

Fact Sheet



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

Permit Number: **R30-09900081-2018**
Application Received: **November 2, 2017**
Plant Identification Number: **03-54-09900081**
Permittee: **Appalachian Power Company**
Facility Name: **Ceredo Generating Station**
Mailing Address: **1 Riverside Plaza, Columbus, OH 43215-2373**

Physical Location: Ceredo, Wayne County, West Virginia
UTM Coordinates: 365.97 km Easting • 4247.45 km Northing • Zone 17
Directions: Take Rte. 52 exit of I-64 and travel south for a short distance. Turn left onto Airport Road until you reach the Huntington Testing Building. Turn left to cross the railroad tracks and then turn immediately right onto Walker Branch Road. Travel 0.8 miles and then turn right at the 3-way stop sign. Travel approximately 1.0 miles and the site is on the left.

Facility Description

Ceredo Generating Station is a 510 megawatt (MW nominal rating) peaking power plant. The facility consists of six identical natural gas-fired turbines (Emission Unit ID# 1E - 6E), and a single natural gas-fired fuel gas heater (Emission Unit ID# 7E). The operation of the gas turbines is simple-cycle. Each turbine is a General Electric Model MS 7001EA/PG7121(EA) with a nominal output of 85 MW and a maximum heat input of approximately 1,215 MMBtu/hr HHV. The normal operation of the turbines is between 80% and 100% full load. The turbines are equipped with dry low-NO_x (DLN) combustors (9ppm of NO_x) and CO oxidation catalysts. The turbines combust only natural gas. A single fuel gas heater is generally operated concurrently with the gas turbines. The heater is natural gas-fired, with a heat input capacity of approximately 14.2 MMBtu/hr.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2016 Actual Emissions
Carbon Monoxide (CO)	240.2	21.71
Nitrogen Oxides (NO _x)	245.3	19.69
Particulate Matter (PM _{2.5})	N/A	7.84
Particulate Matter (PM ₁₀) <i>PM₁₀ is a component of TSP.</i>	83.3	7.84
Total Particulate Matter (TSP)	83.3	8.44
Sulfur Dioxide (SO ₂)	5.0	0.39
Volatile Organic Compounds (VOC)	13.6	1.39
Hazardous Air Pollutants*	7.4	0.51

**Some of the above HAPs may be counted as PM or VOCs. None of the HAPs are emitted at major source levels.*

Title V Program Applicability Basis

This facility has the potential to emit 240 tons per year of CO and 245 tons per year of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Appalachian Power Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30. This facility is also subject to 40CFR60 (NSPS) requirements, as well as Title IV (Acid Rain) requirements, and is therefore 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	PM limits for Indirect Heat Exchangers
45CSR6	Open burning prohibited
45CSR10	SO ₂ limits
45CSR11	Standby plans for emergency episodes
45CSR13	Construction Permits
45CSR16	New Source Performance Standards
45CSR30	Operating permit requirement
45CSR33	Acid Rain Provisions and Permits
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial -Commercial-Institutional Steam Generating Units
40 CFR 60 Subpart GG	Performance Standards for Stationary Gas Turbines
40 CFR Part 61	Asbestos inspection and removal
40 CFR 64	Compliance Assurance Monitoring (CAM)
40 CFR 72	Permits Regulations.
40 CFR 73	Sulfur Dioxide Allowance System Permits Regulation.

	40 CFR 74	Sulfur Dioxide Opt-ins
	40 CFR 75	Continuous Emissions Monitoring
	40 CFR 76	Nitrogen Oxides Reduction Program
	40 CFR 77	Excess Emissions
	40 CFR 78	Appeals Procedure for Acid Rain Program
	40 CFR Part 82, Subpart F	Ozone depleting substances
	40 CFR 97 Subpart AAAAA	TR NO _x Annual Trading Program
	40 CFR 97 Subpart CCCCC	TR SO ₂ Group 1 Trading Program
	40 CFR 97 Subpart EEEEE	TR NO _x Ozone Season Group 2 Trading Program
State Only:	45CSR4	No objectionable 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 <i>(if any)</i>
R13-2382D	April 14, 2016	
R33-55276-2020-4 Phase II Acid Rain Permit	December 14, 2015	

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.

Determinations and Justifications

This is the third permit renewal for this facility. The following changes have been made since the most recent permit was issued:

Title V Boilerplate changes: Conditions 3.5.3., 3.5.5. and 3.5.6. were changed to require electronic submittal of reports to the WV DAQ and to the USEPA.

Other changes:

Condition 3.1.9. - This condition contained the requirements of 45CSR39 (CAIR NO_x Annual Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR NO_x Annual Trading Program" of 40 CFR §97.406. The requirements of the Transport Rule have been added in Appendix B of the permit.

Condition 3.1.10. - This condition contained requirements of 45CSR40 (CAIR NO_x Ozone Season Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR NO_x Ozone Season Group 2 Trading Program" of 40 CFR §97.806. The requirements of the Transport Rule have been added in Appendix B of the permit.

Condition 3.1.11. - This condition contained requirements of 45CSR41 (CAIR SO₂ Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR SO₂ Group 1 Trading Program" of 40 CFR §97.606. The requirements of the Transport Rule have been added in Appendix B of the permit.

Condition 4.3.1. referenced a section 6.6.2., however there is no section 6.6.2. in the permit. The reference was corrected to section 4.2.3.a., b., c., and d.

Non-Applicability Determinations

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

None.

Request for Variances or Alternatives

Requirement 4.2.2. includes a custom schedule for monitoring of nitrogen and sulfur content of fuel (natural gas) burned in six turbines. The change was based on approval letters from EPA : Judith Katz, "Re: Request for Custom Fuel Monitoring Schedule under Subpart GG of NSPS" received on May 11, 2001, and Conniesue B. Oldham received on September 19, 2002.

Insignificant Activities

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

Comment Period

Beginning Date: Friday, May 25, 2018
Ending Date: Monday, June 25, 2018

Point of Contact

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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
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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)

No comments received.