

Fact Sheet



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

Permit Number: **R30-02300003-2011**
Application Received: **March 17, 2010**
Plant Identification Number: **03-54-023-00003**
Permittee: **Virginia Electric and Power Company**
Facility Name: **Mt. Storm Power Station**
Mailing Address: **5000 Dominion Boulevard, Glen Allen, VA 23060**

Revised: N/A

Physical Location: Mt. Storm, Grant County, West Virginia
UTM Coordinates: 649.85 km Easting • 4340.00 km Northing • Zone 17
Directions: Off of State Route 93, two (2) miles west of Bismark. From the intersection of Route 93 into Davis, WV continue east on Route 93 for approximately 8 miles.

Facility Description

Dominion's Virginia Electric and Power Company's Mt. Storm Power Station is a coal-fired electric generation facility and operates under Standard Industrial Classification (SIC) code 4911 and North American Industry Classification System (NAICS) code 221112. The facility consists of three (3) coal-fired boilers, two with a rated design capacity of 5,779 mmBtu/hr each and one with a rated design capacity of 5,824 mmBtu/hr, an oil-fired auxiliary boiler with a rated design capacity of 150 mmBtu/hr, and various supporting operations such as coal handling, ash handling, limestone handling, and various tanks with insignificant emissions. The Mt. Storm Power Station 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	2009 Actual Emissions
Carbon Monoxide (CO)	1571.72	623.61
Nitrogen Oxides (NO _x)	47,167.09	3,765.96
Particulate Matter (PM ₁₀)	3076.26*	522.42
Total Particulate Matter (TSP)	3908.29*	849.68
Sulfur Dioxide (SO ₂)	205,559.53	3,062.68
Volatile Organic Compounds (VOC)	188.61	119.89

PM₁₀ is a component of TSP.

** TSP and PM₁₀ have increased by 23.89 and 9.63 TPY respectively as a result of the addition of a coal blending operation. (Permit Modification R30-02300003-2005 MM01)*

Hazardous Air Pollutants	Potential Emissions	2009 Actual Emissions
Hydrogen Chloride	184.58	119.73
Hydrogen Fluoride	23.07	14.97
Sulfuric Acid Mist	495.83	293.57
Total of other Miscellaneous non-major HAPs	6.34	3.755

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

Title V Program Applicability Basis

This facility has the potential to emit 205,560 tons per year of SO₂, 47,167 tons per year NO_x, 1,572 tons per year CO, 3,076 tons per year PM₁₀ and 710 tons per year 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, Virginia Electric and Power Company's Mt. Storm 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:

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
45CSR14	Permits for Construction and Major Modification, of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration
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
45CSR38	Provisions For Determination Of Compliance With Air Quality Management Rules
45CSR39	Control Of Annual Nitrogen Oxides Emissions
45CSR40	Control Of Ozone Season Nitrogen Oxides Emissions
45CSR41	Control Of Annual Sulfur Dioxide Emissions
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. Part 61, Subpart M	National Emission Standard For Asbestos
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
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.

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
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>)
R13-656	June 4, 1982	
R13-1438	February 20, 1992	
R13-1660D	May 13, 2003	Supersedes and replaces R13-1660C issued January 5, 2002 which superseded and replaced R13-1660B issued July 10, 1998 which superseded and replaced R13-1660R issued February 18, 1997 which superseded and replaced the original permit R13-1660 issue February 28, 1994
R13-1661/R14-10	August 12, 1994	
R13-2034C	August 4, 2008	Supersedes and replaces R13-2034B issued February 22, 2008 which superseded and replaced R13-2034A issued March 13, 2006 which superseded and replaced R13-2034 issued July 23, 1996. Also Supersedes and replaces, permit R13-2593A issued March 8, 2005 which Superseded and replaced permit R13-2593 issued September 21, 2004.
R13-2735	December 13, 2007	
R33-3954-2012-3 (Acid Rain Permit)	December 18, 2007	Effective January 1, 2008
CAIR Permit	June 18, 2007	
Consent Decree: No. 03-CV-517A (US vs. VEPCO)	October 3, 2003	Effective October 10, 2003 (date entered by the courts)
CO-R39-C-2009-11	June 26, 2009	Compliance Order

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

This is a renewal of the Title V permit which was issued on October 19, 2005 and modified on October 5, 2007, May 27, 2008, November 20, 2008 and March 10, 2009. Changes to the most recent version of the Title V Permit consist of the following:

1) Title V Boilerplate changes

- **Condition 1.1.** The Equipment Table was updated to reflect new emission point ID names as submitted in the Title V renewal application. The table was also updated to reflect revisions resulting from NSR permit modifications.
- **Condition 2.1.4.** has been added and states: *Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a “rolling yearly total” shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.*
- **Condition 3.1.1. and 3.1.2.** were revised because the language in 45CSR§§6-3.1. & 3.2. was revised.
- **Condition 3.1.3.** citation was changed because 45CSR15 was repealed and 40 CFR 61 is now incorporated into 45CSR34.
- **Condition 3.5.3. and 3.5.5.** were revised to require electronic submittal of the annual certification to USEPA. The certification shall now only be submitted to the USEPA by e-mail.

2) **Condition 3.4.4.** was revised to require monthly inspections of fugitive dust controls systems throughout the year.

3) **45CSR26 - NO_x Budget Trading Program as A Means of Control and Reduction of Nitrogen Oxides from Electric Generating Units**

- This Rule has been repealed. Therefore the requirements of this rule have been removed. The NO_x Budget Permit Application included in Appendix A has also been removed. The facility is now subject to 45CSR40 (*Control Of Ozone Season Nitrogen Oxides Emissions*) and the Clean Air Interstate Rule (CAIR) NO_x Ozone Season Trading Program.

4) **45CSR37 - Mercury Budget Trading Program To Reduce Mercury Emissions**

- This Rule has been repealed. Therefore the CAMR Mercury Budget Trading Program requirements have been removed from the permit.

5) **Conditions 3.1.9., 3.1.10. and 3.1.11.**

- The discussion regarding the vacature of CAIR by the US Court of Appeals for the District of Columbia has been removed.

6) **45CSR42 - Greenhouse Gas Emissions Inventory Program**

- This rule is applicable only when the facility becomes an “affected source” by emitting any greenhouse gas on an annual basis greater than the de minimis amounts listed in section 3.1 of the rule i.e.:

Greenhouse Gas Compound	tons/year
carbon dioxide	10,000
methane	476
nitrous oxide	32.6

Greenhouse Gas Compound	tons/year
hydrofluorocarbons	0.855
perfluorocarbons	1.09
sulfur hexafluoride	0.42

If the applicability threshold is triggered, then in accordance with a reporting cycle provided by the Secretary, affected sources shall report to the Secretary the quantity of all greenhouse gases emitted above *de minimis* amounts in the years specified by the Secretary under Section 4. of 45CSR42. Conditions 3.1.12. and 3.5.10. were added to the permit

7) Requirements from Permit R13-2735

- This permit was issued on December 13, 2007. It establishes requirements to provide the means to make enforceable the result of the BART analysis related to boilers “MTST-01-BLR-STG-1,” (*MS1/2e*) “MTST-02-BLR-STG-1” (*MS1/2e*) and “MTST-03-BLR-STG-1” (*MS3e*). These requirements are contained in conditions 3.4.1, 4.1.6., 4.1.7., 4.1.8., 4.1.9., 4.2.6., 4.2.7., 4.3.4., 4.4.3., 4.4.4., 4.4.5., and 4.5.7. “R13-2735” has also been added to the “*Active R13, R14, and R19 Permits*” table in Section 1.2.

8) VEPCO Federal Consent Decree

- The following language has been incorporated into the permit as Condition 4.1.21:

The Consent Decree entered by the United States District Court for the Eastern District of Virginia, Civil Action Nos. 03-CV-517-A and 03-CV-603-A, on October 10, 2003 between Virginia Electric and Power Company (VEPCO) and the United States of America, et al.(the “Consent Decree”), as such Consent Decree might be amended or modified from time to time in accordance with its terms, is incorporated in its entirety into this permit by reference and is attached as Appendix D to this permit. The permittee’s obligation under this permit shall be to comply with the terms and conditions of the Consent Decree that relate to the operation of Mount Storm Power Station exclusively, and such compliance shall be determined exclusively by reference to the terms and conditions of the Consent Decree.

Brief descriptions of the paragraphs added to the permit are as follows:

Paragraph 5

- This paragraph of the consent decree defines a “30-Day Rolling Average Emission Rate”

Paragraphs 56, 57 and 58

- These paragraphs of the consent decree have requirements for the installation and operation of selective catalytic reduction (SCR) controls for NO_x emission reductions.

Paragraph 66

- This paragraph of the consent decree contains an option of compliance with an emission rate after a flue gas desulfurization control device (FGD) demonstrates SO₂ 30-Day Rolling Average Removal Efficiency of at least 95.0%.

Paragraph 67

- This paragraph of the consent decree contains requirements for the interim mitigation of Mount Storm SO₂ emissions while FGDs are improved.

Paragraph 69

- This paragraph of the consent decree contains requirements for the operation of the FGDs

Paragraph 78

- This paragraph of the consent decree has requirements for the operation of the electrostatic precipitators (ESPs).

Paragraph 80

- This paragraph of the consent decree has requirements for the operation maintenance of the ESPs in compliance with the approved ESP optimization plan. It also sets a PM emission limit of 0.030 lb/mmBtu for each unit.

Paragraph 81

- This paragraph of the consent decree specifies PM emission rate determination methods.

Paragraph 95

- This paragraph of the consent decree requires that a stack test for PM emissions be conducted at least once every four (4) successive QA Operating Quarter” (as defined in 40 CFR §72.2). The results of such testing shall be submitted to the Plaintiffs [of the Consent Decree] as part of the periodic reporting of paragraph 137 (see below).

Paragraph 137

- This paragraph of the Consent Decree requires that a periodic report, in accordance with Appendix B Section III.C.1.a. of the Consent Decree, be submitted.

40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)

- The existing Title V permit contains monitoring that meets the definition of “continuous compliance demonstration method” for Units 1, 2 and 3 electrostatic precipitators (ESPs). The ESPs are equipped with “Forry Energy Management Systems” which monitor ESP performance. Included in the permit is a 45CSR2A Monitoring and Recordkeeping Plan which requires Station personnel to obtain ESP average kw/hour data, on an hourly basis as well as other unit data taken from the Digital Control System (DCS) for each of the units. From this data, ESP Efficiency (percent power) and ESP Corona Power Density (watts/1000 ACFM) are calculated hourly. The potential particulate emissions are also calculated and compared to the Units’ regulatory emission limits. The monitoring plan is attached to the Permit as Appendix B.

Furthermore, the compliance method does not include an assumed control device emission reduction factor that could affect the actual operation and maintenance of the ESPs. Therefore in accordance with 40 CFR §64.2(b)(vi), this facility is exempt from the requirements of 40 CFR Part 64 for Particulate Matter.

- There are no add-on control devices for the emissions of Carbon monoxide (CO). Therefore CAM is not applicable for CO.
- The CAM rule is not applicable to the units for Volatile Organic Compounds (VOCs), or Hazardous Air Pollutants (HAPs) since there are no emission limitations or standards for these pollutants
- The units are exempt from the CAM rule under 40 CFR§64.2(b) for the following pollutants:
 - *Oxides of Nitrogen (NO_x)*

The units are subject to emission standards that apply under an emissions trading program that has been approved by the Administrator. Also NO_x CEMs are required through the Acid Rain Program

- *Sulfur Dioxide (SO₂)*
The units are subject to emission standards prescribed by the Acid Rain Program pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.
- There are no add-on control devices for emissions discharged from the auxiliary boiler. Therefore, CAM is not applicable to this boiler.

Combustion Turbine Emergency Generator

- **45CSR2 & 45CSR10** – The combustion turbine does not produce heat or power by indirect heat transfer and therefore is not defined as a “Fuel Burning Unit.” Therefore these rules do not apply to the turbine.

Industrial, Commercial, and Institutional Boilers and Process Heaters MACT

- As a result of USEPA’s issuance of the final “Industrial, Commercial, and Institutional Boilers and Process Heaters MACT” the boiler MACT language in Condition 3.1.14. of the “Draft” permit has been deleted. New language has been inserted in Section 4 in Condition 4.1.21. as follows:
 - a. The oil fired auxiliary boiler [*MTST-00-AB-STG-1*], shall comply with all applicable requirements for existing affected sources pursuant to 40 C.F.R. 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source effective date. The permittee is required to submit an Initial Notification no later than 120 calendar days after becoming subject to the rule in accordance with 40 C.F.R. §63.7545(b).

These dates may be subject to change if the permittee is granted an extension pursuant to the provisions of 40 C.F.R. 63, the compliance date is amended by USEPA, or if §112(j) of the 1990 Clean Air Act Amendments becomes applicable.

[40CFR63, Subpart DDDDD, 45CSR34]

- b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR§30-6.5.b.]

45CSR2 and 45CSR10 Monitoring Plan Typographical Errors

- At the top of page 13 of the approved Monitoring plan, there are two typographical errors. In the description of “45 CSR 2, §4.1.b.,” Type ‘a’ should be Type ‘b.’ and “twelve hundred (600) pounds per hour” should be “six hundred (600) pounds per hour.”

Non-Applicability Determinations

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

45CSR5	Pursuant to 45CSR5, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR5. 45CSR2 is applicable to the facility.
45CSR17	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 40 CFR 60 Subpart Da	The Steam Generators potentially subject to these rules commenced construction prior to August 17, 1971
40 CFR 60 Subpart Db	The Steam Generator potentially subject to this rule commenced construction prior to June 19, 1984
40 CFR 60 Subpart Dc	This facility does not have Seam Generators less than 100 mmBtu/hr but greater than 10 mmBtu/hr.
40 CFR 60 Subpart K	The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111(b)) which construction, reconstruction, or modification commenced after June 11, 1973 and prior to May 19, 1978.
40 CFR 60 Subpart Ka	The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR 60.111a(b)) which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984.
40 CFR 60 Subpart Kb	Storage vessels potentially affected by this subpart have a storage capacity of less than 75 cubic meters and therefore are not subject to this subpart.
40 CFR 60 Subpart GG	The Combustion Turbine potentially subject to this rule commenced construction prior to October 3, 1977 and combusts Jet Fuel Oil.
40 CFR 63 Subpart YYYY	The combustion turbine <i>MTST-C1-CTG-T-1</i> is defined as an “existing combustion turbine” per 40 CFR §60.6090(a)(1) and therefore is not subject to this subpart or to 40 CFR 63 Subpart A pursuant to 40 CFR §60.6090(b)(4).
40 CFR 63 Subpart ZZZZ	Emergency diesel generators <i>MTST-00-EG-DG-1A MTST-00-EG-DG-1B</i> , are existing emergency stationary RICE and therefore are not subject to the requirements of this subpart pursuant to 40 CFR §63.6590(b)(3). The diesel fire pumps <i>MTST-00-FP-ENG-1 and MTST-00-FP-ENG-3</i> are less than 500 brake horsepower and therefore are not affected sources as defined in this subpart.
40 CFR 82 Subpart B	The facility does not conduct motor vehicle maintenance involving CFCs on site.
GHG Clean Air Act requirements	This is a renewal Title V permit and there have not been any modifications that would have triggered a PSD permit.

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: January 25, 2011
Ending Date: February 24, 2011

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

Frederick Tipane
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

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Comments (*See Attachment A for comments and responses*) were received from Dominion Resources Services, Inc. and from the USEPA resulting in the following revisions to the Draft Permit and Fact Sheet.

Permit Condition	Revision
1.1 Table	Corrected Combustion Turbine Design Capacity from 230.2 to 215.3 mmBtu/hr.
1.1 Table	Corrected MTST-00-CS-CNV-Q conveyer year installed from 19725 to 1972.
4.1.5 & 4.1.16.	The language has been revised to eliminate “a minimum of” language. It now states “The averaging time shall be six (6) hours.”
	New condition (4.1.21.) was added for Boiler MACT (<i>This was not comment related. See Boiler MACT discussion above</i>). Subsequent conditions were renumbered.
4.1.26.	This condition is now 4.1.27. All of Paragraph 69 of the Consent Decree has been added to this condition.
	A new condition (4.1.28.) has been added to include Paragraph 68 of the consent decree. Subsequent conditions were re numbered.

Permit Condition	Revision
4.1.28.	This condition is now 4.1.30. “Pursuant to Paragraphs 78 & 79 of the consent decree” has been added.
4.1.29.	This condition is now 4.1.31. The language has been revised to read “The emission rate from Unit 1 and Unit 2, as emitted from Emission Point MS1/2e, and from Unit 3 as emitted from Emission Point MS3e shall meet a PM emission limit of 0.030 lb/mmBtu.”
4.1.30.	This condition is now 4.1.32.
4.3.1.	“+/- 12 months” was added after five (5) years. “A compliance test shall be conducted no later than eighteen (18) months of the issuance date of this permit.” was deleted.
4.3.2.	Language contained in Paragraph 81 of the Consent Decree has been added to this condition. Paragraph 81 has been added to the citation of authority
4.3.3. & 4.3.4.	These two conditions have been combined as condition 4.3.3.
4.4.5.	Corrected a typographical error in the first line. R13-2753 was changed to R13-2735.
4.5.5 & 4.5.6.	These two conditions were not required to be in the Title V permit and therefore have been deleted.
4.5.7	This condition is now 4.5.5. The duplicate language “15 for the reporting period January 1 to June 30 and on or before March” has been deleted.
5.3.1 & 6.3.2.	Revised language per EPA comments.
Fact Sheet	Revised the potential emissions in the “Title V Program Applicability Basis” section to match those in the “Emission Summary” Table
Fact Sheet	In the discussion for the “VEPCO Federal Consent Decree” in Item 8 under “Determinations and Justifications” replace North Branch Power Station with Mount Storm Power Station
Fact Sheet	Added discussion of the non-applicability of rules 45CSR2 and 45CSR10 to the combustion turbine.
Fact Sheet	Added discussion regarding typographical errors in the 45CSR2 and 45CSR10 Monitoring Plan.

Attachment A

Response to Comments

Response to EPA Comments
Re: Mount Storm Power Station Proposed Title V Permit R30-02300003-2011

Unit 1, 2 and 3 Boilers

Comment

1. The PM limit is based on a 6 hour minimum averaging time. I think this is stemming from the requirement that stack tests have 3 runs at 2 hours minimum/run. This is correct from a stack test standpoint, but is ambiguous from an emissions limit standpoint (Facility could be out of compliance at 6 hr avg. time, but could extend out to 24 hours and be in compliance based on the wording of the condition.) From the consent decree, it appears that CEMS have been installed (Is this correct?). Averaging time should be clearly defined and the rationale documented.

Response

The language has been revised to eliminate "a minimum of" language. It now states "The averaging time shall be six (6) hours." Yes, CEMS have been installed.

Auxiliary Boiler

Comment

1. See above comment, boiler is given a 6 hr. min avg time.

Response

See above response

Comment

2. Method 9 tests are only required during normal operation (longer than 24 hours), and are run monthly and bi-monthly for operational testing. If those tests are less than 24 hours, would the facility by default not have to do any monitoring to show compliance with opacity limit?

Response

In accordance with the approved Monitoring Plan submitted under 45CSR2 (Rule 2), that appears to be the case. The auxiliary boiler is used for building heat when two of the main units are offline. It is seldom and rarely used. When it is run during its monthly and bi-monthly testing periods, it is only run for about an hour.

Comment

3. Page 13 of the monitoring appendix, 45CSR2, §4.1.b. - insert correct citation. regs are for type b fuel burning units, but monitoring plan cites type 'a' and lists "twelve hundred (600) pounds per hour", also a typo

Response

The Auxiliary boiler is a type “b” fuel burning unit. The rule citation is correct. The only typo appears to be the reference for Type “a” fuel burning units which should be Type “b” fuel burning units.

Turbine

***Note** Although the facility included the combustion turbine in the 45CSR2 & 10 Monitoring Plan, the turbine does not meet the definition of a “Fuel Burning Unit” in either of these rules. Therefore neither rule applies to the turbine. The following has been added to the Fact Sheet:

Combustion Turbine Emergency Generator

- **45CSR2 & 45CSR10** – The combustion turbine does not produce heat or power by indirect heat transfer and therefore is not defined as a “Fuel Burning Unit.” Therefore these rules do not apply to the turbine.

Comment

1. Turbine as well as aux boiler are listed as backup, aux boiler has fuel usage limits but not turbine. Why the discrepancy? Were any emissions estimates/applicability determinations based on an hours of operation/fuel usage limit?

Response

The Auxiliary boiler has fuel usage limits which are applicable through a 45CSR13 (Rule 13) permit. The turbine does not have a Rule 13 permit and hence, no fuel usage requirements. No, the emissions limitations for the auxiliary boiler were not based on hours of operation or fuel usage limit. They are based on the 45CSR2 (Rule 2) and 45CSR10 (Rule 10) standards.

Comment

2. See #3 of auxiliary boiler.

Response

Although the facility included the turbine in the Rule 2 & 10 Monitoring Plan the combustion turbine is not an “indirect heat exchanger” and therefore is not subject to Rule 2 or 10.

Comment

3. 45CSR2 and 45CSR10 define distillate oil as "fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-98, 'Standard Specification for Fuel Oils.'"

Turbine is exempt to certain requirements under these parts, based the distillate oil exemptions. Does jet fuel meet these ASTM requirements? It appears jet fuel has different specs (ASTM D1655-10), what's the rationale for still allowing the exemption under this provision? If it is not exempt, please include the necessary requirements.

Response

Rule 2 & 10 are not applicable to the turbine and therefore it is exempt from these rule requirements.

Comment

4. From the monitoring plan, turbine has applicable requirements (PM limits, opacity limits, sulfur content requirements), they are not included in monitoring plan, but not the title V permit. They should be included in the appropriate section of the title V permit.

Response

Rule 2 & 10 are not applicable to the turbine.

Comment

5. I had previously asked about the turbine MMBTU/hr changing from 215 to 230 MMbtu/hr. Since the PM limits are based on mmbtu, increasing the capacity (even on paper) is increasing pm PTE, and could trigger major NSR. In order to avoid this, avoid confusion down the road, and to make the capacity consistent with the monitoring requirements, the capacity needs to be changed back to 215.3 MMbtu/hr.

Response

The design capacity has been changed back to 215.3 MMbtu/hr.

Fuel Handling Equipment and Limestone Handling Equipment

Comment

1. Remove "normal" operation references, since "normal" isn't defined, this isn't considered practically enforceable.

Response

In reference to facility operation in conditions 5.3.1. and 6.3.2., "normal" has been removed.

Comment

2. Permit currently calls for method 22 once/month, and then a follow-up method 9 with varying frequencies (depending on if it is the fuel handling equipment or limestone handling equipment) if method 22 detects certain opacity. This essentially allows the facility in some cases months to correct a VE problem. Bobbie Scroogie came up with the following wording in another permit, and I think this works:

"If visible emissions from any of the affected facilities are observed during these monthly observations, or at any other time, that appear to exceed the allowable visible emission requirement for the affected facility, visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall be conducted immediately. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded."

Response

Conditions 5.3.1. and 6.3.2. have been revised to include this language

Regarding Response to VEPCO Draft comments

Comment

1) Old condition 4.1.29 - VEPCO commented to remove the word "each", is this supposed to have the same intention as 4.1.6 and 4.1.7, if so, I would suggest using the wording from those templates as a boiler plate for the new condition.

Response

The language in this condition has been revised to read: "The emission rate from Unit 1 and Unit 2, as emitted from Emission Point MS1/2e, and from Unit 3 as emitted from Emission Point MS3e shall meet a PM emission limit of 0.030 lb/mmBtu."

Comment

2) 4.3.1 - changed "5 years" to "permit term", and remove the language requiring a stack test within 18 months of issuance. These two changes make it possible to have a time span of 10 years in between stack tests. Since the stack test is used to get an EF to demonstrate compliance, I recommend wording allowing for 5 years +/- 12 months to avoid a potentially long gap in between tests, but if you have another approach I am open to suggestions

Response

The condition has been change to "...once every five (5) years +/- 12 months..."

WVDAQ's Response to Dominion Resources Services, Inc.'s Comments
RE: Mount Storm Draft Title V Permit Draft Title V Permit R30-02300003-2011

Condition Number (Page Number)	Comment Type	Comment Area	Comment	Response
1.1 (4)	Editorial	General	Change date for MTST-00-CS-CNV-Q to 1972	This has been corrected.
4.1.9 (31)	Clarification	Limitations & Standards	Suggest that the word "applicable" be added to this condition between "any" and "State rule" to make this provision more concise.	The language in this permit condition is that of the Rule 13 permit with the exception of "of R13-2735 (i.e., Units 1, 2, and 3 ESPs and FGDs)." Furthermore the equipment would have to comply with a more stringent limit only if the limit was applicable to the equipment in the first place. Therefore the term "applicable" is somewhat redundant and will not be added to this condition.
4.1.24 (33)	Addition	VEPCO Consent Decree	Methodology is not specified on how to calculate 30-day rolling averages. Propose that paragraph 68 of the consent decree, with the exception of the language that references Chesterfield Power Station, be added to the Title V. Propose this language be added as a new condition 4.1.27 and all conditions added after this point be renumber.	Paragraph 68 of the consent decree has been added as condition 4.1.27. as proposed in this comment. The subsequent conditions have been renumbered.
4.1.26 (34)	Addition	VEPCO Consent Decree	Since there are provisions in the consent decree that allow for the bypassing of the scrubber until the end of 2012, we propose that all of paragraph 69 be included as part of this condition.	All of Paragraph 69 of the consent decree has been included as proposed in this comment.
4.1.28 (34)	Addition	VEPCO Consent Decree	In order to clarify what the optimization studies require, we suggest adding the following language to end of this condition "pursuant to Paragraphs 78 & 79 of the consent decree."	The language "pursuant to Paragraphs 78 & 79 of the consent decree" has been added as suggested. This condition is has been renumbered as 4.1.29.

Condition Number (Page Number)	Comment Type	Comment Area	Comment	Response
4.1.29 (35)	Clarification	Limitations & Standards	Remove the word "each" from this condition. Using the word "each" in this sentence is not consistent with the decree language in paragraph 80. Moreover, Units 1 and 2 vent through a common stack which is where all measurements would be taken during a stack test.	The word “each” has been removed. Also, based on comments from USEPA the language has been revised to identify the emission points MS1/2e for Units 1 and 2 and MS3e for Unit 3. This condition is has been renumbered as 4.1.30.
				The existing Condition 4.1.30. has been renumbered as 4.1.31.
4.3.1 (36)	Clarification	Testing	Long outages can make It difficult to schedule testing, therefore, to allow for flexibility in testing frequency we propose that the testing frequency be changed from five years to 20 QA operating quarters. If this change is not accepted we are asking that years be replaced with calendar years.	The original intent of this condition was to conduct CO testing at least once during the permit term. Based on comments from USEPA the language has been revised to read “...once every five (5) years +/- 12 months...”
4.3.1 (36)	Clarification	Testing	Remove "A compliance test shall be conducted no later than eighteen (18) months of the Issuance date of this permit" from this condition. This language pertains to the initial Issuance of the Title V permit and is no longer applicable.	The intent was to continue on the existing five (5) year cycle. Therefore this language has been removed.

Condition Number (Page Number)	Comment Type	Comment Area	Comment	Response
4.3.2 (36)	Addition	Testing	To provide clarification on the allowable PM testing methods allowed under the consent decree we propose to add the following language to the end of this condition, "The reference methods for determining PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5 or Method 17, using annual stack tests. VEPCO shall calculate PM Emission rates from the annual stack tests in accordance with 40 C.F.R. 60.8(f) and 40 C.F.R. 60.48a(b). The annual stack-testing requirement of this Paragraph shall be conducted as described in Paragraph 95 of the Decree and may be satisfied by: (A) any annual stack tests VEPCO may conduct pursuant to Its permits or applicable regulations from the States of West Virginia If such tests employ reference test methods allowed under this Decree, or (B) Installation and operation of PM CEMs required under the Decree."	This language is contained in Paragraph 81 of the Consent Decree. It has been added to this condition. Paragraph 81 has been added to the citation of authority
4.3.3 (36)	Streamlining	Testing	The table in conditions 4.3.3 and 4.3.4 are identical; therefore we are suggesting that conditions 4.3.3 and 4.3.4 be combined. See the redline stakeout version of the permit for details on this suggested change.	These conditions have been combined.
4.3.3 (36)	Clarification	Testing	Long outages can make it difficult to schedule testing; therefore, to allow for flexibility in testing frequency we propose that the testing frequency be changed from years to QA operating quarters. If this change is not accepted we are asking that years be replaced with calendar years	The language was taken from Permit R13-2735 and from Interpretive Rule 45 CSR2A and therefore will not be changed. The interpretive rule does not use this specific language but uses the terms "Cycle 1", "Cycle 2" and "Cycle 3" as related to the testing frequency. It also defines each cycle. The "Cycles" are not defined as calendar years or QA operating quarters.

Condition Number (Page Number)	Comment Type	Comment Area	Comment	Response
4.4.5 (39)	Editorial	Recordkeeping	On the first sentence of this condition there is a typographical error. Change " Permit R13-2753" to "Permit R13-2735."	This has been corrected.
4.5.5 (40)	Remove	Reporting	Per paragraph 105 of the decree this condition Is not required to be included into the Title V, therefore we are asking that it be removed from the permit.	Since paragraph 105 of the Consent decree does not require this condition to be included in the Title V permit it has been deleted.
4.5.6 (40)	Remove	Reporting	Per paragraph 105 of the decree this condition Is not required to be included into the Title V, therefore we are asking that it be removed from the permit.	Since paragraph 105 of the Consent decree does not require this condition to be included in the Title V permit it has been deleted.
4.5.7 (40)	Editorial	Reporting	Remove the following language from this condition "and on or before March 15 for the reporting period January 1 to June 30 and" from this condition. This reporting period is a duplicate.	This condition has been corrected and the suggested language removed.
Fact Sheet (2)	Editorial	Title V Program Applicability Basis	Numbers in this section need to match the emission summary table.	These numbers have been corrected.
Fact Sheet (6)	Editorial	Determinations and Justifications	In item 8 Change North Branch to Mount Storm	North Branch has been changed to Mount Storm.