West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on May 20, 2009.

Permit Number: **R30-04900026-2009**Application Received: **June 25, 2010**Plant Identification Number: **03-54-04900026**

Permittee: American Bituminous Power Partners, L.P.

Facility Name: Grant Town Power Plant

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

Permit Action Number: MM01 Revised: October 12, 2010

Physical Location: Grant Town, Marion County, West Virginia

UTM Coordinates: 572.40 km Easting • 4379.25 km Northing • Zone 17

Directions: US Route 19 north from Fairmont. Turn left in Rivesville onto State

Route 17 and follow Paw Paw Creek for 4 miles.

Facility Description

American Bituminous Power Partners' Grant Town Power Plant is a coal refuse-fired electric generation facility with a total output of 80 MWe. The facility consists of two 551.9 MMBTU/hr coal refuse-fired circulating fluidized bed boilers and various supporting operations such as coal handling, ash handling, limestone handling, and various tanks with insignificant emissions. The boilers are designed to accommodate a variety of fuels, but the primary fuel is coal refuse (gob) supplemented with pond fines. Natural gas is used as a start up fuel.

The facility operates under SIC code 4911.

This modification removes language pertaining to certain dust suppressant brand names and language relating to certain HAP limits was modified. The CEMS language was modified allowing monitoring on the common stack for the two CFBs. Additionally, NSPS language was updated for 40 CFR 60, Subparts Y, Da, and OOO.

Emissions Summary

There are no changes in Potential Emissions associated with this permit modification.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 821.89 tons per year of CO, 1,933.86 tons per year of NO_x, 159.3 tons per year of PM₁₀, 4,012.75 tons per year of SO₂, 541 tons per year of HCl, and 53.6 tons per year of HF. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, American Bituminous Power Partners' Grant Town Power Plant is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers
	45CSR14	Prevention of Significant Deterioration
	45CSR16	New Stationary Sources
	45CSR30	Operating permit requirement.
	40 C.F.R. 60, Subpart Y	Coal Preparation and Processing Plants
	40 C.F.R. 60, Subpart Da	Electric Utility Steam Generating Units
		(Constructed After September 18, 1978)
	40 C.F.R. 60, Subpart OOO	Nonmetallic Mineral Processing Plants

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

None

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

State Only:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R14-0005E	August 6, 2010	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's

operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

Dust Suppressant Brand Names

The references to specific brand names of chemical dust suppressants in Conditions 3.1.14 and 3.1.15 were removed. The permittee requested this change because "listing the brand names 'Coherex' and 'Soil-Cement' in effect unnecessarily limits the use of other equivalent dust suppressants. .." In reviewing this request, the writer for R14-0005E discovered that the original R14 permit application used very high control efficiencies (90-95%) on paved and unpaved surfaces based on the use of the brand name suppressants. Therefore, the updated permit will allow use of alternative chemical dust suppressants but not before receiving approval from the DAQ.

Language Relating to Certain HAP Limits

The permittee has requested that HAP language footnoted to the emissions limit table under Condition 4.1.3 of the permit be eliminated. The language states that "[M]aximum permissible levels of lead, mercury, fluorides and beryllium *shall* [emphasis added] be established below the levels specified above based upon test data obtained in accordance with provisions 4.3.5 through 4.3.8 of the permit following start-up of the permitted facility." ABPP claims that the most recent stack testing showed compliance with the HAP emission limits under Condition 4.1.3 and that the DAQ has "indicated no . . . intent to lower the emission limits . . ."

The writer for R14-0005E was not able to discover the intent of this language from the original permitting action or any intent to lower the emissions. However, as this language was added as part of a PSD permit, the language will not be eliminated. The language will, however, be changed to state that levels "may" be changed rather than "shall."

CEMS Stack Location

The Grant Town Power Station utilizes two Circulating Fluidized Bed (CFB) boilers that release through a common stack. CFBs use injected limestone to achieve inherent SO_2 reductions. Currently, the permit requires each individual CFB to meet a sliding SO_2 reduction efficiency (based on SO_2 emission rate). This requires the permittee to use two continuous emissions monitors (CEMS); one in each individual boiler's exhaust prior to the common stack. The permittee requested that the language of Condition 4.1.4 be changed so that they will only have to meet an aggregate SO_2 reduction efficiency (which will not change) and monitor in the common stack.

There is no regulatory obstacle to this request. The boilers are subject to SO_2 emission standards under 40 CFR 60, Subpart Da, and the general NSPS language under 40 CFR 60.13(g) states explicitly that when two affected facilities are subject to the same standard and their exhausts combined prior to release, then the operator may install CEMS on the combined stack to show compliance with the emission standards. Condition 4.1.4 was revised as requested.

NSPS Language

The NSPS language in R14-0005E was updated for 40 CFR 60, Subparts Y, Da, and OOO. This required minor revisions to the following conditions:

- 4.2.3
- 4.3.2-4.3.3
- 5.1.5-5.1.6
- 5.3.1
- 6.1.1

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

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 C.F.R. 72, 73, 74, 76, 77, and 78.

American Bituminous has the following type of unit specified under 40 C.F.R. §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 C.F.R. 75 apply to the CEMS as specified in 40 C.F.R. §60.49Da.

d. 40 C.F.R. 60, Subpart D – "Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971."

Per 40 C.F.R. §60.40(e), any facility covered under 40 C.F.R. 60, Subpart Da is not covered under 40 C.F.R. 60, Subpart D. Since the boilers are subject to 40 C.F.R. 60, Subpart Da, they are not subject to 40 C.F.R. 60, Subpart D.

e. 40 C.F.R. 60, Subpart Db – "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units."

Per 40 C.F.R. §60.40b(e), any facility covered under 40 C.F.R. 60, Subpart Da is not covered under 40 C.F.R. 60, Subpart Db. Since the boilers are subject to 40 C.F.R. 60, Subpart Da, they are not subject to 40 C.F.R. 60, Subpart Db.

f. 40 C.F.R. 60, Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units."

40 C.F.R. 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 C.F.R. 60, Subpart Dc.

- g. 40 C.F.R. 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 C.F.R. 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 C.F.R. 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 C.F.R. 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.
- 40 C.F.R. 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 C.F.R. 60, Subpart Kb applies to volatile organic liquid storage tanks constructed after July 23, 1984 with a storage capacity greater than 75 m³ (19,812 gallons). All volatile organic liquid storage tanks at this facility have a storage capacity of less than 75 m³ (19,812 gallons).
- j. 40 C.F.R. 63, Subpart Q "National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers."

Per 40 C.F.R. §63.400(a), 40 C.F.R. 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.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A Ending Date: N/A

All written comments should be addressed to the following individual and office:

Rex Compston
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public

hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Rex Compston
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.