

Fact Sheet



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

Permit Number: **R30-06100134-2013**
Application Received: **April 30, 2012**
Plant Identification Number: **061-00134**
Permittee: **Longview Power, LLC**
Facility Name: **Longview Power Plant**
Mailing Address: **966 Crafts Run Road, Madsville, WV 26541**

Revised: NA

Physical Location: Madsville, Monongalia County, West Virginia
UTM Coordinates: 589.2 km Easting • 4395.7 km Northing • Zone 17
Directions: From Morgantown, take WV Route 19 West to Route 100 North to Route 53 (Fort Martin Road). Proceed 5.4 miles. Turn left into Gate 2. Proceed to security.

Facility Description

Longview is an electric generating unit with a 6,114 MMBtu/hr pulverized coal fired boiler steam turbine generator and a natural gas fired auxiliary boiler, with associated equipment including coal, limestone, and ash handling, a cooling tower, an emergency generator, and a fire pump.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2011 Actual Emissions
Carbon Monoxide (CO)	2953	679
Nitrogen Oxides (NO _x)	1791	340
Particulate Matter (PM _{2.5})	258	11
Particulate Matter (PM ₁₀)	521	22
Total Particulate Matter (TSP)	537	22
Sulfur Dioxide (SO ₂)	2420	364
Volatile Organic Compounds (VOC)	99	16

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2011 Actual Emissions
Total Miscellaneous HAPs	15.88	2.87

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

Title V Program Applicability Basis

This facility has the potential to emit 2,953 tons per year of CO, 2,420 tons per year of SO₂, 1,791 tons per year of NO_x, and 521 tons per year of PM₁₀. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Longview Power 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 |
| 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
45CSR20	Good Engineering Practice As Applicable To Stack Heights
45CSR30	Requirements For Operating Permits
45CSR33	Acid Rain Provisions And Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
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 Da	Standards of Performance for Electric Utility Steam Generating Units
40 C.F.R. 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
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. Part 61, Subpart M	National Emission Standard For Asbestos
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 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
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

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 (if any)
R14-0024E	July 20, 2012	
R33-56671-2013-1	December 31, 2008	Effective January 1, 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

1. 45CSR2 - To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.

- The Opacity limit for each stack is 10% based on a six minute block average.
 - The Longview Plant main stack (EA-1) will primarily use a PM Continuous Emissions Monitor (CEM) which is installed and operated in accordance with Performance Specification (PS) 11 in Appendix B of 40CFR60 as required by Permit R14-0024E. If any 24-hour block average PM rate based on PM CEM data indicates an excursion of the hourly PM limit or data systems other than PM CEM data are used to satisfy the 75 percent of total operating hours per 30 day rolling average of the hourly PM limit, then visible emission observations in accordance with Method 9 of appendix A-4 of 40CFR Part 60 shall be conducted.
- 45CSR§2-8.2.a.2. requires fuel burning units to submit a monitoring plan for compliance with the visible emissions standards of 45CSR§2-3 within six (6) months of the effective date (August 31, 2000) of the rule. The intent was that the existing fuel burning units, at the time of the effective date of the rule, submit such monitoring plans if required and that any new fuel burning units would have the monitoring incorporated into an NSR construction permit. There are no deadlines or provisions in this rule for the submittal of a monitoring plan for newly constructed fuel burning units. Longview falls in this latter scenario in which the monitoring is incorporated in permit R14-0024. Therefore, Longview was not required to submit a Rule 2 monitoring plan.
- The auxiliary boiler is infrequently used and is fired on natural gas only. Therefore pursuant to 45CSR§2-8.4.b. and 45CSR§2A-3.1.a., the auxiliary boiler is exempt from the Rule 2 opacity monitoring and testing requirements.
- The rated design heat input (DHI) for the fuel burning unit (SB-1) at the Longview Plant is 6114 mmBtu/hr. The rated design heat input (DHI) for the "auxiliary boiler" at the Longview Plant is 225 mmBtu/hr. Using the calculation procedure (.05 x TDHI) outlined in Section 4.1.a. of 45CSR2 for the main boiler, the allowable PM emission limit is established as (.05 x 6114) which equals 305.7 lb/hr through stack "EA-1". The PM limit established in 40 CFR 60 Subpart Da and Permit R14-0024E is more stringent (i.e., 0.015 lb/MMBtu) and therefore compliance with the streamlined Subpart Da/R14-0024E permit limit will ensure compliance with the Rule 2 limit. Using the calculation procedure (.09 x TDHI) outlined in Section 4.1.b. of 45CSR2 for the auxiliary boiler, the allowable PM emission limit is established as (.09 x 225) which equals 20.25 lb/hr through stack "EX-1". The PM limit established in Permit R14-0024E is more stringent (i.e.,

1.26 lb/hr) and therefore compliance with the streamlined Permit R14-0024E limit will ensure compliance with the Rule 2 limit.

- 45CSR2A requires periodic PM testing in which the frequency of testing can be every one, two or three years based upon the results of the previous test. The once every three years testing frequency would apply if the previous test results were less than or equal to 50% of the Rule 2 weight rate standard. Since Longview's R14-0024E Permit limit is less than 50% of the Rule 2 Standard, the testing frequency would be once every three years. Also, the potential PM emissions are equal to the potential PM₁₀ emissions and testing is required once every 12-months for PM₁₀. (See condition 5.3.4.) Furthermore, a PM CEM which establishes compliance is required to be operated on a continual basis. Therefore, the Testing frequency of Rule 2A is not included in the permit.
- The auxiliary boiler is infrequently used and is fueled by natural gas and therefore exempt from the Rule 2 testing requirements pursuant to 45CSR§2A-3.1.a.

2. 45CSR10 - To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.

- Under this rule, Longview's main boiler *SB-1* is defined as a "Type a" fuel burning unit (FBU). This rule however, is tailored to existing "Type a" FBUs and does not have provisions for any other "Type a" FBUs. Therefore Longview's main boiler is not subject to Rule 10.
- Longview's auxiliary boiler *SX-1* is defined as a "Type b" FBU. The allowable SO₂ emission limit for the auxiliary boiler discharging through "EX-1" is established in 45CSR§10-3.3.f. as the product of 3.2 and the total design heat input. The rated design heat input (DHI) for the auxiliary boiler is 225 mmBtu/hr. Using the calculation procedure (3.2 x TDHI) as outlined in Section 3.3.f. of 45CSR10, the allowable SO₂ emission limit for the auxiliary boiler discharging through stack "EX-1" is established as (3.2 x 225) which equals 720 lb/hr. The SO₂ limit established in Permit R14-0024E is more stringent (i.e., 0.133 lb/hr) and therefore compliance with the streamlined Permit R14-0024E limit will ensure compliance with the Rule 10 limit.
- Longview's auxiliary boiler is infrequently used and combusts only natural gas. Because it combusts natural gas, under 45CSR§10-10.3., it is exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements of 45CSR§10-8.

3. 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

- The Longview Plant is subject to Rule 13 for all regulated air pollutants that are not covered specifically by Rule 14 including the 45CSR13 public notice procedures and some HAPs. Any such requirements have been incorporated into Permit R14-0024E as appropriate.

4. 45CSR14 - Permits For Construction And Major Modification Of Major Stationary Sources Of Air Pollution For The Prevention Of Significant Deterioration

- Permit R14-0024E a Prevention of Significant Deterioration (PSD) permit which contains applicable requirements and incorporates Best Available Control Technology (BACT). The permit covers the entire facility including the PC Boiler (main boiler) and cooling tower, the auxiliary boiler, the coal handling system, the limestone handling system, the ash handling system, the emergency generator and the emergency fire pump. Included in the permit are 40 CFR Part 60 applicable requirements from Subparts Da, Db, Y and OOO, 40 CFR Part 63 requirements from Subpart UUUUU as well as requirements from State Rules 45CSR2 and 45CSR10.

- The initial testing requirements in R14-0024E have been fulfilled. Therefore, the language in sections 4.3.1., 5.3.1., 5.3.4., 5.3.5 and 5.3.6. has been modified as required for ongoing testing. Sections 5.2.2., 5.3.2., 6.3.1., 6.3.2. and 7.3.1. have not been included in the Title V permit since the testing has been fulfilled.

Section 3 – Facility Wide Requirements

- Condition 3.1.12.f. – the reference in condition 3.1.7.f. to “Paragraphs A.20.a through A.20.e herein” is a typographical error which was carried over from an earlier version of R14-0024 prior to the permit format change. It should have read “Paragraph 3.1.7.a through 3.1.7.e herein.” Since the corresponding Title V permit condition is 3.1.12.f. it reads “Paragraph 3.1.12.a through 3.1.12.e herein” in the Title V permit.
- Condition 3.1.14.b. – For clarity as a result of EPA comments to the Draft/Proposed permit, “[i.e., spray system and/or water truck]” has been added after the word “same” in the first sentence of this condition.
- Condition 3.2.1. – As a result of EPA comments to the Draft/Proposed permit, “Method 22-like” has been added to the first sentence of the second paragraph. The phrase “for three (3) consecutive monthly checks” and the sentence “A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.” have been removed.

Section 4 - Coal Handling Equipment

- This section contains limits for throughputs, opacity, and PM emissions. The coal handling equipment is subject to 40 CFR 60 Subpart Y.
 - With the exception of the stacking belt conveyor and the storage pile, all equipment is fully enclosed. Compliance is demonstrated through periodic visible emission checks, monitoring and record keeping of coal delivered to the facility and if required, testing and the operation and maintenance of control equipment.
- Conditions 4.1.1.f.1 and 2 – As a result of EPA comments to the Draft/Proposed permit and EPA’s recommendation, these conditions have been listed as “State-Enforceable only.”
 - Compliance will be demonstrated with 4.1.1.f.1. and 2. through the operation and maintenance of air pollution control equipment requirements of condition 4.1.2. and the record keeping of the maintenance and malfunction of air pollution control equipment requirements of conditions 4.4.2. and 4.4.3.
- Condition 4.5.1. - language was revised in order to delete the website reference.

Section 5 - PC Boiler and Cooling Tower

- This section contains requirements and limits for heat input, opacity, PM, PM₁₀, SO₂, NO_x, CO, VOC, H₂SO₄, Hg, HCL and HF. The PC Boiler is subject to 40 CFR 60 Subpart Da and 40 CFR 63 Subpart UUUUU. The compliance date for Subpart UUUUU is April 16, 2015. However, this date does not apply to the requirements in conditions 5.1.9., 5.1.10. and 5.1.11. since they are requirements of permit R14-0024E.

- Compliance is demonstrated with the use of a continuous emissions monitoring system (CEMS), to measure and record the emissions of PM, SO₂, NO_x, CO, Hg and other parameters from the PC Boiler stack, periodic testing, and coal sampling and analysis.
- In Section 5 of R14-0024E a typographical error occurs in which the PC boiler stack is identified as emission point “EB1” instead of “EA1.” Also the Title V application shows the PC boiler stack as emission point “EA-1.” Therefore in the Title V permit “EB1” has been replaced with “EA-1.”
- Conditions 5.1.2. and 5.1.3. – As a result of EPA comments to the Draft/Proposed permit the units for the NSPS Subpart Da NO_x and SO₂ limits in these tables have been changed from “Pound/MWh” to “Pound/MWh gross energy output” for clarity.
- Condition 5.1.7. - This condition requires that the permittee establish through testing, the relationship between CO emissions and VOC emissions. Longview has found that the test data collected to date (2011 and 2012 testing) do not demonstrate a direct, technically valid correlation between CO and VOC emissions that would be appropriate for use as a compliance indicator as specified by the permit. Nevertheless, all 2011 and 2012 stack test results demonstrate that Longview consistently meets VOC emission limits. Continued sound operation and maintenance of Longview’s PC Boiler can be considered a valid parametric demonstration of continued compliance with the VOC limit. While the CO CEMS does not provide a direct surrogate measure for VOC emissions, the CO CEMS can be used to demonstrate ongoing operation of the PC Boiler, which in turn has been demonstrated in 2011 and 2012 to produce compliant VOC emissions.
- Condition 5.1.8. - This condition requires that the permittee establish through testing, the relationship between SO₂ emissions and H₂SO₄ emissions. Longview has found that the test data collected to date (2011 and 2012 testing) do not demonstrate a direct, technically valid correlation between SO₂ and H₂SO₄ emissions that would be appropriate for use as a compliance indicator as specified by the permit. Nevertheless, all 2011 and 2012 stack test results demonstrate that Longview consistently meets H₂SO₄ emission limits. Continued sound operation and maintenance of Longview’s Air Quality Control System (AQCS) can be considered a valid parametric demonstration of continued compliance with the H₂SO₄ limit. While the SO₂ CEMS does not provide a direct surrogate measure for H₂SO₄ emissions, the SO₂ CEMS can be used to demonstrate ongoing operation of the AQCS, which in turn has been demonstrated in 2011 and 2012 to produce compliant H₂SO₄ emissions.
- Condition 5.1.14. – This condition has been fulfilled during construction and therefore not included in the Title V permit.
- Condition 5.2.1. – the PC Boiler is not subject to the Rule 2 monitoring plan therefore, the “45CSR§2-8.2.a,” and “45CSR§2A-6.3.” citations of authority in the R14 permit were not carried over to the Title V permit.
- Condition 5.2.1.a. – §60.48Da(p)(2) has been added to the citation of authority
- Condition 5.2.1.c. – As a result of EPA comments to the Draft/Proposed permit, language from §60.49Da(c)(2) has been added to this condition.
- Condition 5.2.2. – This condition has been revised to delete “[Reserved]” and add the requirements of §§60.49Da(e), (f), and (h).

- Condition 5.2.6. – the reference to condition 5.1.16. in the R14 permit should have been 5.1.15. Therefore it has been corrected in the Title V permit. Also as a result of EPA comments “(i.e., mass balance using measured drift rate, total dissolved solids and circulating water flow)” has been added to this condition for clarification on the method used for determination of PM and PM₁₀ emission.
- Condition 5.2.7. – the reference to condition 5.1.14 in the R14 permit should have been 5.1.13. Therefore it has been corrected in the Title V permit. Also the requirements of 40 CFR §§60.48Da(p)(5), (6), (7) and (8) have been added to this condition.
- Condition 5.2.8. – the requirements of 40 CFR §60.48Da(p)(4) have been added to this condition.
- Condition 5.2.10. – As a result of EPA comments to the Draft/Proposed permit and the addition of SO₂ CEMS for CAM, this condition has been revised to include language for the SO₂ CEMS.
- Conditions 5.3.3., and 5.3.4. – the citation of authority for these two conditions both refer to R14-0024 §5.3.3. A typographical error is contained in the R14 permit in which 5.3.3. was used twice in the permit requirements.
- Condition 5.4.4. – a typographical error was corrected by adding the word “day” at the end of the first sentence.
- Condition 5.5.1. - language was revised in order to delete the website reference.
- Condition 5.5.2. – a typographical error was corrected by removing the word “of” near the beginning of the first sentence.
- Condition 5.5.3. – Although §60.51Da(b)(4) refers to a 75 percent data requirement, condition 5.5.3.c. has been revised to 90 Percent. Condition 5.5.3.k. has been added to include the requirements of 40 CFR §60.51Da(h). Since the PC Boiler is exempt from the opacity standard of Subpart Da (see item 5 below), §60.51Da(h)(4)(i) is not applicable. The citation of authority has been revised to include 40 CFR §§60.51(b), (c), and (h)

Section 6 - Auxiliary Boiler

- This section contains requirements and limits for hourly heat input, hours of operation, amount of natural gas consumed, opacity, PM, PM₁₀, SO₂, NO_x, CO, VOC and the sulfur content of the natural gas consumed. The auxiliary boiler is subject to 40 CFR 60 Subpart Db.
 - Since the auxiliary boiler uses natural gas with a sulfur content not greater than 0.15 grains per 100 cubic feet as its fuel and the operation of the boiler is limited to 876 hours per year with a maximum of 197.1 million cubic feet of natural gas consumed on an annual basis, compliance will be demonstrated through record keeping on a daily basis of the amount of fuel consumed, the hours of operation and the hourly steam load. The emissions of NO_x, and CO, using site specific emission factors and the calculated hourly heat input from the monitored data, can be calculated based upon the averaging period specified in the permit. The emissions of PM, PM₁₀, SO₂, VOC using AP 42 factors and the calculated hourly heat input from the monitored data, can be calculated based upon the averaging period specified in the permit.

- As described in Item 1 above, the auxiliary boiler is infrequently used and is fired on natural gas only. Therefore, 45CSR2 exempts the auxiliary boiler from the monitoring requirements for opacity.
- In Section 6 of R14-0024E the auxiliary boiler is identified as “SX1” and the stack is identified as emission point “EX1.” The Title V application shows the auxiliary boiler as “SX-1” and the stack as emission point “EX-1.” Therefore in the Title V permit “SX1” and “EX1” have been replaced with “SX-1” and “EX-1” respectively.
- Condition 6.1.1. – As a result of EPA comments to the Draft/Proposed permit, 6.1.1.e. was added which states: “The limits of 6.1.1.b. and c., shall be based on a 12-month rolling total.”
- Condition 6.2.1. – “(including the time of start-up and shutdown)” was added to satisfy the requirements in “45CSR§2A-7.1.a.1.
- Condition 6.4.5. was added to the Title V permit which contains the record keeping requirements of 40 CFR §60.49b(r)(1).

Section 7 – Limestone and Ash Handling Systems

- This section contains limits for throughputs, opacity, PM, PM₁₀, emissions and storage pile capacities. The limestone handling equipment is subject to 40 CFR 60 Subpart OOO.
 - With the exception of the limestone truck hopper and the limestone storage pile, all the limestone equipment is fully enclosed. Compliance is demonstrated through periodic visible emission checks and the operation and maintenance of control equipment.
- Condition 7.1.1. – R14-0024E refers to Table 3 for the “Limestone Handling Transfer Limits” which is contained in 7.1.1.b. The table was titled “Table 3 - “Limestone Handling Transfer Limits” in a previous version of the permit and is not titled in this latest version. Therefore the table has been titled “Table 7.1.1. - “Limestone Handling Transfer Limits” in the Title V permit and the references to “Table 3” have been changed to “Table 7.1.1.” Also in this permit condition, there were two sub-paragraphs labeled “d.” Therefore the second “d” was changed to “e” and the subsequent conditions changed to “f” and “g.” This correction is also reflected in condition 7.2.1. in the Title V permit.
- Conditions 7.1.1.c. and d. – [SL-5] has been added after “L-5” since ‘SL-5’ is the Title V permit ID.
- Conditions 7.1.1.g.1. and 2. – As a result of EPA comments to the Draft/Proposed permit and EPA’s recommendation, these conditions have been listed as “State-Enforceable only.”
 - Compliance will be demonstrated with 7.1.1.g.1. and 2. through the operation and maintenance of air pollution control equipment requirements of condition 7.1.4. and the record keeping of the maintenance and malfunction of air pollution control equipment requirements of conditions 7.4.2. and 7.4.3.
- Conditions 7.1.2.a. – As a result of EPA comments to the Draft/Proposed permit and EPA’s recommendation, these conditions have been listed as “State-Enforceable only.”
 - Compliance will be demonstrated with 7.1.2.a. through the operation and maintenance of air pollution control equipment requirements of condition 7.1.4. and the record keeping

of the maintenance and malfunction of air pollution control equipment requirements of conditions 7.4.2. and 7.4.3.

- Condition 7.2.1. – see condition 7.1.1. above.

Section 8 – Internal Combustion Engines

- This section contains limits for hours of operation; sulfur content and amount of the fuels used; and PM, PM₁₀, SO₂, NO_x, CO, NMHC + NO_x, and VOC emissions. The emergency generator and fire pump engines are subject to 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ.
 - To meet the requirements of Subpart ZZZZ, pursuant to 40 CFR §603.6590(c)(1), the engines must meet the requirements of Part 60 Subpart IIII. The engines are EPA certified compliant engines and therefore comply with Subpart IIII. Additionally, monthly records of hours of operation and a 12-month rolling total for each engine are kept.
- Conditions 8.1.1.c. and d. – As a result of EPA comments to the Draft/Proposed permit, “(i.e., 12-month rolling total)” has been added following “annual basis” in each of these conditions.
- Condition 8.1.1.e. – As a result of EPA comments to the Draft/Proposed permit and EPA’s recommendation, this condition has been listed as “State-Enforceable only.”
- Conditions 8.4.2. – As a result of EPA comments to the Draft/Proposed permit this condition has been added for the record keeping of the fuel consumed based on a 12-month rolling total for each engine.

Appendix A and Appendix B

- R14-0024 contains Appendix A which has a sample form for visible emissions observations. This form has not been included in the Title V permit.
- R14-0024 contains Appendix B which has Tables A and B listing the coal and limestone emission points subject to a visible emission standard. This Appendix has been included in the Title V permit as Appendix B.

5. 45CSR16 - Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60

- 40 C.F.R 60, Subpart Da - *Standards of Performance for Electric Utility Steam Generating Units*
 - The PC Boiler is capable of combusting more than 250 MMBtu/hr heat input of coal and commenced construction after September 18, 1978. Therefore it is subject to Subpart Da.
 - This subpart establishes emission limits for PM and opacity, NO_x, and SO₂. It also establishes compliance provisions for such emission limits. These requirements have been included in permit R14-0024E and in the Title V permit in Section 5.
 - CEMS are used to monitor and record the emissions of PM, SO₂, and NO_x.in accordance with 40 CFR Part 60 for PM and 40 CFR Part 75 for SO₂ and NO_x. Reporting requirements are contained in section 5.5. of the Title V permit.

- Since PM CEMS is installed and operated for measuring PM emissions in accordance with 40 CFR 60 Subpart Da, pursuant to 40 CFR §60.42Da(b)(1), the boiler is exempt from the opacity standard of Subpart Da.
 - The initial testing required by this subpart has been completed and therefore not included in the Title V permit.
 - The notification of 40 CFR §60.48Da(p)(1) and the initial performance evaluation of 40 CFR §60.48Da(p)(3) have been satisfied and therefore not included in the permit.
 - Longview's SO₂ emission requirement is based on gross energy output. Thus, the facility is not required to comply with the percent reduction. Therefore §60.51Da(b)(3) is not applicable.
- 40 C.F.R 60, Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*
- The auxiliary boiler is capable of combusting more than 100 MMBtu/hr heat input of natural gas and commenced construction after June 19, 1984. Therefore it is subject to Subpart Db.
 - This subpart establishes emission limits for PM and opacity, NO_x, and SO₂. It also establishes compliance provisions for such emission limits.
 - The auxiliary boiler is fired on gaseous fuel (i.e., natural gas) and therefore pursuant to 40 CFR §60.42b(k)(2) is exempt from the SO₂ emission limits. There are no PM standards for natural gas fired boilers. The auxiliary boiler would be subject to the NO_x emission limit except that it meets the limited use criteria described in §§60.44b(j)(1), (2), and (3). Therefore, pursuant to §60.44b(k) the auxiliary boiler is not subject to the NO_x emission limits.
 - The maximum heat input capacity demonstration required in §60.46b(g) has been completed and therefore not included in the Title V permit.
- 40 CFR 60 Subpart Y – *Standards of Performance for Coal Preparation Plants*
- The coal handling facility is subject to the requirements of Subpart Y which limits the opacity from any coal processing and conveying equipment and coal storage systems to 20%. The requirements of this subpart have been included in permit R14-0024E and in the Title V permit in Section 4.
 - The initial compliance testing was performed and completed by the facility in accordance with 40 CFR §60.8 and §60.257(a). Ongoing compliance will be demonstrated by periodic visible emission checks.
- 40 CFR 60, Subpart OOO - *Standards of Performance for Nonmetallic Mineral Processing Plants*
- The Limestone handling facility is subject to the requirements of Subpart OOO which establishes limits for particulate matter emissions and visible emissions from crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins or enclosed truck or railcar loading stations used in nonmetallic mineral processing plants. The requirements of this subpart have been included in permit R14-0024E and in the Title V permit in Section 7.

- The initial compliance testing was performed and completed by the facility in accordance with 40 CFR §60.8 and §60.675. Ongoing compliance will be demonstrated by periodic visible emission checks.
- 40 CFR 60, Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*
 - The emergency generator engine is a 1528 horsepower diesel engine with an engine displacement of 37.1 liters. The fire pump engine is a 240 horsepower diesel engine with a displacement of 6.8 liters. Both engines were manufactured after 2006 and are subject to the requirements of Subpart IIII which establishes emission limits for particulate matter, carbon monoxide and non-methane hydrocarbons plus nitrogen oxides as well as operation and maintenance requirements. These requirements are included in the Title V permit in Section 8.
 - The emergency generator and fire pump engines are EPA certified. The fire pump engine is also a National Fire Protection Association (NFPA) fire pump engine. Therefore they meet the requirements of 40 CFR §60.4211(c) and are in compliance with this subpart and are not subject to 40 CFR §60.4211(g) for compliance testing. They also meet the standards applicable to non-emergency engines and therefore are not required to install non-resettable hour meters pursuant to 40 CFR §60.4209(a).
 - Neither engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR §60.4202 and therefore 40 CFR §60.4209(b) is not applicable.
 - Pursuant to 40 CFR §60.4214(b) Initial notification is not required for emergency stationary internal combustion engines.

6. 45CSR33 – Acid Rain Provisions and Permits

- 40 CFR Parts 72, 73, 74, 75, 76, 77 & 78 - *Permits Regulation, Sulfur Dioxide Allowance System Permits Regulation, Sulfur Dioxide Opt-ins, Continuous Emissions Monitoring, Nitrogen Oxides Reduction Program, Excess Emissions, & Appeals Procedure for Acid Rain Program*
 - Longview's PC Boiler "SB-1" is a Phase II Acid Rain affected unit under 45CSR33 as defined by 40 CFR §72.6, and as such must meet the requirements of 40 CFR Parts 72, 73, 74, 75, 76, 77 and 78.
 - Condition 5.5.8. of the Title V permit has requirements for the Acid Rain Program.

7. 45CSR34 - Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR Part 63

- 40 CFR 63, Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*
 - The emergency generator and fire pump diesel engines are defined as new stationary RICE (commenced construction after June 12, 2006) and are subject to the area source (non-major source of HAPs) requirements of Subpart ZZZZ
 - Pursuant to 40 CFR §63.6590(c) since these engines are located at an area source of HAPs and are new stationary RICE, they must meet the requirements of Subpart ZZZZ

by meeting the requirements of 40 CFR 60 subpart IIII, for compression ignition engines. No further requirements apply for these engines under Subpart ZZZZ.

These engines meet the requirements in 40 CFR 60 Subpart IIII which are included in the Title V permit in Section 8. (See item 5 above)

- 40 CFR Part 63 Subpart UUUUU - *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units (EGU)*
 - The PC Boiler commenced construction prior to May 3, 2011 and is therefore defined as an existing electric utility steam generating unit (EGU). It is subject to the requirements of Subpart UUUUU which establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from coal- and oil-fired EGUs. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations. Pursuant to 40 CFR §63.9984(b) an existing EGU must comply with this subpart no later than April 16, 2015. Therefore, not all of the requirements have been included in the Title V permit. If required to conduct an initial compliance demonstration by performance testing as specified in §63.10011(a), the permittee must submit a Notification of Compliance Status (NOCS) report according to §63.9(h)(2)(ii). If required to submit an NOCS, a complete application for a modification to the Title V permit to incorporate the specific requirements of Subpart UUUUU must also be submitted. (See condition 5.1.19.)

Compliance with the mercury, non-mercury HAP metals, and hydrochloric acid requirements in Permit R14-0024E and included in the Title V permit (See conditions 5.1.9., 5.1.10., 5.1.11., and 5.2.1.e.) do not fall under the April 16, 2015 compliance date of Subpart UUUUU.

8. 40 CFR 64 - Compliance Assurance Monitoring (CAM)

- Longview's PC Boiler SB-1 is a pollutant specific emissions unit (PSEU) for PM₁₀ meeting the applicability requirements of 40 CFR §64.2 and therefore a CAM plan has been submitted with the Title V application.

The permit condition 5.1.5.requirement for PM₁₀ indicates that the PM₁₀ includes filterable and condensable fractions of PM. It also states that the PM₁₀ will be controlled with a fabric filter. There are no add-on controls specifically for the condensable fraction of PM₁₀. Therefore a conclusion can be made that only the filterable portion of PM₁₀ is subject to CAM. To satisfy CAM for the filterable fraction of PM₁₀, in lieu of parametric monitoring of the fabric filter (e.g., bag leak detectors), the CAM plan utilizes PM CEMS to monitor the fabric filter for proper operation.

The PC boiler is equipped with a flue-gas desulfurization (FGD) wet scrubber for the control of SO₂ emissions. Although the wet scrubber is not an add-on control device specifically for the condensable fraction of PM₁₀, some of the PM₁₀ condensable fraction may be removed. The amount removed may vary depending upon the operation of the scrubber. However, as a result of EPA comments to the Draft/Proposed permit and EPA's recommendation, a CAM plan for the FGD has been added. In lieu of parametric monitoring of the FGD the CAM plan utilizes SO₂ CEMs to monitor the FGD for proper operation.

Furthermore, to verify compliance with emission limits for PM₁₀, performance testing is required to be conducted once every twelve (12) months. To date, all stack testing has demonstrated compliance by a wide margin with the PM₁₀ limit. For example the total PM₁₀ emission determined from the results of the November 2012 testing was 14.35 lb/hr (87% compliance

margin) and from the results of the November 2011 testing was 31.18 lb/hr (72% compliance margin).

Therefore, the CAM plans for the fabric filter and FGD meet the requirements of 40 CFR Part 64. CAM requirements are contained in permit conditions 5.2.1.a. and b., 5.2.9. through 5.2.14. inclusive, 5.4.7., and 5.5.7.

Monitoring per the CAM Plan for the fabric filter will be as follows:

		PSEU PC Boiler SB-1 (Fabric Filter)
		Indicator No. 1
I.	Indicator	PM CEMS
	Monitoring Approach	A continuous emissions monitor system (CEMS) will be used to measure PM emitted from SB-1. The PM CEMS data will be used as a means to ensure the proper operation of the fabric filter. (5.2.1.)
II	Indicator Range	Measured emissions will be compared to the PM ₁₀ emissions limit of 110 lb/hr based on a 6-hr rolling average. (5.1.5.)
	A. QIP threshold	Not provided at this time.*
III	Performance Criteria	The PM CEMS shall be installed and operated in accordance with Performance Specification (PS) 11 in appendix B of 40CFR60. (5.2.1.)
	A. Data Representativeness	
	B. Verification of Operational Status	NA
	C. QA/QC Practices and Criteria	Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 in appendix F of 40CFR60. The permittee shall perform Relative Response Audits on an annual basis and a Response Correlation Audit once every three (3) years. (5.2.1.)
	D. Monitoring frequency	The PM CEMS monitors on a continuous basis. (5.2.1.)
	E. Data Collection Procedure	CEMS data is collected and recorded automatically. (5.2.1.)
	F. Averaging Period	6-hr rolling average. (5.1.5.)

Monitoring per the CAM Plan for the FGD will be as follows:

		PSEU PC Boiler SB-1 (FGD)
		Indicator No. 1
I.	Indicator	SO ₂ CEMS
	Monitoring Approach	A continuous emissions monitor system (CEMS) will be used to measure SO ₂ emitted from SB-1. The SO ₂ CEMS data will be used as a means to ensure the proper operation of the FGD. (5.2.1.)
II	Indicator Range	Measured emissions will be compared to the SO ₂ emissions limit of 1.4 Pound/MWh gross energy output based on 30-day rolling average**. (5.1.3.)
	A. QIP threshold	Not provided at this time.*

		PSEU PC Boiler SB-1 (FGD)
		Indicator No. 1
III	Performance Criteria	The SO ₂ CEMS shall be certified and operated in accordance with the requirements of 40 CFR 75 provided that the requirements of 40CFR§60.49Da(b)(4)(i – iii) are met. (5.2.1.)
	A. Data Representativeness	
	B. Verification of Operational Status	NA
	C. QA/QC Practices and Criteria	The SO ₂ CEMS shall be certified and operated in accordance with the requirements of 40 CFR 75 provided that the requirements of 40CFR§60.49Da(b)(4)(i – iii) are met. (5.2.1.)
	D. Monitoring frequency	The SO ₂ CEMS monitors on a continuous basis. (5.2.1.)
	E. Data Collection Procedure	CEMS data is collected and recorded automatically. (5.2.1.)
	F. Averaging Period	30-day rolling average**. (5.1.3.)

*A QIP threshold is not required to be part of the CAM plan.

** 30 successive operating days

- For Sulfur Dioxide (SO₂) there are two PSEUs. The PSEU from the NSPS (40 CFR 60 Subpart Da) is exempt from CAM pursuant to 40 CFR §64.2(b)(1)(i) because the PC Boiler is subject to the limits/standards of 40 CFR60 Subpart Da which was proposed after November 15, 1990. The PSEU from the PSD permit R14-0024 is exempt from CAM pursuant to 40 CFR §64.2(b)(1)(vi) because the unit is equipped with SO₂ CEMS, which is considered a continuous compliance determination method.
- Oxides of Nitrogen (NO_x), is exempt from CAM pursuant to 40 CFR §64.2(b)(1)(i) because the PC Boiler is subject to the limits/standards of 40 CFR60 Subpart Da which was proposed after November 15, 1990.
- The CAM rule is not applicable to Carbon Monoxide (CO) for the PC Boiler since there is no add-on control device utilized to meet its emission limitation.
- The CAM rule is not applicable for Volatile Organic Compounds (VOCs) for the PC Boiler since there is no add-on control device utilized to meet its emission limitation.
- The CAM rule is not applicable for Hazardous Air Pollutants (HAPs) for the PC Boiler since these pollutants do not trigger the pre-control major source threshold limits.
- There are no other potential PSEUs that meet the applicability criteria of 40 CFR §64.2(a) which would require CAM.

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 C.F.R. 60 Subpart Kb	The facility does not include storage vessels greater than or equal to 75 cubic meters that are used to store volatile organic liquids for which construction, reconstruction or modification commenced after July 23, 1984.
40 CFR 63 Subpart JJJJJ	The auxiliary boiler is a gas-fired boiler and therefore not subject to this subpart pursuant to §63.11195(e).
Greenhouse Gas (GHG) Permitting	The existing PSD permit was issued prior to the GHG tailoring rule. There have not been any modifications to the facility that would trigger a PSD permit. Therefore, there are no applicable GHG requirements

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: March 12, 2013
Ending Date: April 11, 2013

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)

1. Comments on the “Draft/Proposed” permit were received from Longview Power, LLC. Below is a discussion regarding the comments and the changes made to the permit:

The first comment regarded clarification or removal of condition 5.1.19. Therefore, the language in condition 5.1.19. has been revised for clarity in order to dispel the misunderstanding that a Title V permit revision was needed for the submittal of the Notice of Compliance Status (NOCS) report. The submittal for a Title V modification application is to incorporate any applicable requirements contained in the NOCS that are not already included in the Title V permit.

The second comment regarded the reporting requirements in conditions 5.5.5. and 5.5.6. No revisions were made to the permit resulting from this comment.

The third comment regarded redundancy in reporting requirements of condition 5.5.4. with condition 5.5.7.b.1. & 2. Since the latter requirements were primarily contained in condition 5.5.4. the language in 5.5.4. has been revised to fully incorporate the requirements of 5.5.7.b.1. & 2.

Note - With the addition of SO₂ CEMS as CAM in response to EPA comments, conditions 5.5.4. and 5.5.7.b. were not revised.

2. Comments on the “Draft/Proposed” permit were received from the USEPA.

Revisions were made to the permit and fact sheet as a result of the USEPA comments. Attachment A contains the comments and responses.

ATTACHMENT A

Response to EPA Comments on Longview Power Title V Permit
Permit No. R30-06100134-2013

Response to EPA Comments on Longview Power Title V Permit
Permit No. R30-06100134-2013

Comment:

Condition 3.1.12

This condition requires the facility to obtain and permanently retire sulfur dioxide (SO₂) allowances for the purpose of mitigating acid deposition and visibility impacts in nearby Class I Areas (Dolly Sods Wilderness Area, James River Face Wilderness Area, Otter Creek Wilderness Area, and Shenandoah National Park), and is listed as a “State-Enforceable only” condition in the title V permit. This condition came about after consultation with the Federal Land Manager (FLM), as required by 45CSR14-13, for the protection of Air Quality Related Values (AQRVs). The FLM commented on the initial prevention of significant deterioration permit that emissions from the facility would cause adverse impacts to nearby Class I areas. After ongoing discussions, these concerns were alleviated, in part, with the requirement in condition 3.1.12 for the facility to obtain and retire SO₂ allowances. Because the FLM’s concurrence that the construction of the facility would have no adverse impact was contingent upon the requirement to obtain these allowances, and because the requirement was designed for the protection of AQRVs, this condition should be Federally enforceable, and the “State-Enforceable only” language should be removed from 3.1.12.

Response:

As per EPA’s recommendation, “State-Enforceable only” has been removed.

Comment:

Condition 3.1.14.b

There appears to be a typo in the first sentence of this condition (“and shall utilize same to apply water”).

Response:

This is the identical language as written in Permit R14-0024E. The “same” refers to the fixed water spray system and/or a water truck. In order to clarify the requirement, “[i.e., spray system and/or water truck]” has been added after the word “same.”

Comment:

Condition 3.2.1

This condition requires the facility to conduct visible emissions checks for the coal handling equipment and limestone and ash handling equipment once per calendar month. If visible emissions are present for 3 consecutive months, a Method 9 reading must be done within 72 hours of the third visible emissions check. This form of monitoring does not assure compliance with the opacity limits for these units, and would potentially allow for over 3 months to pass before confirming that the source was out of compliance with the opacity limits and taking corrective action. EPA recommends requiring a Method 9 test if visible emissions are detected during *any* monthly visible emissions check. If the follow-up Method 9 test indicates a violation of the opacity limits, corrective action should be taken. Both the initial visible emissions check and/or follow-up Method 9 test should be consistent with the averaging period for the opacity limit. Also, please clarify in the permit what method must be used for the initial visible

emissions checks. It appears that Method 22 was intended to be used, however, this is not explicitly stated in condition 3.2.1.

Response:

The phrase “*for three (3) consecutive monthly checks*” and the sentence “*A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.*” have been removed. The first sentence in the second paragraph has been revised to read “*A Method 22-like visible emission check shall determine the presence or absence of visible emissions.*”

Comment:

Conditions 4.1.1.f.1 and 2

There is no associated monitoring associated with the lb/hr and TPY PM and PM₁₀ limits in these conditions. Please clarify how compliance with these limits is being determined, and add monitoring as necessary. Also, if the TPY limits have the effect of limiting the potential to emit of the units, they must be based on a 12-month rolling total in order to be practically enforceable. If they are for the purposes of establishing a state emissions inventory, and reflect the full PTE of the unit, EPA recommends that they be listed as “State-Enforceable only.”

Response:

As per EPA’s recommendation, these conditions have been listed as “State-Enforceable only.”

Language was added to the fact sheet for compliance explanation.

Comment:

Condition 4.2.1

See comment for condition 3.2.1.

Response:

See response for condition 3.2.1.

Comment:

Table 5.1.2 and 5.1.3

EPA recommends changing units for the NSPS subpart Da NO_x and SO₂ limits in these tables from “Pound/MWh” to “Pound/MWh gross energy output” for clarity.

Response:

Changed as recommended.

Comment:

Condition 5.2.1.c

This condition should mirror §60.49Da(c)(2), which requires more than just the NO_x CEMS needing to meet 40 CFR 70.

Response:

Language from §60.49Da(c)(2) has been added to this condition.

Comment:

Condition 5.2.6

This condition states that “[t]he permittee shall determine the PM, and PM₁₀ emissions from the cooling towers using a method that accurately predicts these specific pollutants from mechanical draft cooling towers.” The permit should specifically state what method or methods are acceptable.

Response:

This condition appears as it is written into the PSD permit with the unspecified method. The facility uses a mass balance calculation with site specific data. As recommended this condition has been revised to include “(i.e., mass balance using measured drift rate, total dissolved solids and circulating water flow)” after the word “method” in the third sentence. Also, “45CSR§30-5.1.c.” has been added to the citation of authority

Comment:

Condition 5.2.7

This condition outlines procedures in the event that PM CEMS data is not available for 75 percent of the total operating hours per 30-day rolling average. The permit does not include the requirements in 40 CFR 60.48Da(p), including the requirement that “[b]eginning on January 1, 2012, non-out-of-control CEMS hourly averages shall be obtained for 90 percent of all operating hours on a 30-boiler operating day rolling average basis.” Please add the requirements in 40 CFR 60.48Da(p), or provide a justification for why they are not applicable.

Response:

The notification of 40 CFR §60.48Da(p)(1) and the initial performance evaluation of 40 CFR §60.48Da(p)(3) have been satisfied.

Condition 5.2.1.a. contains the requirements of 40 CFR §60.49Da(v). 40 CFR §60.48Da(p)(2) requires the PM CEMs to be installed, evaluated operated and maintained according to §60.49Da(v). Therefore, 40 CFR §60.48Da(p)(2) has been added to the citation of authority in Condition 5.2.1.

40 CFR §60.48Da(p)(4) has been added to Condition 5.2.8.

40 CFR §§60.48Da(p)(5), (6), (7) and (8) have been added to Condition 5.2.7. and the “75 percent” has been changed to “90 percent.”

Comment:

Condition 5.2.9 to 5.2.14

The CAM section in the fact sheet states that “[a] continuous emissions monitor system (CEMS) will be used to measure PM emitted from the PC Boiler. The PM CEMS data will be used as a surrogate for PM₁₀ data, as PM₁₀ is a smaller size fraction of the PM data measured by the CEMS. If the 6-hour rolling average PM data complies with the emissions limit for PM₁₀, then compliance will be demonstrated.” Similar language is included in condition 5.2.10 of the title

V permit. The PM limit in NSPS subpart Da does not include condensable emissions of particulate matter, while the PM₁₀ limit accounts for filterable and condensable fractions of particulate matter (see condition 5.1.5). Because the PM limit does not account for condensable emissions, the PM CEMS data is not an appropriate surrogate for PM₁₀ data, and compliance with the PM limit would not be an appropriate indicator for demonstrating compliance with the PM₁₀ limit. As a result, the CAM plan needs to be revised. If more than one control device is being used to meet the PM₁₀ emissions limit for PC Boiler, such as the wet scrubber, it should also be included in the CAM plan.

Response:

The permit condition 5.1.5. requirement for PM₁₀ indicates that the PM₁₀ includes filterable and condensable fractions of PM. It also states that the PM₁₀ will be controlled with a fabric filter. There are no add-on controls specifically for the condensable fraction of PM₁₀. Therefore a conclusion can be made that only the filterable portion of PM₁₀ is subject to CAM.

The WVDAQ agrees that the PM limit does not account for condensable emissions and is therefore not an appropriate surrogate for both filterable and condensable fractions of PM₁₀. As a result of your comment however, and per your recommendation, the CAM plan has been revised. In lieu of parametric monitoring the revised CAM plan will utilize PM CEMS to monitor the fabric filter for proper operation.

The flue-gas desulfurization (FGD) wet scrubber was installed for the control of SO₂ emissions. Although the wet scrubber is not an add-on control device specifically for the condensable fraction of PM₁₀, some of the PM₁₀ condensable fraction may be removed. The amount removed may vary depending upon the operation of the scrubber. However, as per your recommendation, a CAM plan for the FGD has been added. In lieu of parametric monitoring of the FGD the CAM plan will utilize SO₂ CEMS to monitor the FGD for proper operation.

Furthermore, to verify compliance with emission limits for PM₁₀, performance testing is required to be conducted once every twelve (12) months. To date, all stack testing has demonstrated compliance by a wide margin with the PM₁₀ limit. For example the total PM₁₀ emissions determined from the results of the November 2012 testing was 14.35 lb/hr (87% compliance margin) and from the results of the November 2011 testing was 31.18 lb/hr (72% compliance margin).

Comment:

Condition 6.1.1

This condition appears to limit the use of the Auxiliary Boiler to avoid triggering certain NSPS subpart Db requirements. While the determination of the annual capacity factor is based on a calendar year, if the limits in 6.1.1 are also intended to have the effect of limiting the unit's potential to emit, they must be based on a 12-month rolling total in order to be practically enforceable.

Response:

Added 6.1.1.e. which states: "The limits of 6.1.1.b. and c. shall be based on a 12-month rolling total."

Comment:

Conditions 6.1.2 through 6.1.7

It is unclear how the monitoring provisions in 6.2.1 (which require records of the date, daily amount of fuel consumed, hours of operation, and hourly steam load) would assure compliance with lb/hr limits based on a three or six-hour block average and opacity requirements. Please clarify how compliance with these emissions limits is being demonstrated and the rationale behind the monitoring requirements and/or add monitoring provisions that assure compliance with the limits in 6.1.2 through 6.1.7.

Response:

Conditions 6.1.2 through 6.1.6. - The auxiliary boiler is a limited use boiler (limited to 876 hours of operation per year) fired with natural gas. The monitoring requirements of condition 6.2.1. provides information regarding the operation of the auxiliary boiler and the necessary data to calculate the emissions of NO_x, SO₂, PM, PM₁₀, CO and VOCs using the calculated hourly heat input and site specific emission factors for NO_x and CO and AP-42 factors for SO₂, PM, PM₁₀, and VOCs. The emissions can be calculated based upon the averaging period specified in the permit.

Conditions 6.1.7. - As described in Item 1 of the fact sheet under “Determinations and Justifications,” the auxiliary boiler is infrequently used and is fired on natural gas only. Therefore, 45CSR2 exempts the auxiliary boiler from the monitoring requirements for opacity.

Comment:

Conditions 7.1.1.g and 7.1.2.a

See comment for conditions 4.1.1.f.1 and 2.

Response:

As per EPA’s recommendation, these conditions have been listed as “State-Enforceable only.”

Language was added to the fact sheet for compliance explanation.

Comment:

Condition 7.2.1

See comment for condition 3.2.1.

Response:

See response for condition 3.2.1.

Comment:

Condition 8.1.1

There appears to be no monitoring or recordkeeping requirements for the amount of fuel consumed for the emergency engine and fire pump. Please clarify how compliance with these two requirements is being demonstrated. Also, it is unclear whether references to “annual basis” and tons per year are based on a 12-month rolling total or calendar year. If the TPY limits have the effect of limiting the potential to emit of the units, they must be based on a 12-month rolling total in order to be practically enforceable. If they are for the purposes of establishing a state emissions inventory, and reflect the full PTE of the unit, EPA recommends that they be listed as “State-Enforceable only.”

Response:

Condition 8.4.2. has been added for the record keeping of the fuel consumed based on a 12-month rolling total for each engine. Also “(i.e., 12-month rolling total)” has been added following “annual basis” in conditions 8.1.1.c. and d.

As per EPA’s recommendation, 8.1.1.e. has been listed as “State-Enforceable only.”

Comment:

Missing NSPS Subpart Da Requirements

The minimum CEMS data availability provisions 40 CFR 60.49Da(e) (which requires emissions data for 90% of all operating hours), (f), and (h), as well as 40 CFR 60.51Da(b) and (h) appear to be missing from the permit. Please include these provisions or provide a justification for why they are not applicable. Also, please note that the language in 5.5.3.c may need to be revised as a result because it also refers to 75 percent data requirement.

Response:

The requirements of §§60.49Da(e), (f), and (h) have been added as condition 5.2.2.

The requirements of §60.51Da(b) were already contained in condition 5.5.3.

The requirements of §60.51Da(h) have been added condition 5.5.3.k.

The citation of authority for condition 5.5.3. has been revised to include 40 CFR §§60.51Da(b), (c), and (h).

Subpart Da §60.51Da(b)(4) still refers to a 75 percent data requirement. However, condition 5.5.3.c. has been revised to 90 Percent.

Longview’s SO₂ emission requirement is based on gross energy output. Thus, the facility is not required to comply with the percent reduction. Therefore §60.51Da(b)(3) is not applicable.

Comment:

Fact Sheet

Page 12 of the Fact Sheet states that the PC Boiler is exempt from CAM for NO_x and SO₂ because the unit is subject NSPS subpart Da, which was proposed after November 15, 1990. While this is correct, the unit is also subject to SO₂ limits which come from the State SIP, and therefore the exemption under 40 CFR 64.2(b)(1)(i) does not apply. However, the unit is equipped with SO₂ CEMS, which is considered a continuous compliance determination method, and is therefore exempt from CAM under 40 CFR 64.2(b)(1)(vi). EPA recommends rewording the exemption from CAM for SO₂.

Response:

As per EPA’s recommendation, the language has been revised.

Comment:

Similarly, the Fact Sheet exempts the unit from CAM for VOCs because emissions from the PC Boiler are below major source threshold limits. However, the unit has the ability to operate 24 hours a day, 365 days a year, and has a VOC lb/hr limit of 24.5 lbs/hr. This results in potential emissions of 107.3 TPY, which is above major source thresholds. An exemption from CAM cannot be granted under the current wording of the Fact Sheet, however, an exemption from CAM for VOCs could be given if the emissions unit is not using a control device to achieve compliance with the VOC limits.

Response:

As per EPA's recommendation, the language has been revised.