

# Fact Sheet



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

Permit Number: **R30-06100001-2021**  
Application Received: **April 22, 2020**  
Plant Identification Number: **061-00001**  
Permittee: **Monongahela Power Company**  
Facility Name: **Fort Martin Power Station**  
Mailing Address: **800 Cabin Hill Drive, Greensburg, PA 15601**

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Physical Location: Maidsville, Monongalia County, West Virginia  
UTM Coordinates: 591.91 km Easting • 4,395.95 km Northing • Zone 17  
Directions: From Morgantown, WV travel on WV-100 approximately 3.6 miles.  
Turn Right onto State Route 53, continue to Power Plant.

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### Facility Description

The Fort Martin Power Station is a fossil fuel fired electric generation facility with two units (560 MW and 568 MW) and operates under Standard Industrial Classification (SIC) code 4911. The facility consists of two (2) 4,984 MMBtu/hr coal-fired boilers, two (2) 115.3 MMBtu/hr auxiliary boilers, two (2) 320 KW diesel-fired emergency generators, one (1) 208 hp emergency generator for fire pump, three (3) 252 hp emergency generators for FGD quench pumps, boiler-related lime handling and various support operations such as coal handling, ash handling, wastewater treatment and various storage 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

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Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2019 Actual Emissions
Carbon Monoxide (CO)	915.8	672.03

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<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2019 Actual Emissions</b>
Nitrogen Oxides (NO <sub>x</sub> )	23,596.20	9,393.30
Lead (Pb)	0.07	0.07
Particulate Matter (PM <sub>2.5</sub> )	830.80	165.08
Particulate Matter (PM <sub>10</sub> )	2,413.10	258.61
Total Particulate Matter (TSP)	4,651.30	1,124.30
Sulfur Dioxide (SO <sub>2</sub> )	135,391.60	4,239.99
Volatile Organic Compounds (VOC)	127.10	80.48
<i>PM<sub>10</sub> is a component of TSP.</i>		
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2019 Actual Emissions</b>
Hydrochloric Acid (HCl)	1,828.40	5.40
Hydrogen Fluoride (HF)	234.30	6.20
Total of non-major miscellaneous HAPs	20.32	11.52

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

### **Title V Program Applicability Basis**

This facility has the potential to emit 135,391.6 tons per year of SO<sub>2</sub>, 23,596.2 tons per year of NO<sub>x</sub>, 2,413.1 tons per year of PM<sub>10</sub>, 915.8 tons per year of CO, 127.1 tons per year of VOC's, 1,828.4 tons per year of HCl, 234.3 tons per year of HF, and 289.9 tons per year of H<sub>2</sub>SO<sub>4</sub>. 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, Monongahela Power Company's Fort Martin Power Station 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:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	NSR Permits
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances

	45CSR16	Standard of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
	45CSR2	Control of Particulate matter emissions from indirect heat exchangers
	45CSR10	Control of sulfur dioxide emissions from indirect heat exchangers
	45CSR33	Acid Rain Provisions and Permits
	45CSR34	Emission Standards for Hazardous Air Pollutants
	40 C.F.R. 64	Compliance Assurance Monitoring
	40 C.F.R. Part 72	Permits Regulation
	40 C.F.R. 73	Sulfur dioxide allowance
	40 C.F.R. 74	Sulfur dioxide Opt-ins
	40 C.F.R. 75	Continuous Emissions Monitoring
	40 C.F.R. 76	Nitrogen Oxides Reduction Program
	40 C.F.R. 77	Excess Emissions
	40 C.F.R. 78	Appeal Procedure for Acid Rain Program
	40 C.F.R. 60 Subpart Kb	Storage Vessels
	40 C.F.R. 60 Subpart Db	Standards of Performance for Industrial–Commercial-Institutional Steam Generating Units
	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 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. 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
	40 C.F.R. 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units.
	40 C.F.R. 97, Subpart AAAAA	CSAPR NO <sub>x</sub> Annual Trading Program
	40 C.F.R. 97, Subpart EEEEE	CSAPR NO <sub>x</sub> Ozone Season Trading Program
	40 C.F.R. 97, Subpart CCCCC	CSAPR SO <sub>2</sub> Group 2 Trading Program
State Only:	45CSR4	No objectionable odors.
	45CSR43	Cross-State Air Pollution Rule to Control Annual Nitrogen Oxides Emissions, Annual Sulfur Dioxide Emissions, And Ozone Season Nitrogen Oxides Emissions

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**

<b>Permit or Consent Order Number</b>	<b>Date of Issuance</b>	<b>Permit Determinations or Amendments That Affect the Permit (if any)</b>
R13-2705	6/22/2007	
R13-2711A	11/14/2007	
G60-C006A	1/10/2011	

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 November 2, 2015. Substantial changes to the most recent version of the Title V Permit consist of the following:

**1) Section 1.1. Emission Units Table:**

- Added GORE System as a control device of emission units B1 and B2 and added it to the list of control devices. The GORE System is a fixed static system consisting of 5 layers of modules (25” X 27” X 13”); Layers 1-4 (394 modules) and Layer 5 (354 modules). The GORE modules are located in the FGD absorber vessel after the FGD system and prior to the flue gas exiting through the stack.
- Emission Unit VBF-3 was added. This emission unit comes from R13-2711A and was taken out of the Title V permit under R30-06100001-2009 (SM01) although R13-2711A still contained emission limits for this emission unit. The emission unit is subject to Section 6.0 Source-Specific Requirements for Gypsum Handling. Emission limits from R13-2711A for VBF-3 were added in condition 6.1.1.

**2) 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.

**3) Condition 3.1.10. (previous 3.1.9) -** This condition contained the requirements of 45CSR39 (CAIR NO<sub>x</sub> 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 B of the permit.

**4) Condition 3.1.11. (previous 3.1.10) -** This condition contained requirements of 45CSR40 (CAIR NO<sub>x</sub> 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 B of the permit.

5) **Condition 3.1.12. (previous 3.1.11)** - This condition contained requirements of 45CSR41 (CAIR SO<sub>2</sub> 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 B of the permit.

6) **Section 4.0.**

- The MATS “place holder” language for 40 CFR 63 Subpart UUUUU in condition 4.1.12. of the current permit has been deleted. The requirements of 40 CFR 63 Subpart UUUUU (MATS) have been added in Section 4 of the permit in conditions 4.1.3.b., 4.1.12. through 4.1.29., 4.2.9. through 4.2.20., 4.3.2. through 4.3.15., 4.4.10. through 4.4.19., and 4.5.8. through 4.5.18. See discussion below.

7) **Section 7.0**

- The Incorporation by reference (IBR) of the General permit requirements have been deleted and the individual requirements of Class II General Permit G60-D (hereafter referred to as Permit G60-D) and Registration G60-C006A have been incorporated into the permit. The general permit itself and the registration will not be included in the Appendix. Therefore, the General permit has been deleted from Appendix C.
- As discussed, the IBR language has been deleted and therefore the individual applicable requirements from the General permit, 40 CFR 60 Subpart IIII, and 40 CFR 63 Subpart ZZZZ have been incorporated in this section of the permit. If a requirement is not applicable to all of the emergency RICE engines covered in this section, the Emission Point ID will follow the citation of authority of the requirement to indicate which engine is subject to a particular permit condition.
- EDFP-1 is an existing emergency CI generator ≤500 hp located at a major source of HAPs. As such it is subject to the requirements of 40 CFR 63 Subpart ZZZZ. The applicable requirements of 40 CFR 63 Subpart ZZZZ that EDFP-1 is subject to are included as conditions 7.1.15 – 7.1.24, 7.4.1, 7.5.1, 7.5.2, and 7.5.4.

8) **APPENDIX B** – The CAIR requirements have been replaced with the Cross-State Air Pollution Rule Requirements.

9) **APPENDIX C** – The Class II Emergency Generator General Permit G60-C has been deleted and replaced with the Acid Rain Permit. The G60-D requirements have been incorporated directly into Section 7.0.

10) **APPENDIX D** – The 40 CFR63 Subpart UUUUU Averaging Plan has been included.

❖ **40 C.F.R. 63 Subpart DDDDD** – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.*

- The Fort Martin Power Station is a major source of HAPs because it has potential emissions in excess of 25 tpy for total HAPs and potential emissions in excess of 10 tpy for any individual HAP. Therefore, 40 CFR Part 63, Subpart DDDDD potentially applies to Unit B1 and Unit B2 steam generators and the two auxiliary boilers. The Unit B1 and Unit B2 steam generators are not subject to the Boiler MACT regulation per 40 CFR §63.7491(a) because they are electric utility steam generating units (EGUs) covered by 40 CFR 63 Subpart UUUUU (see discussion below). The non-EGU auxiliary

boilers (Aux Blr 1A and Aux Blr 1B) are considered limited use boilers under 40 C.F.R. 63 Subpart DDDDD and their applicable requirements were included during the previous Title V renewal.

❖ **40 CFR 63 Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units**

- This regulation, also known as the “Utility Mercury and Air Toxics (MATS)” rule, applies to coal- and 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, acid gases, and filterable particulate matter, 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 (cf. §63.9984(b)). A one-year extension was requested and granted. Therefore, the compliance date for the Fort Martin Station was April 16, 2016. However, 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 date. The Fort Martin Power Station has met the initial compliance requirements.

The coal-fired Unit B1 and Unit B2 steam generators are existing EGUs as defined in §63.9982(d), and do not meet any of the exemption criteria in §63.9983. The three steam generators primarily combust coal with a heating value greater than 8,300 Btu/lb. The units are also capable of combusting natural gas as a secondary fuel for startup, shutdown, and for flame stabilization. Both units meet the criterion of §63.9990(a)(1) for units combusting coal with a heating value greater than 8,300 Btu/lb, and as such do not combust low rank virgin coal.

- Compliance Approach - The permittee has conducted the initial compliance demonstration and submitted the results of the performance testing to DAQ. The test results are briefly discussed below for each pollutant. Additionally, the required NOCS has been submitted. The facility has elected to demonstrate compliance by emissions averaging for HCL and PM (quarterly stack tests), and CEMS for Hg (30-day rolling average).

- *Filterable Particulate Matter (PM)*  
The permittee has elected to comply with the 0.30 lb/MWh filterable particulate matter (PM) limitation (rather than Total non-Hg HAP metals, or Individual HAP metals). The initial performance testing was concluded for Units B1 and B2 on September 24, 2016 resulting in 0.062 lb/MWh. Continuous compliance will be demonstrated through quarterly performance testing and utilizing the emissions averaging procedures in 40 CFR §63.10009.
- *Hydrogen Chloride (HCL)*  
The permittee has elected to comply with the 0.02 lb/MWh Hydrogen Chloride (HCL) limitation. The initial performance testing was concluded for Units B1 and B2 on September 24, 2016 resulting in 0.001 lb/MWh. Continuous compliance will be demonstrated through quarterly performance testing and utilizing the emissions averaging procedures in 40 CFR §63.10009.
- *Mercury (Hg)*  
The permittee has elected to comply with the 0.013 lb/GWh mercury (Hg) limitation utilizing an Hg CEMS. The initial compliance was concluded on September 8, 2016 resulting in 0.007 lb/GWh. Continuous compliance will be demonstrated using the Hg CEMS and utilizing the emissions averaging procedures in 40 CFR §63.10009.
- *Work Practice Standard for Tune-up of Burner & Combustion Controls*  
The permittee will conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months as specified in 40 CFR §63.10021(e).

- *Work Practice Standard for Startup & Shutdown*  
 The permittee will operate all continuous monitoring systems for the units during periods of *startup* and *shutdown* as those terms are defined in 40 CFR §63.10042. (*The Fort Martin Power Station plans to utilize paragraph (1) of the start-up definition in §63.10042 for both units*). During startup of a unit, clean fuel (defined in §63.10042) must be used for ignition. Once coal is fired, all of the applicable control technologies must be engaged. During shutdown of a unit, the permittee must operate all applicable control technologies while firing coal. The permittee must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown. All applicable requirements in Items #3 and #4 of Table 3 to Subpart UUUUU will be adhered to.
- The applicable requirements for an EGU utilizing PM and HCL quarterly performance testing and Hg CEMS have been included in Section 4 of the permit. The initial compliance demonstration has been completed and the NOCS has been submitted therefore the initial compliance requirements are not included in the permit. The permittee has indicated the use of emission averaging; therefore, the emission averaging requirements have been incorporated into the permit.
  - The permittee has not indicated the desire to qualify for LEE status and therefore the LEE requirements have not been included in the permit.
  - A PM continuous parametric monitoring system (CPMS) is not being utilized, therefore the PM CPMS requirements have not been included in the permit.
  - The permittee has elected to comply with the PM limit as opposed to total non-Hg HAP metals or Individual HAP metals, therefore requirements pertaining to non-Hg HAP metals or Individual HAP metals are not included in the permit.

❖ **30 C.F.R. 64 – Compliance Assurance Monitoring (CAM).**

- There has been no change to the existing CAM Plan since the last Title V permit Renewal.

**Non-Applicability Determinations**

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

Non-Applicable Requirement	Emission Unit (Point ID)	Reason for Non-Applicability
45CSR5	Facility-Wide	Rule to Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations, and Coal Disposal Areas is not applicable to the facility because 45CSR 2 is applicable. (per 45CSR§§5-2.4.b,2.14)
45CSR§10-8	Blr 1A & Blr 1B (Aux Blr Stack)	The auxiliary boilers burn distillate fuel only and, as per 45CSR§10-10.3 are exempt from 45CSR§10-8.
45CSR17	Facility-Wide	Rule to Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation, Storage, and Other Sources of Fugitive Particulate Matter is not applicable because 45CSR2 is applicable, as stated in section 6.1 of 45CSR17.
40 C.F.R. 60 Subpart Da	B1 (Stack 1), B2 (Stack 2)	Boilers B1 and B2 commenced construction prior to September 18, 1978.

Non-Applicable Requirement	Emission Unit (Point ID)	Reason for Non-Applicability
40 C.F.R. 60 Subpart K	Facility-Wide	Fort Martin Power Station does not have any tanks storing petroleum liquids (as defined in 40 C.F.R. §60.111) that were constructed after June 11, 1973 and prior to May 19, 1978 and exceed 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Ka	Facility-Wide	Fort Martin Power Station does not have any tanks storing petroleum liquids (as defined in 40 C.F.R. §60.111a) that were constructed after May 18, 1978 and prior to July 23, 1984 and exceed 40,000 gallons in capacity.
40 C.F.R. 60 Subpart Q		Since the facility's cooling towers are not operated with chromium-based water treatment chemicals they are not subject to this subpart.

### 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: February 24, 2021  
Ending Date: March 26, 2021

### Point of Contact

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

Robert Mullins  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41286  
Robert.A.Mullins@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.