

Fact Sheet



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

Permit Number: **R30-07900006-2021**
Application Received: **November 19, 2020**
Plant Identification Number: **03-54-079-00006**
Permittee: **Appalachian Power Company**
Facility Name: **John E. Amos Plant**
Mailing Address: **1 Riverside Plaza, Columbus, OH 43215-2373**

Physical Location:	St. Albans, Putnam County, West Virginia
UTM Coordinates:	428.16 km Easting • 4258.42 km Northing • Zone 17
Directions:	From Charleston, take Interstate 64 West (towards Huntington). Turn right onto Exit 44 ramp and proceed to Route 817. Turn left onto Route 817 (North). The facility is located approximately 1.5 miles on the right.

Facility Description

The Amos Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of two (2) coal-fired steam generators with a rated design capacity of 7,020 mmBtu/hr each, one (1) coal-fired steam generator with a rated design capacity of 11,936 mmBtu/hr, one (1) oil-fired auxiliary boiler with a rated design capacity of 642 mmBtu/hr, one (1) oil-fired auxiliary boiler with a rated design capacity of 600 mmBtu/hr, various supporting operations such as coal handling and ash handling, and various tanks with insignificant emissions. 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 Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2019 Actual Emissions
Carbon Monoxide (CO)	9,973.94	993.29
Nitrogen Oxides (NO _x)	71,046.11	4,666.81
Particulate Matter (PM _{2.5})	1,648.77	23.35
Particulate Matter (PM ₁₀)	4,063.05	48.24
Total Particulate Matter (TSP)	6,599.74	142.28
Sulfur Dioxide (SO ₂)	134,702.14	3,517.65
Volatile Organic Compounds (VOC)	993.54	118.61

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2019 Actual Emissions
Beryllium	23.42	0.01
Hydrochloric Acid	21,580	42.93
Hydrogen Fluoride	1,874	7.37
Selenium	84.88	1.33
Total of other non-major HAPs	33.5	4.75

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

Title V Program Applicability Basis

This facility has the potential to emit 134,702.14 tons per year of SO₂, 71,046.11 tons per year of NO_x, 4,063.05 tons per year of PM₁₀, 9,973.94 tons per year of CO, 993.54 tons per year of VOCs and 23,595.8 tons per year of total HAPs. 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, John E. Amos 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.

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

Federal 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
45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers.
45CSR11	Prevention Of Air Pollution Emergency Episodes

45CSR13	Permits For Construction, Modification, Relocation And Operation Of Stationary Sources Of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, And Procedures For Evaluation
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
45CSR30	Requirements For Operating Permits
45CSR33	Acid Rain Provisions And Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
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 C.F.R. 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 61, Subpart M	National Emission Standard For Asbestos
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal- and Oil- Fired Electric Utility Steam Generating Units
40 C.F.R. Part 64	Compliance Assurance Monitoring
40 C.F.R. Part 72	Permits Regulation
40 C.F.R. Part 73	Sulfur Dioxide Allowance System
40 C.F.R. Part 74	Sulfur Dioxide Opt-ins
40 C.F.R. Part 75	Continuous Emissions Monitoring
40 C.F.R. Part 76	Acid Rain Nitrogen Oxides Emission Reduction Program
40 C.F.R. Part 77	Excess Emissions
40 C.F.R. Part 78	Appeals Procedure (for Acid Rain Program)
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. Part 97, Subpart AAAAA	CSAPR NO _x Annual Trading Program
40 C.F.R. Part 97, Subpart GGGGG	CSAPR NO _x Ozone Season Group 3 Trading Program
40 C.F.R. Part 97, Subpart CCCCC	CSAPR SO ₂ Group 1 Trading Program
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
<u>State Only:</u>	
45CSR4	To Prevent And Control The Discharge Of Air Pollutants Into The Open Air Which Causes Or Contributes To An Objectionable Odor Or Odors
45CSR43	Cross-State Air Pollution Rule To Control Annual Nitrogen Oxides Emissions, Annual Sulfur Dioxide Emissions, And Ozone Season Nitrogen Oxides Emissions
CO-R2-E-2005-2	Consent Order Creating a Compliance Program for fugitive fly ash dust control systems.
WVDAQ Letter	Letter dated September 3, 2002 addressed to Mr. Greg Wooten and signed by Jesse D. Adkins regarding the thermal decomposition of boiler cleaning solutions.
WVDAQ Letter	Letter dated January 21, 2004 addressed to Mr. Frank Blake and signed by Jesse D. Adkins regarding the combustion of Demineralizer Resins.

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 (<i>if any</i>)
R13-480	March 8, 1979	
R13-2663E	September 1, 2015	
G60-C063	August 5, 2014	
R33-3935-2022-5A	March 12, 2019	
CO-R2-E-2005-2	February 8, 2005	

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 June 29, 2016. Substantial changes to the most recent version of the Title V Permit consist of the following:

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:

- Added "FGD" (Flue Gas Desulfurization) to the Unit 1 control device column. It was inadvertently omitted during the last renewal.
- Added "(Contractor owned)" in the description for Tanks #4, #6, #8, #9, #73, and #76 per request in the renewal application.
- Revised the capacity and year installed for tank #73 per the renewal application request.
- Removed Tanks #11, #12 and #24 per request in the renewal application.

3) Section 3.0 changes:

- Condition 3.1.12. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” Also, 45CSR43 has been added to the citation of authority. The actual requirements have not changed.
- Condition 3.1.13. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” The requirements in this condition have been revised from 40 CFR §97.506 (Subpart BBBBB - *CSAPR NOX Ozone Season Group 1 Trading Program*) to 40 CFR §97.1006 (Subpart GGGGG - *CSAPR NOX Ozone Season Group 3 Trading Program*) in accordance with 40 CFR §52.2540(b). The citation of Authority has been revised to replace 40 CFR 40 §97.506 with 40 CFR §97.1006 and to delete 45CSR43.
- Condition 3.1.14. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” Also, 45CSR43 has been added to the citation of authority. The actual requirements have not changed.
- Conditions 3.4.1. and 3.4.2. – Replaced “G60-C” with “G60-D” in the citation of authority. (See discussion under Item 5 below)

4) Section 4.0 changes:

- The MATS Rule 40 CFR 63 Subpart UUUUU has been revised. Therefore, the permit has been updated to the revised MATS language. The revised permit conditions affected by this change are: 4.1.11.(9), 4.1.12.a.and c., 4.1.16., 4.2.17., 4.2.19., 4.3.3.(3)(iii), 4.4.6. and 4.4.6.(1), 4.5.7., 4.5.10., 4.5.11., 4.5.12. and 4.5.13. Conditions 4.5.14. - 4.5.17. have been added to include the revised MATS language from 40 CFR §§63.100031(f)(1), (f)(4), (f)(5), and (f)(6) which were previously incorporated by reference in condition 4.5.13.
- Condition 4.3.1. – Updated the testing results to reflect the most current tests performed on February 19, 20, and 21, 2020.

5) Section 7.0 changes:

- The emergency generators were registered under Class II General Permit G60-C with registration G60-C063 on August 5, 2014. The General Permit G60-C has since been revised and superseded by G60-D. Although the emergency generators were registered under G60-C they are now subject to the requirements of G60-D. Therefore, the requirements from G60-C in Section 7.0 have been revised or removed to reflect the revised requirements of G60-D. Where a permit condition has been deleted, the subsequent permit conditions have been renumbered in the renewal permit. Since the majority of the requirements in this section have been affected by the revisions, individual condition numbers have not been listed here. The citation of authority for the affected conditions has been updated to reflect G60-D. Also, since the ATTACHMENT A “*Monthly Hours of Operation Record (G60-C)*” was associated with G60-C and is not included in G60-D, ATTACHMENT A has been removed from the Title V permit. Other changes in section 7.0 not related the G60-D revisions are listed in the subsequent bullets below.
- Condition 7.1.2. – A typographical error in the Volatile Organic Compounds total tons/year was corrected from 0.12 to 1.2.

- Condition 7.1.12. (7.1.13 of the current permit) – This condition has been revised to remove the 40 CFR 60 Subpart III vacated requirements in §§60.4211(f)(2)(ii) and (iii).
 - Condition 7.5.4. - Added reporting requirements from 40 CFR 60 Subpart III for the emergency generators.
- 6) **APPENDIX A** – Updated the “Facility Environmental Contact” for the 45CSR2 & 45CSR10 Monitoring Plan.
- 7) **APPENDIX B** – Updated this appendix with the current Acid Rain Permit.
- 8) **APPENDIX C** – As discussed under Item 3) “Section 3.0 changes” above, the Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. The Appendix has also been updated to the current DAQ Title V boilerplate for the CSAPR requirements which includes the replacement of 40 CFR §97.506 (Subpart BBBB - CSAPR NOX Ozone Season Group 1 Trading Program) with 40 CFR §97.1006 (Subpart GGGG - CSAPR NOX Ozone Season Group 3 Trading Program).
- 9) **ATTACHMENT A** – Deleted. (See discussion in the first bullet under Item 5 above)

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:* Pursuant to 45CSR5, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR5. 45CSR2 is applicable to the facility.
- 45CSR17** *To Prevent And Control Particulate Matter Air Pollution From Materials Handling, Preparation, Storage And Other Sources Of Fugitive Particulate Matter:* Pursuant to 45CSR17, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR17. 45CSR2 is applicable to the facility.
- 40 CFR 60 Subpart D** *Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced After August 17, 1971:* The fossil-fuel-fired steam generators potentially affected by this rule have not commenced construction or modification after August 17, 1971.
- 40 CFR 60 Subpart Da** *Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978:* The electric utility steam generating units potentially affected by this rule have not commenced construction or modification after September 18, 1978.

**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 18, 1978:* The facility does not have storage vessels that are used to store petroleum liquids (as defined in 40 CFR §60.111(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after June 11, 1973 and prior to May 19, 1978.

**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:* The facility does not have storage vessels that are used to store petroleum liquids (as defined in 40 CFR §60.111a(b)) and that have a storage capacity greater than 40,000 gallons for which construction, reconstruction or modification was commenced after May 18, 1978 and prior to July 23, 1984.

**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:* Storage vessels potentially affected by this rule are exempted because they contain liquids with a maximum true vapor pressure of less than 3.5 kPa, have a storage capacity of less than 75 cubic meters, or have not commenced construction, reconstruction or modification after July 23, 1984.

**40 CFR 60
Subpart Y** *Standards of Performance for Coal Preparation Plants:* The coal handling equipment potentially affected by this rule, except for the two crushers “CR-70E” and “CR-70W,” has not been constructed or modified after October 24, 1974. The Putnam Terminal coal handling equipment was constructed after October 24, 1974 but does not prepare coal by any of the processes listed in 40 CFR §60.251(e) and therefore is not defined as a “coal preparation and processing plant.”

**40 CFR 63
Subpart Q** *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers:* This facility does not include industrial process cooling towers that are operated with chromium-based water treatment chemicals.

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: May 18, 2021

Ending Date: June 17, 2021

Point of Contact

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

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41910
frederick.tipane@wv.gov

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.