West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

Permit Number: R30-04900026-2020 Application Received: February 5, 2019 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

Physical Location: Grant Town, Marion County, West Virginia

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

Directions: From Fairmont take US Route 19 north to Rivesville. Tum left onto

County Route 17. Follow CR 17 approximately 4 miles to plant entrance

on the right.

Facility Description

American Bituminous Power Partners L.P.'s (AmBit) Grant Town Power Plant is a coal refuse-fired electric generation facility with a total output of 80 MWe and operates under SIC 4911 and NAICS 221112. The facility consists of two (2) 551.9 MMBTU/hr coal refuse-fired circulating fluidized bed boilers and various supporting operations such as coal handling, ash handling and limestone handling. 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 has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

Emissions Summary

Plantwide En	nissions Summa	ary [Tons per	· Year]
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Regulated Pollutants	Potential Emissions	2017 Actual Emissions
Carbon Monoxide (CO)	821.89	780.4
Nitrogen Oxides (NO _X)	1933.86	1672.4
Particulate Matter (PM _{2.5})	128.24*	24.52
Particulate Matter (PM ₁₀)	150.65*	48.03
Total Particulate Matter (TSP)	390.45*	218.16
Sulfur Dioxide (SO ₂)	1994.62	1964.3
Volatile Organic Compounds (VOC)	38.68	37.0

PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2017 Actual Emissions
Hydrogen Chloride	541	85.0
Hydrogen Fluoride	53.6	1.50
Mercury	0.09	0.01
Chromium Compounds	0.87	0.02
Manganese Compounds	0.65	0.04

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 PM_{10} , 1,994.62 tons per year of SO_2 , 541 tons per year

Legal and Factual Basis or 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:

Fed	leral	and	State:

45CSR2 To Prevent And Control Particulate Air Pollution From Combustion Of Fuel In Indirect Heat Exchangers
45CSR6 Control Of Air Pollution From Combustion Of Refuse

^{*} The previously reported PTE for TSP was incorrect and most likely did not include condensable PM in the calculations and possibly did not include all sources of PM emissions. AmBit reevaluated and provided updated PTEs for TSP, PM_{10} , and $PM_{2.5}$.

45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat
	Exchangers.
45CSR11	Prevention Of Air Pollution Emergency Episodes
45CSR14	Permits For Construction And Major Modification Of Major
	Stationary Sources For The Prevention Of Significant
	Deterioration Of Air Quality
45CSR16	Standards of Performance for New Stationary Sources
	Pursuant to 40 CFR Part 60
45CSR30	Requirements For Operating Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
45CSR43	Cross-State Air Pollution Rule To Control Annual Nitrogen
	Oxide Emissions, Annual Sulfur Dioxide Emissions, and
	Ozone Season Nitrogen Oxides Emissions
40 C.F.R 60, Subpart Da	Standards of Performance for Electric Utility Steam
· • •	Generating Units
40 C.F.R 60, Subpart Y	Standards of Performance for Coal Preparation Plants
40 C.F.R 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing
•	Plants
40 CFR Part 61, Subpart M	National Emission Standard for Asbestos
40 CFR Part 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants:
•	Coal- and Oil-Fired Electric Utility Steam Generating Units
40 CFR Part 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for
*	Stationary Reciprocating Internal Combustion Engines
40 CFR Part 82, Subpart F	Ozone depleting substances
40 CFR Part 97, Subpart AAAAA	CSAPR NO _X Annual Trading Program
40 CFR Part 97, Subpart CCCCC	CSAPR SO ₂ Group 1 Trading Program
40 CFR Part 97, Subpart EEEEE	CSAPR NO _X Ozone Season Group 2 Trading Program
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as
2 ,,,,,	annual emission inventory reporting.
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State Only:

45CSR4 To Prevent And Control The Discharge Of Air Pollutants Into

The Open Air Which Causes Or Contributes To An

Objectionable Odor Or Odors

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 CFR Part 60 (NSPS), 40 CFR Part 61 (NESHAPs), and 40 CFR 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)
R14-0005F	September 21, 2016	
AED-CAA-113(a)-2019-0001	May 21, 2019	

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 renewal of the Title V permit which was issued on September 30, 2014 and modified on January 24, 2017. Substantial changes to the most recent version of the Title V Permit consist of the following, which includes the removal of the Prep Plant Gob Hopper Boiler 22S through an "Off-Permit" notification dated March 17, 2016:

1) Title V Boilerplate changes

➤ Conditions 3.5.3., 3.5.5. and 3.5.6. - These conditions were revised to require electronic submittal of the Title V compliance certifications (annual and semi-annual), self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols to the WV DAQ.

2) Section 1.1 – "Emission Units Table"

- > Revised the description for Emission Units 20S, Tank #1 and Tank #2 per the permit application.
- > Removed Emission Unit 22S. This boiler is no longer in service and has been decommissioned and dismantled.
- 3) Condition 3.1.9. This condition contained the requirements of 45CSR39 (CAIR NO_x Annual Trading Program). Since CAIR has been replaced with the Cross-State Air Pollution Rule (CSAPR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "Cross-State Air Pollution Rule (CSAPR) Trading Program" of 40 CFR §97.406. The requirements of CSAPR have been added in Appendix A of the permit.
- 4) Condition 3.1.10. This condition contained requirements of 45CSR40 (CAIR NO_x Ozone Season Trading Program). Since CAIR has been replaced with the Cross-State Air Pollution Rule (CSAPR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "Cross-State Air Pollution Rule (CSAPR)Trading Program" of 40 CFR §97.806. The requirements of the Transport Rule have been added in Appendix A of the permit.
- 5) Condition 3.1.11. This condition contained requirements of 45CSR41 (CAIR SO₂ Trading Program). Since CAIR has been replaced with the Cross-State Air Pollution Rule (CSAPR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "Cross-State Air Pollution Rule (CSAPR) Trading Program" of 40 CFR §97.606. The requirements of the Transport Rule have been added in Appendix A of the permit.
- 6) Condition 3.7.2.c. Removed the language pertaining to 40 CFR 75. Although the monitoring procedures of Part 75 may be required as an applicable requirement from another rule or regulation, the facility is not subject to the Acid Rain emission limitations or reductions. Therefore, Part 75 is not applicable to the facility.
- 7) Section 4.0 Removed emission point ID 00H in the section description.

The requirements of 40 CFR 63 Subpart UUUUU (MATS) have been added in Section 4 of the permit in conditions 4.1.9. through 4.1.16., 4.2.5. through 4.2.13., 4.3.11. through 4.3.24., 4.4.7. through 4.4.15., and 4.5.6. through 4.5.17. See discussion below.

8) Condition 4.1.3.

- ➤ 4.1.3.b. of this condition became effective on January 13, 2017. Therefore, the footnotes and references to January 13, 2017 have been deleted.
- ➤ Since the SO₂ lb/mmBtu limits in 4.1.3.b. are more stringent than the limits in 4.1.3.a., the streamlining language has been revised to remove "SO₂" and "60.43Da(a)(1)" in 4.1.3.a. Also streamlining language has been added to 4.1.3.b for compliance with the SO₂ lb/mmBtu limit of 40 CFR §60.43Da(a)(1).
- ➤ Since this facility combusts coal containing more than 25%, by weight, coal refuse, the facility is exempt from the NO_x standards and monitoring requirements of Subpart Da per 40 CFR §60.44Da(a)(1). Therefore, the streamlining language in 4.1.3.a. has been revised to remove "NO_x" and "60.44Da(a)(1)." Additionally, "60.44Da(a), and 60.44Da(a)(1)" have been removed from the citation of authority for this condition.
- 9) Conditions 4.1.8. and 4.1.9. (current permit) The current version of 40 CFR 60 Subpart Da no longer has a requirement for particulate matter reduction applicable to this facility. Therefore, the requirements in these conditions of the current Title V permit have not been included in the renewal permit.
- 10) Conditions 4.1.10. and 4.1.11. (current permit) As discussed in Item 8 above, the NO_x requirements in 40 CFR 60 Subpart Da are not applicable to this facility. Therefore, the requirements in these conditions of the current Tile V permit have not been included in the renewal permit.
- 11) Condition 4.1.8.(renewal permit) [4.1.12. (current permit)] As discussed in Item 8 above, the NO_x requirements in 40 CFR 60 Subpart Da are not applicable to this facility. Therefore, the reference to the NO_x emission standards has not been included.
- 12) Condition 4.1.13. (current permit) The MATS placeholder language in this condition has been replaced with requirements from the MATS rule.
- 13) Conditions 4.1.14. and 4.1.15. (current permit) The Prep Plant Gob Hopper Boiler (emission Unit 22S is no longer in service and has been decommissioned and dismantled. Therefore, the requirements in these conditions of the current Tile V permit have not been included in the renewal permit.
- 14) Condition 4.3.9. This condition has been updated to include the date of the most recent test and the resulting retesting frequency.
- 15) Section 4.6 Compliance Plan The requirements from section "D" of the federal "Administrative Compliance Order on Consent" AED-CAA-113(a)-2019-0001 have been added to this section to ensure full compliance with the MATS. The facility could not meet the MATS emission standards for HCL or SO₂ by the compliance date.
- **16)** Condition 6.5.1. Corrected Typo in the first sentence to reference part 60 instead of part 63. The current permit has 40 CFR §63.676 and should be 40 CFR §60.676.
- 17) Condition 8.4.1. This condition in the current permit has been divided into three conditions in the renewal permit as conditions 8.4.1., 8.4.2. and 8.4.3.

- 18) APPENDIX A The CAIR requirements have been replaced with the Cross-State Air Pollution Rule Requirements.
- 19) 40 CFR 63 Subpart UUUUU National Emission Standards for Hazardous Air Pollutants: Coaland Oil-Fired Electric Utility Steam Generating Units
 - This regulation, also known as the "Utility Mercury and Air Toxics (MATS)" rule, applies to coaland oil-fired EGUs as defined in §63.10042 of 40 CFR Part 63. The Utility MATS rule establishes national emission limitations and work practice standards for mercury (Hg), acid gases, and filterable particulate matter (PM), as well as requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. Existing affected sources must comply with the requirements of Subpart UUUUU no later than April 16, 2015 (§63.9984(b)). A one-year extension was requested and granted. Therefore, the compliance date for the Grant Town Power Plant was April 16, 2016. Subsequently, a three-year extension was requested and granted for Acid Gas HAP Requirements. Therefore, the compliance date for HCL or SO₂ (as a surrogate) was April 16, 2019. In accordance with §64.9984(f), compliance demonstration by conducting the required performance tests and other activities must be completed no later than 180 days after said compliance dates (i.e., April 16, 2016 for PM and Hg and April 16, 2019 for Acid Gas HAP). The Grant Town Power Plant has met the initial compliance requirements for PM and mercury but failed to be in compliance with the Acid Gas HAP requirements.

Boiler #1A and Boiler #1B are existing coal-fired EGUs as defined in §63.9982(d), and do not meet any of the exemption criteria in §63.9983. Both boilers primarily combust coal refuse (gob) which is included in the definition of "coal" in §63.10042. The units also combust natural gas as a startup fuel. Both units are categorized as coal-fired not low rank virgin coal EGUs.

Compliance Approach - The permittee has conducted the initial compliance demonstration and submitted the results of the performance testing to DAQ for PM and Mercury. The test results are briefly discussed below for each pollutant. The permittee has been unable to meet the Acid Gas HAP requirements and has entered into an "Administrative Compliance Order on Consent" with the USEPA (see discussion below). Additionally, the required Notice of Compliance Status (NOCS) has been submitted. The facility has elected to demonstrate compliance by quarterly stack testing for PM, annual emission testing to demonstrate compliance for mercury, and SO₂ CEMS for acid gases.

• Filterable Particulate Matter (PM)

The permittee has elected to comply with the 0.030 lb/MMBtu filterable particulate matter (PM) limitation (rather than Total non-Hg HAP metals, or Individual HAP metals). The initial performance testing was concluded for Boilers #1A and #1B on April 16, 2016 resulting in 0.02 lb/MMBtu. Continuous compliance will be demonstrated through quarterly performance testing.

Sulfur Dioxide (SO₂)

The permittee has elected to comply with the 0.20 lb/MMBtu sulfur dioxide (SO₂) limitation. (rather than HCl) using SO₂ CEMS (which is the only compliance method for SO₂ as provided in Item #1 of Table 2 to Subpart UUUUU). Initial compliance could not be demonstrated by the compliance date of April 16, 2019.

AmBit has entered into an "Administrative Compliance Order on Consent" with the USEPA. Through this consent decree, AmBit shall achieve full compliance with the MATS by 11:59 pm on April 15. 2020 and shall operate Units 1A and 1B so that the emissions from the units

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 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.
- 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 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 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.

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: December 13, 2019 Ending Date: January 13, 2020

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.