

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 April 17, 2009.

Permit Number: **R30-05300009-2009**
Application Received: **12/7/2010**
Plant Identification Number: **05300009**
Permittee: **Appalachian Power Company**
Facility Name: **Mountaineer Plant**
Mailing Address: **1 Riverside Plaza, Columbus, OH 43215**

Permit Action Number: *MM01* Revised: *February 28, 2011*

Physical Location: New Haven, Mason County, West Virginia
UTM Coordinates: 419.04 km Easting • 4314.70 km Northing • Zone 17

Directions: From Charleston take Interstate 77 North to Exit 138. Travel west on US Route 33 approximately 24 miles to New Haven. Facility is located on the Right one mile east of New Haven in Mason County.

Facility Description

The Mountaineer Plant is a fossil fuel fired electric generation facility and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of one (1) coal-fired steam generator with a rated design capacity of 11,960 mm Btu/hr, two (2) oil-fired auxiliary boilers with a rated design capacity of 598 mm Btu/hr each, 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.

This modification incorporates changes to R13-0075G, which facilitated the installation and operation of a frozen limestone material handling system.

Emissions Summary

As stated in the Engineering Evaluation for R13-0075G, the following Potentials to Emit (PTEs) will increase:

- Particulate Matter by 0.48 TPY
- PM₁₀ by 0.18 TPY
- PM_{2.5} by 0.03 TPY

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Mountaineer Plant 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 40 CFR 60 (NSPS) requirements as well as Title IV (Acid Rain) requirements and therefore 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:	45CSR13 45CSR30	Operating permit requirement.
State Only:	45CSR42	Greenhouse Gas Emissions Inventory Program

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.

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>)
R13-0075G	9/28/2009	

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

The following excerpt from the Engineering Evaluation for R13-0075G describes the equipment and process changes made at this facility:

This project consists of the installation and operation of a frozen limestone material handling system to be added to the limestone processing system. This portion of the system will bypass the existing method of feeding the day silos from underpile feeders. The new system will allow the facility to handle frozen limestone agglomerates using a separate system to accept and handle the frozen limestone. The physical system includes a hopper, conveyor, roll crusher/breaker and associated chute work. The planned operation will utilize an endloader to collect limestone off the limestone storage pile and transport it to the feed hopper. The limestone will drop out of the feed hopper through enclosed chutes to the conveyor. The fully enclosed conveyor will move the limestone to the crusher/breaker. The limestone will exit the bottom of the crusher/breaker and fall onto the existing reclaim conveyor. This operation will be performed only when the limestone is frozen together in clumps and the normal method of feeding the reclaim conveyor from the underpile feeders becomes too difficult due to the limestone being frozen together.

The limestone received at the facility for operation of the flue gas desulfurization system is a nominal 3/4 inch size with 100% passing through a 1" screen. The limestone is received from barge deliveries and stored on site in a storage pile. During the cold winter months, the limestone may freeze together and cause material handling problems. The new system is designed to break the clumps of frozen limestone prior to sending it to the day silos and further processing.

The crusher/breaker in this system is designed to break the frozen lumps of the limestone to three inch (3") frozen lumps. It rotates at a low revolution rate (57 rpm) to break apart the frozen limestone without reducing the size of the limestone itself. The system is planned to be used as needed. For this permit application, the applicant conservatively assumed 4 months of usage per year. During these months, the fine limestone particles will typically be bound to larger stone by ice.

To facilitate the changes described above, the following equipment was added to the emission units table:

- Frozen Limestone Reclaim Hopper
- Frozen Limestone Reclaim Conveyor
- Frozen Limestone Crusher/Breaker

To ensure that the applicant uses the crusher/breaker no more than four months a year, the hourly and annual output of the crusher was limited in Condition 6.1.5., and records of the limestone processed are now required in Condition 6.4.4.

Additionally, new boilerplate language for greenhouse gas reporting was added as conditions 3.1.18 and 3.4.10.

Non-Applicability Determinations

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

40CFR60, Subpart OOO--Standards of Performance for Nonmetallic Mineral Processing Plant: The equipment added with this modification breaks apart frozen limestone without reducing the size of the limestone itself. Therefore, the new equipment does not meet the definition of a crusher in 40 C.F.R. § 60.671. Since the new equipment does not meet the definition of a crusher, they are exempt from this subpart per 40 C.F.R. § 60.670(a)(1).

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.