

Fact Sheet



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

Permit Number: **R30-4900026-2014**
Application Received: **November 7, 2013**
Plant Identification Number: **049-00026**
Permittee: **American Bituminous Power Partners, L.P.**
Facility Name: **Grant Town Power Plant**
Mailing Address: **P. O. Box 159, Grant Town, WV 26574**

Revised: N/A

Physical Location: Grant Town, Marion County, West Virginia
UTM Coordinates: 572.40 km Easting • 4,379.25 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.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
|---|---------------------|-----------------------|
| Regulated Pollutants | Potential Emissions | 2013 Actual Emissions |
| Carbon Monoxide (CO) | 821.89 | 752 |
| Lead | 0.59 | 0.01 |
| Nitrogen Oxides (NO _x) | 1,933.86 | 1,679 |

| Regulated Pollutants | Potential Emissions | 2013 Actual Emissions |
|---|----------------------------|------------------------------|
| Particulate Matter (PM _{2.5}) | 74.34 | 48.97 |
| Particulate Matter (PM ₁₀) | 159.3 | 94.61 |
| Total Particulate Matter (TSP) | 212.4 | 154.52 |
| Sulfur Dioxide (SO ₂) | 4,012.75 | 2,097 |
| Volatile Organic Compounds (VOC) | 38.68 | 35.7 |

PM₁₀ is a component of TSP.

| Hazardous Air Pollutants | Potential Emissions | 2013 Actual Emissions |
|---------------------------------|----------------------------|------------------------------|
| Mercury | 0.087 | 0.006 |
| Hydrogen Chloride | 541 | 122.73 |
| Hydrogen Fluoride | 53.6 | 1.90 |
| Chromium Compounds | 0.87 | 0.031 |
| Manganese Compounds | 0.65 | 0.063 |

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has 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, L.P. 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:

| | |
|-------------------------|---|
| 45CSR2 | Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers. |
| 45CSR6 | Open burning prohibited. |
| 45CSR10 | To Prevent and Control Air Pollution from the Emission of Sulfur Oxides. |
| 45CSR11 | Standby plans for emergency episodes. |
| 45CSR14 | Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration. |
| 45CSR16 | Standards of Performance for New Stationary Sources |
| WV Code § 22-5-4(a)(14) | The Secretary can request any pertinent information such as annual emission inventory reporting. |
| 45CSR30 | Operating permit requirement. |
| 45CSR34 | Emission Standards for Hazardous Air Pollutants |
| 40 CFR Part 61 | Asbestos inspection and removal |

| | |
|---------------------------|--|
| 40 CFR 60, Subpart Da | Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced after September 18, 1978. |
| 40 CFR 60, Subpart Y | Standards of Performance for Coal Preparation Plants. |
| 40 CFR 60, Subpart OOO | Standards of Performance for Nonmetallic Mineral Processing Plants. |
| 40 CFR 63, Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. |
| 40 CFR 63, Subpart UUUUU | National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units. |
| 40 CFR 63, Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. |
| 40 CFR 75 | Continuous Emission Monitoring |
| 40 CFR Part 82, Subpart F | Ozone depleting substances |

State Only:

| | |
|---------|---|
| 45CSR4 | No objectionable odors. |
| 45CSR39 | Control of Annual NO _x Emissions to Mitigate Interstate Transport of Fine PM and NO _x . |
| 45CSR40 | Control of Ozone Season NO _x Emissions to Mitigate Interstate Transport of Ozone and NO _x . |
| 45CSR41 | Control of Annual SO ₂ Emissions to Mitigate Interstate Transport of Fine PM and SO ₂ . |

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

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

| Permit or Consent Order Number | Date of Issuance | Permit Determinations or Amendments That Affect the Permit (if any) |
|--------------------------------|------------------|---|
| R14-0005E | Aug. 6, 2010 | N/A |

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," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a second renewal of the Title V Permit. The following changes have occurred since the most recent Title V permit was issued:

Title V Boilerplate changes

Condition 3.3.1.d. was added to require reporting of test results.

Conditions 3.5.3. and 3.5.5. were revised to address electronic submittal of the annual certification to the USEPA. The certification shall now only be submitted to the USEPA by e-mail.

45CSR37 - Mercury Budget Trading Program to Reduce Mercury Emissions - On May 8, 2009, WVDEP repealed 45CSR37, therefore the CAMR Mercury Budget Trading Program requirements have been removed from the permit (Condition 3.1.9.). CO-R37-C-2008-4, dealing with the CAMR Rule, was removed as Appendix A and the remaining Appendices were renamed.

Condition 4.1.14. - This condition was Condition 3.1.16. in the previous permit. A new subheading was added to Section 4.0 to incorporate requirements for the prep plant Gob hopper boiler. The condition was moved here.

Condition 4.3.9. - Since the frequency of retesting is dependent upon the test results of the previous testing and since it is possible that more than one series of tests may be required during the permit term (e.g. tests are required annually, once/2years, or once/3 years), the language in this condition has been revised to remove the dates of the last tests. Instead, those dates are included here in the fact sheet. Boilers #1A and #1B were tested in August 2011 and April 2013 and the test results indicated an average PM emission rate of 19.37 pounds per hour and 19.88 pounds per hour, respectively, which is <80% of the weight emission standard of 33.1 pounds per hour. Since the testing indicated that emissions are <80% of the weight emission standard, American Bituminous is now on a once/2years schedule.

40 CFR 63 Subpart UUUUU – Coal and Oil Fired Electric Utility Steam Generating Units (MATS Rule)
EPA promulgated final standards for Hazardous Air Pollutants From Coal and Oil Fired Electric Utility Steam Generating Units as 40 CFR 63, Subpart UUUUU, more commonly referred to as the Mercury and Air Toxics Standards (MATS) rule. As the rule currently stands, existing EGUs such as the CFB units (Emission Point 1E) at the Grant Town Power Plant, will be required to meet the maximum achievable control technology (MACT) standards by the initial compliance date of April 16, 2015. Placeholder language and requirements have been added in Condition 4.1.13.

The CFBs are fossil fuel fired (coal), have a capacity of more than 25 megawatts electric (MWe), and serve a generator that produces electricity to sell; therefore, the CFBs are considered EGUs under the MATS rule. The CFBs commenced construction prior to the date in 40 CFR §63.9982(b) and have not been modified or reconstructed since that time; therefore the units are classified as existing EGUs.

40 CFR 63 Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters
Based on the current rule in Subpart DDDDD (Major Source Boiler MACT), this rule applies to industrial, commercial, or institutional boilers or process heaters as defined in 40 CFR §63.7575 that are located at, or part of, a major source of HAP. 40 CFR §63.7491(a) specifically exempts an electric utility steam generating unit (EGU) covered by 40 CFR 63, Subpart UUUUU; therefore the CFB units (Emission Point 1E) will not be subject to the Major Source Boiler MACT.

The prep plant Gob hopper boiler (Emission Point 00H) has a maximum capacity of 0.794 mmBtu/hr and is fired with kerosene which is classified as a distillate oil per the definitions in the rule. Distillate oil is further classified as a light liquid fuel. As such the boiler would be classified as a “unit designed to burn light liquid fuel” and would be subject to the rule. The initial compliance date for the prep plant GOB hopper boiler is January 31, 2016. Placeholder language and requirements have been added in Condition 4.1.15.

40 CFR 63 Subpart ZZZZ – Reciprocating Internal Combustion Engines (RICE MACT) - 40 CFR 63, Subpart ZZZZ (commonly referred to as the RICE MACT), applies to existing, new, reconstructed reciprocating internal combustion engines (RICE). The Grant Town Power Plant has two emergency use RICE that were installed in 1992: a 235 HP diesel feed pump (Emission Point DFP) and a 350 HP diesel fire pump (Emission Point DFP2). The engines are classified in the rule as < 500 HP existing emergency use CI RICE located at a major source of HAP. The initial compliance date for engines in this category was May 3, 2013. The applicable requirements of the rule have been incorporated in Section 8.0. of the Title V permit.

Non-Applicability Determinations

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

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.

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.

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.

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.

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.

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.

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.

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.

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 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).

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.

40 CFR 64 - Compliance Assurance Monitoring. This is the second permit renewal for this facility. CAM was found not to be applicable to this facility at the time of the first renewal. Therefore, a CAM determination is not required.

GHG Clean Air Act requirements - This is a second renewal Title V permit and there have been no modifications that would have triggered a PSD permit.

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: August 13, 2014

Ending Date: September 12, 2014

Point of Contact

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

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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.

Response to Comments (Statement of Basis)

Not applicable.