.2. Monitoring Requirements**

- 5.2.1. The permittee shall conduct visible emission evaluations as follows for Emission Points 2E, 3E, 4E, 6E, 17E, and 18E:
- a. A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 CFR 60, Appendix A, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility and shall be conducted during the period of maximum expected visible emissions under normal unit and facility operations.
  - b. Each emission point with a visible emissions limit specified in Condition 5.1.5 shall be observed visually by a trained Method 22 observer at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. The visible emission observations shall be conducted for each emission point during periods of normal facility operation for a sufficient time interval to determine if there are any visible emissions present. If visible emissions from any of the emission points are observed during these monthly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission point, visible emissions evaluations in accordance with 40 CFR 60,

Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this Condition 5.2.1.b if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

- c. If a visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission point, a visible emissions evaluation shall be performed for that emission point at least once every consecutive 14-day period in accordance with 40 CFR 60, Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission point for three consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements for Condition 5.2.1.b above, in lieu of those established in this Condition 5.2.1.c.

**[45CSR§30-5.1.c]**

Note: The term “Affected Facility” used in Section 5.0 of this permit means any of the following:

- (1) Coal Processing and Conveying Equipment (including Breakers and Crushers)
- (2) Coal Storage Systems
- (3) Coal Transfer and Loading Systems

### **5.3. Testing Requirements**

- 5.3.1. The permittee shall use 40 CFR 60, Appendix A, Method 9 and the procedures in 40 CFR §60.11 to demonstrate compliance with opacity requirements of 5.1.5 for Emission Points 2E, 3E, 4E, 6E, 17E, and 18E. **[45CSR14, R14-0005, B.1 and B.5; 45CSR16; 40 CFR §60.8; 40 CFR §§60.11(b) and (e)(1); 40 CFR §§60.255(a) and 257]**

### **5.4. Recordkeeping Requirements**

- 5.4.1. A record of each visible emissions observation shall be maintained on site, including any data required by 40 CFR 60, Appendix A, Method 9 or Method 22, whichever is applicable. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the inspections, and the times the dust control system(s) are inoperable and any corrective actions taken. **[45CSR§30-5.1.c]**
- 5.4.2. To demonstrate compliance with permit condition 5.1.2, the permittee shall maintain coal/gob stockpile records. The record shall include, at a minimum, the date, stockpile description, quantity of coal/gob, capacity, and annual throughput. **[45CSR§30-5.1.c]**
- 5.4.3. For the purposes of determining compliance with maximum throughput limits set forth in 5.1.3, the applicant shall maintain certified daily and monthly records of the amount of fuel through the Ro-Pro Roll Crusher 18S E. **[45CSR14, R14-0005, B.21]**

### **5.5. Reporting Requirements**

- 5.5.1. None.

## **5.6. Compliance Plan**

5.6.1. None.

**6.0 Limestone Group Requirements [Emission Points 3E, 5E, 6E, 7E, 9E, 16E]**

**6.1. Limitations and Standards**

6.1.1. Limestone receiving, handling, and storage facilities shall consist of the following and particulate emissions shall be controlled as specified with maximum particulate emissions not to exceed the following:

Equipment	Control Equipment	PM Limitation for Control Equipment Discharge lb/hr (gr/scf)
Limestone Receiving Hopper	Enclosure and water/chemical dust suppression system	-----
Limestone Surge Hopper	Baghouse 7C	0.35 (0.01)
Two (2) 70 TPH Limestone Mills (One DFM Mill and one Back-up Hammermill)	Baghouse 6C	2.1 (0.02)
One (1) 3600 ton Limestone Storage Silo	Baghouse 8C	0.34 (0.01)

Compliance with these streamlined particulate matter emission limits assures compliance with 40 CFR §60.672(a). [45CSR14, R14-0005, A.3, B.1, and B.7; 45CSR16; 40 CFR §60.672(a)]

6.1.2. In addition to that limestone stored with the limestone silo, an open stockpile adjacent to the limestone feed hoppers shall be restricted to 5,000 tons. A single additional open stockpile of limestone located on property shall be restricted to an eleven (11) day supply or no more than 10,000 tons. Total open stockpiling of limestone on property shall be limited to no more than 15,000 tons at any one time. Dust entrainment or emissions from the stockpiling shall be minimized by a chemical dust suppressant system. [45CSR14, R14-0005, A.8]

6.1.3. The limestone handling group is subject to 45CSR§2-5.1 as outlined in the Facility-Wide Requirements, Condition 3.1.12, regarding a fugitive dust control system.

- 6.1.4. The permittee shall comply with 40 CFR §60.672 for Emission Points 3E, 5E, 6E, 7E, and 16E as follows:
- a. Stack emissions from any transfer point on belt conveyors or from any other affected facility shall not:
    - 1. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
    - 2. Exceed 7 percent opacity.
  - b. Fugitive emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10 percent opacity, except as provided in 6.1.4.c, 6.1.4.d, and 6.1.4.e.
  - c. Fugitive emissions from any crusher, at which a capture system is not used, shall not exceed 15 percent opacity.
  - d. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

- e. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in 6.1.4.a, 6.1.4.b, and 6.1.4.c, or the building enclosing the affected facility or facilities must comply with the following emission limits:
  - 1. No permittee shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR §60.671. *Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.
  - 2. No permittee shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility, emissions which exceed the stack emissions limits in 6.1.4.a.
- f. The permittee shall not discharge into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.
- g. Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in 6.1.4.a.1 and 6.1.4.a.2.

Note: The term “Affected Facility” used in section 6.0 of this permit means any of the following:

- (1) Crushers
- (2) Grinding Mills
- (3) Screening Operations
- (4) Bucket Elevators
- (5) Belt Conveyors
- (6) Bagging Operations
- (7) Storage Bins
- (8) Enclosed Truck or Railcar Loading Stations

**[45CSR14, R14-0005, B.1 and B.7; 45CSR16; 40 CFR §§60.671 and 60.672]**

- 6.1.5. At all times, including periods of startup, shutdown, and malfunction, any affected facility (including associated air pollution control equipment) shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

**[45CSR14, R14-0005, B.1; 45CSR16; 40 CFR §60.11(d)]**

## **6.2. Monitoring Requirements**

- 6.2.1. The permittee shall conduct visible emission evaluations as follows for Emission Points 3E, 5E, 6E, 7E, and 16E:
  - a. A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 CFR 60, Appendix A, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility and shall be conducted during the period of maximum expected visible emissions under normal unit and facility operations.

- b. Each emission point with a visible emissions limit specified in Condition 6.1.4 shall be observed visually by a trained Method 22 observer at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. The visible emission observations shall be conducted for each emission point during periods of normal facility operation for a sufficient time interval to determine if there are any visible emissions present. If visible emissions from any of the emission points are observed during these monthly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission point, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this Condition 6.2.1.b if the visible emissions condition is corrected within 24 hours; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
- c. If a visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission point, a visible emissions evaluation shall be performed for that emission point at least once every consecutive 14-day period in accordance with 40 CFR 60, Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission point for three consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements for Condition 6.2.1.b above, in lieu of those established in this Condition 6.2.1.c.

[45CSR§30-5.1.c]

### 6.3. Testing Requirements

- 6.3.1. The permittee shall comply with 40 CFR §60.675 for Emission Points 3E, 5E, 6E, 7E, and 16E as follows:
  - a. In conducting the performance tests required in 40 CFR §60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in 6.3.1.e.
  - b. The owner or operator shall determine compliance with the particulate matter standards in permit condition 6.1.4.a as follows:
    1. Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121°C (250°F), to prevent water condensation on the filter.
    2. Method 9 and the procedures in 40 CFR §60.11 shall be used to determine opacity.
  - c. The owner or operator shall determine compliance with the particulate matter standards in permit conditions 6.1.4.b, 6.1.4.c, and 6.1.4.f as follows:
    1. In determining compliance with the particulate matter standards in permit conditions 6.1.4.b and 6.1.4.c, the owner or operator shall use Method 9 and the procedures in 40 CFR §60.11, with the following additions:

- i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
    - ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g. road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
  2. In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under permit condition 6.1.4.f, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).
  3. When determining compliance with the fugitive emissions standard for any affected facility described under permit condition 6.1.4.b, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
    - i. There are no individual readings greater than 10 percent opacity; and
    - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
  4. When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under permit condition 6.1.4.c, the duration of Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
    - i. There are no individual readings greater than 15 percent opacity; and
    - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- d. In determining compliance with permit condition 6.1.4.e, the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
- e. The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
  1. For the method and procedure of 6.3.1.c, if emissions from two or more facilities continuously interfere so that 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 applicable to any of the individual affected facilities contributing to the emissions stream.
    - ii. Separate the emissions so that the opacity of emissions from each affected facility can be read.  
**[45CSR14, R14-0005, B.1; 45CSR16; 40 CFR §60.675]**

#### **6.4. Recordkeeping Requirements**

6.4.1. A record of each visible emissions observation shall be maintained on site, including any data required by 40 CFR 60, Appendix A, Method 9 or Method 22. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the inspections, and the times the dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c]

6.4.2. To demonstrate compliance with permit condition 6.1.2, the permittee shall maintain limestone stockpile records. The record shall include, at a minimum, the date, stockpile description, quantity of limestone, capacity, and annual throughput.

[45CSR§30-5.1.c]

#### **6.5. Reporting Requirements**

6.5.1. The permittee shall comply with 40 CFR §63.676 for Emission Points 3E, 5E, 6E, 7E, and 16E as follows:

a. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in permit condition 6.1.4, including reports of opacity observations made using Method 9 to demonstrate compliance with permit conditions 6.1.4.b, 6.1.4.c, and 6.1.4.f, and reports of observations using Method 22 to demonstrate compliance with permit condition 6.1.4.e.

[45CSR14, R14-0005, B.1; 45CSR16; 40 CFR §60.676(f)]

#### **6.6. Compliance Plan**

6.6.1. None.

## 7.0 Ash Group Requirements [Emission Points 8E, 13E, 14E]

### 7.1. Limitations and Standards

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

Equipment	Control Equipment	PM Limitation for Control Equipment Discharge lb/hr (gr/scf)
Vacuum System for Collected Flyash in Baghouses and Air Preheater Hoppers (separate system for each boiler)	Two cyclones (ID Nos. 14-C/A & 15-C/A) and two Baghouses (ID Nos. 14C & 15C)	14C – 0.61 (0.018) 15C – 0.61 (0.018)
Vacuum System for Bottom Ash /Cooler Rejects (separate system for each boiler) 3100 ton 44 foot I.D. Ash Silo Emergency Dry Ash Loadout	Baghouse 9C	0.52 (0.016)
Wet Ash Loadout	Rotary-wet unloader to thoroughly wet ash prior to loading and handling	-----

[45CSR14, R14-0005, A.4]

- 7.1.2. The ash handling group is subject to 45CSR§2-5.1 as outlined in the Facility-Wide Requirements, Condition 3.1.12, regarding a fugitive dust control system.
- 7.1.3. At all times, including periods of startup, shutdown, and malfunction, the ash handling equipment (including associated air pollution control equipment) shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[45CSR§30-12.7]

### 7.2. Monitoring Requirements

- 7.2.1. The permittee shall inspect all dust control systems weekly during periods of normal facility operation.

[45CSR§30-5.1.c]

### 7.3. Testing Requirements

- 7.3.1. None.

### 7.4. Recordkeeping Requirements

- 7.4.1. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly inspections performed in accordance with 7.2.1, the times the dust control system(s) were inoperable, and any corrective action taken. Records shall be maintained in accordance with 3.4.2.

[45CSR§30-5.1.c]

**7.5. Reporting Requirements**

7.5.1. None.

**7.6. Compliance Plan**

7.6.1. None.

## **8.0 Emergency Engine Requirements [Emission Points DFP, DFP2]**

### **8.1 Limitations and Standards**

- 8.1.1. You must meet the following requirements, except during periods of startup:
- Change oil and filter every 500 hours of operation or annually, whichever comes first.
  - Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
  - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

During periods of startup, you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Note: If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

**[45CSR34; 40 CFR §§63.6602, 63.6625(h), Table 2c(1) and footnote 1]**

- 8.1.2. a. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.
- b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**[45CSR34; 40 CFR §63.6605]**

- 8.1.3. You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

**[45CSR34; 40 CFR §§63.6625(e)(2), 63.6640(a), Table 6(9)]**

- 8.1.4. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 8.1.1.a. The oil analysis must be performed according to the requirements in 40 CFR §63.6625(i).

**[45CSR34; 40 CFR §63.6625(i)]**

- 8.1.5. You must operate the emergency stationary RICE according to the requirements in paragraphs a. through c. below. In order for the engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a. through c. below, is prohibited. If you do not operate the engine according to the requirements in paragraphs a. through c. below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- b. You may operate your emergency stationary RICE for the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. below counts as part of the 100 hours per calendar year allowed by this paragraph b.

Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- c. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.  
[45CSR34; 40 CFR §§63.6640(f)(1), (2)(i), (3)]

- 8.1.6. **General Provisions.** Table 8 to 40 CFR 63, subpart ZZZZ shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. In accordance with 40 CFR §63.6645(a)(5), the notification requirements do not apply if you own or operate an existing stationary emergency RICE.  
[45CSR34; 40 CFR §§63.6665, 63.6645(a)(5), Table 8]

## 8.2. Monitoring Requirements

- 8.2.1. You must install a non-resettable hour meter if one is not already installed.  
[45CSR34; 40 CFR §63.6625(f)]

## 8.3. Testing Requirements

- 8.3.1. None.

## 8.4. Recordkeeping Requirements

- 8.4.1. a. You must keep the records described in paragraphs 1. through 5. below.
  1. A copy of each notification and report that you submitted to comply with this 40CFR63 subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).
  2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
  3. Records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii).
  4. Records of all required maintenance performed on the air pollution control and monitoring equipment.

5. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 8.1.2.b., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- b. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE.
- c. You must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.  
**[45CSR34; 40 CFR §§63.6655(a), (e)(2), (f)(1)]**

## **8.5. Reporting Requirements**

- 8.5.1. You must report each instance in which you did not meet each emission limitation or operating limitation in Section 8.1.1. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.6650.  
**[45CSR34; 40 CFR §63.6640(b)]**
- 8.5.2. You must report each instance in which you did not meet the requirements in 40 CFR 63, subpart ZZZZ, Table 8 that apply to you.  
**[45CSR34; 40 CFR §§63.6640(e), 63.6665, and Table 8]**

APPENDIX A  
CAIR PERMIT APPLICATION



Plant Name

STEP 3,  
continued

**(b) Monitoring, reporting and recordkeeping requirements.**

(1) The owners and operators and the CAIR designated representative, of each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) with the CAIR NO<sub>x</sub> Annual emissions limitation, CAIR NO<sub>x</sub> Ozone Season emissions limitation and CAIR SO<sub>2</sub> emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

**(c) Nitrogen oxides annual emissions requirements.**

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO<sub>x</sub> Annual source and each CAIR NO<sub>x</sub> Annual unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO<sub>x</sub> Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Annual allowance was allocated.

(4) CAIR NO<sub>x</sub> Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Annual allowance to or from a CAIR NO<sub>x</sub> Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

**(d) Nitrogen oxides ozone season emissions requirements.**

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO<sub>x</sub> Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

**(e) Sulfur dioxide annual emission requirements.**

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with sections 51 through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source.

Plant Name **GRANT TOWN POWER PLANT**

**STEP 3,  
continued**

**(f) Excess emissions requirements.**

(1) If a CAIR NO<sub>x</sub> Annual source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Annual unit at the source shall surrender the CAIR NO<sub>x</sub> Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO<sub>x</sub> Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

**(g) Recordkeeping and Reporting Requirements.**

(1) Unless otherwise provided, the owners and operators of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

**(h) Liability.**

(1) Each CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) and each NO<sub>x</sub> unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source or CAIR SO<sub>2</sub> source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Annual units, CAIR NO<sub>x</sub> Ozone Season units or CAIR SO<sub>2</sub> units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program or CAIR SO<sub>2</sub> Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> Annual unit, CAIR SO<sub>2</sub> unit or CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit or CAIR SO<sub>2</sub> unit (as applicable) shall also apply to the owners and operators of such unit.

**(i) Effect on Other Authorities.**

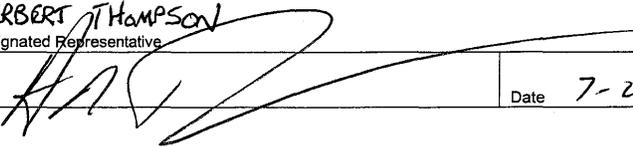
No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR NO<sub>x</sub> Ozone Season Trading Program and CAIR SO<sub>2</sub> Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Annual source, CAIR NO<sub>x</sub> Ozone Season source and CAIR SO<sub>2</sub> source (as applicable) or CAIR NO<sub>x</sub> Annual unit, CAIR NO<sub>x</sub> Ozone Season unit and CAIR SO<sub>2</sub> unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Plant Name GRANT TOWN POWER PLANT

STEP 3,  
continued

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

HERBERT THOMPSON CAIR Designated Representative	
Signature 	Date 7-24-07

## **APPENDIX B**

### **45CSR2 and 45CSR10 Monitoring Plan**



west virginia department of environmental protection

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

Joe Manchin III, Governor  
Randy C. Huffman, Cabinet Secretary  
www.wvdep.org

March 18, 2009

American Bituminous Power Partners, L.P.  
c/o Shawn Jennings, EH&S Specialist  
P. O. Box 159  
Grant Town, WV 26574

Dear Mr. Jennings:

**Subject:** Notice of Monitoring Plan Approval

The Division of Air Quality is pleased to inform you that the monitoring plan revision dated March 10, 2009 submitted pursuant to Regulations 2 & 10 for American Bituminous Power Partners, L.P., Grant Town Power Plant, has been approved. The effective date of the plan is March 18, 2009.

The revised plan has been found acceptable, provided that American Bituminous Power Partners, L.P. can continue to demonstrate compliance with all terms and conditions of R14-0005D and 40 C.F.R. 60, Subpart Da, specifically the emission limits and emission reduction efficiency requirements for each boiler.

Should you have questions or require additional information, contact Mr. Brian Tephabock of my staff at (304) 368-3910.

APPROVED: \_\_\_\_\_

  
John A. Benedict, Director

DATE: \_\_\_\_\_

March 18, 2009

Promoting a healthy environment.

VIA E-MAIL

March 10, 2009

John A. Benedict  
Director, Division of Air Quality  
WV Department of Environmental Protection  
601 57th Street, SE  
Charleston, WV 25304

**Subject: American Bituminous Power Partners, L.P.  
Grant Town Power Plant  
Revised Air Emissions Monitoring Plan - Updated**

Dear Mr. Benedict:

On behalf of American Bituminous Power Partners, L.P. (AmBit), Trinity Consultants (Trinity) has enclosed a revised Air Emissions Monitoring Plan for inclusion in the renewal of the Title V operating permit for the coal refuse fired power plant in Grant Town, West Virginia referred to as the Grant Town Power Plant. This monitoring plan meets the requirements of 45 CSR 2, 45 CSR 2A, 45 CSR 10, and 45 CSR 10A and applies to the two circulating fluidized bed (CFB) boilers supplying steam for electric generation. It should be noted that this revised monitoring plan is simply an update to the approved monitoring plan which is attached to the facility's current Title V permit as Appendix B. The plan has been revised to reflect EPA's approval of new monitoring locations as well as recent and anticipated future changes to the monitoring equipment. The Grant Town Power Plant requests the Department's review and approval of this revised plan in accordance with EPA's specific approval, which is attached for reference. AmBit currently operates and maintains two separate gaseous emissions monitoring systems for the two CFB boilers. One system is used to demonstrate compliance with applicable requirements under 40 CFR Part 60, and is comprised of two sets of analyzers, one set located in each baghouse associated with its respective boiler. The second system is used to demonstrate compliance with applicable requirements under 40 CFR Part 75, and is located in the common stack which exhausts both boilers. In summary, AmBit is requesting the Department's approval for the option to monitor gaseous emissions from the CFB boilers for the purposes of compliance with 40 CFR Part 60 at either the current location, or at the downstream location in the common stack serving the two units. AmBit intends to implement changes in the near future to allow Part 60 compliant monitoring at the

common stack following receipt of your approval and necessary integration of the monitoring software systems.<sup>1</sup>

#### **VISIBLE EMISSIONS MONITORING PLAN**

The Grant Town Power Plant currently monitors opacity from the two CFB combustion units using a Land Mark II continuous opacity monitoring system (COMS) installed in the common stack serving the two boilers. Opacity measurements are continuously reported to the facility data collection and handling system, a KVB-Enertec Windows NT based system. The opacity monitor is calibrated automatically once each twenty-four hour period. The instrument controller, located in the facility CEMS shelter, directs calibration sequence and timing. Calibration results are checked daily by facility personnel and are automatically recorded to the data acquisition system. The COMS has been in service since the initial construction of the facility. Compliance tests will continue to be conducted as required by the Title V permit. Continuous opacity monitoring summary reports, of the format listed in 45 CSR 2A, are submitted on a quarterly basis.

#### **SULFUR DIOXIDE AND NITROGEN OXIDES MONITORING PLAN**

A Monitor Labs SM 8100 sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) continuous emissions monitoring system (CEMS) is utilized to monitor the gaseous pollutant emissions from each of the CFB boilers. Each system also includes a Rosemount World Class 3000 oxygen (O<sub>2</sub>) monitor for diluent monitoring. Both the SO<sub>2</sub>/NO<sub>x</sub> and O<sub>2</sub> probes are currently located in the individual baghouses associated with their respective boilers. Data from these monitors is collected by the KVB-Enertec data acquisition and monitoring system. Emissions from both boilers are also monitored at the common stack by a Thermo 43i SO<sub>2</sub> analyzer and a Thermo 42i NO<sub>x</sub> analyzer. This system uses a California Analytical ZRH carbon dioxide (CO<sub>2</sub>) analyzer for diluent monitoring. Data from these monitors is collected by an ESC data acquisition system. The CEMS are automatically calibrated once each twenty-four hour period. Calibration results are recorded by the respective data acquisition system and are reviewed daily by facility personnel. In addition to the daily calibrations, quarterly audits will also be performed on the monitoring equipment. Cylinder Gas Audits (CGAs) using two certified calibration gas concentrations will be conducted during three of the four quarters in a calendar year. A Relative Accuracy Test Audit (RATA) will be performed in the remaining calendar quarter and will be conducted by a stack testing contractor, comparing the results of their monitoring equipment with those of the installed equipment. Facility emissions rates will be determined by calculating a weighted average emission rate based on fuel inputs to each boiler. Compliance tests will continue to be conducted as required by the Title V permit. CEMS summary reports in the format found in 45 CSR 10A will be submitted on a quarterly basis.

---

<sup>1</sup> As noted, AmBit has received approval from EPA for Part 60 monitoring at the common stack location, as indicated in the attached correspondence.

Page 3 of 3  
March 10, 2009

The opacity, SO<sub>2</sub>/NO<sub>x</sub>, and O<sub>2</sub>/CO<sub>2</sub> monitors operate on a continuous basis. The systems will be maintained and operated in compliance with the applicable sections of 40 CFR Part 60.

Please do not hesitate to contact me at (724) 360-8148 or via email at [CWilson@TrinityConsultants.com](mailto:CWilson@TrinityConsultants.com) or Mr. Shawn Jennings at (304) 278-7449 or via email at [sjennings@edisonmission.com](mailto:sjennings@edisonmission.com) if you have any questions or if additional information will be required for your review of this revised monitoring plan. Thank you for your assistance.

Sincerely,

TRINITY CONSULTANTS



Christi Wilson  
Managing Consultant

Attachment

cc: Shawn Jennings, American Bituminous Power Partners

**EPA APPROVAL LETTER**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Mr. Shawn Jennings, E,H&S Specialist  
American Bituminous Power Partners, L.P.  
P.O. Box 159  
Grant Town, West Virginia 26574

1 2 OCT 2006

Re: CEM Relocation Request

Dear Mr. Jennings:

This letter is in response to your August 15, 2006 alternative monitoring request under the "Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978", New Source Performance Standards (NSPS) Subpart Da for two electric utility boilers at the American Bituminous Power Partners (Ambit) facility in Grant Town, West Virginia. Specifically, your request seeks approval to monitor sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) at the common stack for the two boilers rather than for each individual boiler. Based on the information you have provided, your request has been approved. The details of our response to your request are provided below.

Based on your August 15, 2006, request, the two boilers (1A and 1B) at the Grant Town facility were placed in operation in 1993 and are both subject to NSPS Subpart Da. The boilers are identical waste coal fired fluidized bed units with a combined rated capacity of 80 megawatts of electric power. Emissions from each boiler are controlled by a separate baghouse. The boilers were initially stack tested individually to demonstrate compliance under NSPS Subpart Da. Continuous compliance with Subpart Da has been demonstrated by continuously monitoring emissions in the duct work of each boiler prior to being commingled in the common stack. To date, there have been no NSPS Subpart Da compliance problems associated with the two boilers in regard to the indicated pollutants.

You are proposing to upgrade the existing monitoring equipment for boilers 1A and 1B in order to comply with the recently promulgated Clean Air Interstate Rule. In doing so, you would like to monitor emissions at the common stack of 1A and 1B rather than in the duct work for each individual boiler. To support your request, you cite the following section of the general provisions:

"When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. . ."

40 CFR Section 60.13(g)

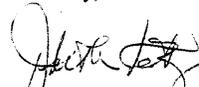


*Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.  
Customer Service Hotline: 1-800-438-2474*

Based on the fact that you have demonstrated initial and continuous compliance with NSPS Subpart Da for each individual boiler and have been in good compliance standing, we approve your request to monitor NO<sub>x</sub> and SO<sub>2</sub> emissions at the common stack consistent with the provisions in 40 CFR Section 60.13(g). However, please note that any violation of the NO<sub>x</sub> and/or SO<sub>2</sub> emission standards under NSPS Subpart Da as evidenced by common stack monitoring will be indicative of an emission violation for both boilers 1A and 1B and appropriate enforcement action may be instituted at that point in time.

This response has been coordinated with the West Virginia Department of Environmental Quality and the EPA Office of Enforcement and Compliance Assurance. If you should have any comments or questions in regard to this matter, do not hesitate to contact James Hagedorn, of the Air Division, at (215) 814-2161.

Sincerely,



Judith M. Katz, Director  
Air Protection Division

cc: John Benedict, Director, WVDAQ  
Toby Scholl, WVDAQ  
Gregory Fried, Office of Enforcement and Compliance Assurance  
Robert Vollaro, EPA Clean Air Markets Division

## **APPENDIX C**

### **Baghouse Inspection and Maintenance Plan**



**AMERICAN BITUMINOUS POWER PARTNERS, L.P.**  
**P O BOX 159 · Highway 17 · Grant Town, West Virginia 26574 (304)278-7449**

---

June 24, 2002  
ABP 035

Ms Laura Mae Crowder  
Technical Analyst  
Division of Air Quality  
Department of Environmental Protection  
7012 MacCorkle Avenue, S E  
Charleston, WV 25304-2943

Subject        Plant ID # 049-0026  
                  Notice of Violation and Cease and Desist Order  
                  Baghouse I & M Plan

Dear Ms Crowder

As a follow up to my June 13 letter, attached to this cover, please find a draft Plant Operating Instruction document (GT-IO-0302, "Baghouse") which has been revised to include regular inspection and monitoring programs for our baghouse system. As we discussed at the May 17, 2002 meeting in your office, the DAQ requested an opportunity to review this plan information and offer comment as warranted. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "HRT", is written over a large, stylized, looping signature line that extends across the page.

Herbert R. Thompson  
Executive Director

HRT/sds

## **BAGHOUSE**

### **1 0 PURPOSE**

The pulse-jet fabric filter baghouse removes particulates from the boiler flue gas to meet environmental emission limits. Parameters and procedures outlined in the Operator Instruction ("OI") are described to ensure system performance in accordance with Original Equipment Manufacturer ("OEM") specifications and the station air permit particulate emissions criteria.

### **2 0 SCOPE**

During normal operation conditions, particulate laden flue gas is pulled into the baghouse through the inlet plenum by the Induced Draft ("ID") fan. Pulse jet controls activate to release trapped particles from the bags to a recovering hopper. The accumulated fly ash is then pneumatically transported to the ash silo from which it shall be conditioned, loaded and transported for disposal. In addition to startup and operational parameters, this instruction includes specific actions to ensure optimum performance of the baghouse system.

### **3 0 RESPONSIBILITY**

It is the responsibility of the O & M supervisor to ensure items contained within the OI are followed. This includes inspections, monitoring, maintenance, and record keeping, outlined herein.

It is the responsibility of the Engineering supervisor to ensure the system is operating such that all relative sections of the station air permit are in compliance. This shall include regular monitoring of system performance, testing, records/reporting requirements to local, State and Federal agencies as well as internal communications.

It is the responsibility of the I & E supervisor to ensure the system instrumentation and control equipment are maintained per OEM guidelines or generally accepted, industry practices, address maintenance repair orders, and regular system preventive maintenance ("PM's") notices in a timely manner as conditions warrant. Review Operator round sheets to confirm system operating parameters are within specified guidelines.

It is the responsibility of the Mechanical Maintenance supervisor to ensure the system mechanical components, are maintained per OEM guidelines or generally acceptable industry practices. Address maintenance repair orders and regular system "PM's" in a timely manner as conditions warrant. Review Operator round sheets to confirm system operating parameters are within specified guidelines.

It is the responsibility of the Shift Supervisor to ensure inspections and monitoring of the baghouse system in accordance with the OI. This shall include continuous monitoring by the Control Room Operator via Distributive Control System (“DCS”), Ops Con, Continuous Emissions Monitoring System (“CEMS”), and Eta Pro programs. In addition, the Shift Supervisor shall ensure regular visual inspections by station Operators, which shall include completion of Operator Round Sheets. Information collected shall be reviewed to ensure operating parameters are within specified limits and take appropriate corrective action if warranted.

The Shift Supervisor assigned annually to station operating record control shall ensure round sheets are filed to one central location and maintained in an orderly manner. A copy of the Operator round sheet is attached to the OI as Exhibit “A”.

4.0 DESCRIPTION

Particulate laden flue gas is pulled into the baghouse through the inlet plenum by the ID fan. The flue gas enters each compartment through the manually operated butterfly valves located near the top of the ash hoppers. The gas then turns up toward the bags suspended from the tube sheet above. As the gas penetrates the bags, the particulate matter is left on the outside of the bag. The clean gas stream continues through the compartment to the poppet dampers into the discharge plenum onto the ID fan. Cleaning of the baghouse is initiated by time or a preset pressure drop across the baghouse unit. The compartments are isolated, one compartment at a time, by the closing of the air operated outlet poppet valves, then through the control/timing sequencing. Each row of bags in the compartment is cleaned by introducing a pulse of 60-80 PSIG instrument air at the top of the bag at the venturi. The air pulse travels down through the bag, flexing the bag and pulsing off the particulate matter to the hopper below. The compartment is then returned to service by opening the outlet valve. The controls then step to the next compartment where the cleaning sequence is repeated until all the compartments have been cleaned. The inlet air-to-cloth ratio allows for operation of the baghouse with one compartment out of service for cleaning or maintenance. Each compartment is equipped with 306 bags, 6 inches in diameter by 14 feet long. The bags are supported on 11 gauge wire cages with annular rings spaced on 8" centers.

4.1 Baghouse Start-up and Operating Procedure

- 4.1.1 Verify all instrumentation is in service. Baghouse "A" differential pressure transmitter PT-2001, Baghouse "B" differential pressure transmitter PT-2101.

- 4 1 2 Verify baghouse "A" differential pressure indicator PI-2021, PS-2021 in service - Baghouse "B" differential pressure indicator PI-2121, PS-2121 in service
- 4 1 3 Verify penthouse exhaust fans in service 1A1, 1A2, 1B1, 1B2
- 4 1 4 Baghouse "A" instrumentation air header isolation valve VF-4801 open Baghouse "B" air header isolation valve VF-4802 in service
- 4 1 5 Baghouse "A" compartments instrument air supply pressure regulator VF-4904 and Baghouse "B" compartment instrument supply pressure regulator VF-4914
- 4 1 6 All Baghouse compartment inlet and outlet valves open
- 4 1.7 Verify pulse times in service
- 4 1 8 Verify all ash hopper heaters in service
- 4 1 9 Verify all ash hopper vibrators in service
- 4 2 Baghouse Start Permissives Met
  - Differential pressure PT-2001 less than 12" WG
  - Inlet flue gas temp > 200° F
  - Inlet flue gas temp < 525° F
  - Instrument air supply
- 4 3 The Differential pressure transmitter PT-2001 H<sub>1</sub> alarm is at 10" WG and the differential H<sub>1</sub>-H<sub>1</sub> trip is at 12" WG
- 4 4 The Ash Handling System is designed to transport ash generated from the combustion process, store it and unload it for delivery to a disposal site Some combustion products from the boiler are accumulated from the flue gas stream as fly ash in the air heater hoppers and in the baghouse bypass
- 4 5 There are 12 baghouse hopper pick-up ports and two boiler air heater hopper pick-up points per system Conveying air and particulate are drawn through filter/separators ASH-FS-1, ASH-FS-2 and through the system vacuum sources, mechanical exhausters, ASH-ME-1A and ASH-ME-1B
- 4 6 Sequencing of the fly ash is controlled by the Process Language Control ("PLC") system with interactive control from pressure transmitters The

controller automatically sequences from one pick-up point to the next or can be Operator initiated

## 5 0 INSPECTION & MONITORING PLAN

The West Virginia Division of Environmental Protection (“WVDEP”) requires a plan for baghouse inspection and monitoring to ensure optimum system performance. The inspection and monitoring plan shall include specific operating and maintenance parameters to be monitored at regular defined intervals. Exhibit “B” contains a matrix of parameters for regular inspection and monitoring further defined as follows.

### 5 1 Continuous Monitoring

- 5 1 1 Total Pressure drop across each baghouse is monitored by the DCS. Typical values are 10-12 inches w c
- 5 1 1 Inlet/Outlet temperature for baghouse are monitored by the DCS. Typical values are 400-430° F
- 5 1 2 Hopper temperatures for each baghouse compartment (12 for each baghouse) are monitored by the DCS. Hopper heaters are activated if the temperature drops below 200° F
- 5 1 3 Hopper level for each baghouse compartment (12 for each baghouse) are monitored by the DCS. The control room operator is notified via alarm if the level exceeds 14 ft depth
- 5 1 4 The pulse jet cleaning cycle progress is monitored by the DCS. Individual compartments are cleaned if the compartment pressure drop exceeds 6 inches w c
- 5 1 5 Furnace draft for each boiler is monitored by the DCS. Normal operating range is between negative 0.5 and positive 2.0 inches w c
- 5 1 6 Opacity is monitored by the CEM unit. Permit limits are defined within Plant Order GT-EO-0008 Air Emissions Requirements. Additionally hourly readings are recorded by the control room operator

5.2 Daily Monitoring/Inspection

5.2.1 At least twice per day (once per operating shifts) a station operator will inspect and record the baghouse system. Observations will be recorded on the daily rounds sheet (Exhibit "A") and include

5.2.1.1 Individual compartment pressure drop generally operating between 2 and 7 inches w.c.

5.2.1.2 Integrity of duct work, gaskets, and expansion joints, noting air leakage into the system

5.2.1.3 Outlet dampers activation to isolate individual compartments for the cleaning cycle

5.3 Weekly Monitoring/Inspection

5.3.1 Individual compartments are isolated to determine effect on opacity. This is to assist in the identification of compromised bags and or seals. Notification and records for this inspection are generated by the facility Maintenance Management System (PMC) program

5.3.2 Pulse controls include individual compartments and main supply air are confirmed to be in working order and set to proper pressure. Notification and records for the inspection are generated by the facility PMC program

5.4 Annual Monitoring/Inspection

5.4.1 Complete system visual inspection as part of a planned outage including ductwork, valves, dampers, gaskets, expansion joints, by fabric, condition, and instrumentation/controls

5.4.2 Stack particulates load testing by an outside contractor. State air permit regulations require this testing along with results submitted to the Office of Air Quality. Depending upon test results compared to permit limits, the frequency may be up to every three years. The permit limit is 33.1 lb/hr @ mcr

Issued By



Plant Manager

GRANT TOWN POWER PLANT

**OPERATOR ROUND SHEETS - 4TH FLOOR**

SHIFT \_\_\_\_\_

DATE \_\_\_\_\_

OPERATOR \_\_\_\_\_

PLANT LOAD \_\_\_\_\_

EXHIBIT "A"

**BAGHOUSES**

**COMPARTMENT DP'S**

A1	B1		COMMENTS
A2	B2	A BAGHOUSE OVERALL DP	
A3	B3	"B" BAGHOUSE OVERALL DP	
A4	B4	VERIFY A" COMPS PULSING	
A5	B5	VERIFY B COMPS PULSING	
A6	B6	CHECK A" OILERS	
A7	B7	CHECK "B OILERS	
A8	B8		
A9	B9		
A10	B10		
A11	B11		
A12	B12		

**5TH FLOOR**

DRAG CHAIN CONVEYORS	A	B	BI - DIRECTIONAL SCREWS	A	B
CHECK OIL LEVELS, ADD			CHECK OIL LEVELS, ADD		
CHECK SEAL AIR FLOW			DRIVE MOTOR AMPS		
DRIVE MOTOR AMPS			CHECK FRONT WALL AIR CANNONS		
CHECK, CLEAN AC FILTER			CHECK FUEL FEED CHUTES		
CHECK FUEL FEED CHUTES					

"A" BLR GAS MAIN HEADER PRESS		"B" BLR GAS MAIN HEADER PRESS	
CHECK A SOOTBLOWERS		CHECK "B SOOTBLOWERS	
"A" MAIN STEAM PRESSURE		"B" MAIN STEAM PRESSURE	
"A" FEEDWATER PRESSURE		B" FEEDWATER PRESSURE	
"A" DRUM PRESSURE		B" DRUM PRESSURE	

WALK AROUND A & B BOILER AND CHECK FOR AIR, ASH, WATER LEAKS

COMMENTS

GRAVIMETRIC BELTS	A1	A2	A3	B1	B2	B3
BELT DRIVE MOTOR AMPS						
CLEAN OUT CONV AMPS						
SEAL AIR PRESSURE						
CHECK ALIGNMENT						
CHECK FUEL FEED						

COMMENTS

OPERATOR 1

REV 7 18 97

Exhibit "B"						
Grant Town Power Plant						
Baghouse System Inspection and Performance Monitoring Matrix						
13-Jun-02						
Rev 00	HRT					
Item	Function	Frequency	Parameter	Units	Normal Operating Range	Actions/notes
Particulate Loading Baghouse System	Permit Limit	Annual	particulates in stack gas	lb/hr	less than 33 lb/hr @MOR	Contract Service activity report to WVDEP
	Main	Annual	visual inspection of system components incl ductwork, valves dampers, gaskets, expansion joints instrumentation	n/a	original design and/or OEM recommendation	effect repairs as necessary document in PMC
	Oper	Continuous	baghouse system pressure drop	inches w.c	10-12 inches	DCS/OpsCon recording, investigate deviations from
	Oper	Continuous	Inlet Temperature	degrees F	400-430	OEM operating parameters as warranted, generate
	Oper	Continuous	Outlet Temperature	degrees F	395-410	work order or initiate corrective actions as warranted
	Oper	Continuous	Hopper Temperature	degrees F	>200	hopper heater "on" if temp drops below 200
	Oper	Continuous	Hopper Level	board alarm	high level alarm @ 14 feet	
	Oper	Continuous	Cleaning Cycle activity	board alarm	initiated by compartment delta P	pulse system begins if delta P > 6 inches w.c
Compartment Inspection	Oper	Weekly	isolate/review individual compartments for possible particulate excursions	change in opacity %	n/a	isolate compartments and complete an "on line" cleaning cycle evaluate effect on stack opacity complete PM record
	Oper	Daily	compartment pressure drop	inches w.c	2-7 in w.c. or as specified by OEM	record on Oper Round sheet, issue work order as required
	Oper	Daily	ductwork/gasket/expansion joint air leakage	n/a	no leaks	record on Oper Round sheet, issue work order as required
	Oper	Daily	inspect action of outlet dampers while pulsing	n/a	smooth action of mechanism	record on Oper Round sheet, issue work order as required
Pulse System Inspection	Oper	Weekly	inspect operation of pulse controls	n/a	pulse header pressure 80-100 psig "active" range for auto cleaning cycle > 8 psig	visual inspection of pulse control system record findings/generate work order as necessary complete PM record
	Oper	Daily/Cont	OpsCon/DCS recording monitor readings	%	< 10% and as defined by Air Permit	incl Control Room Operator recording hourly
Stack Opacity	Oper	Daily	CEMS auto calibration	daily	as per OEM specification	review results