



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Blue Ridge Regional Office

www.deq.virginia.gov

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Federal Operating Permit Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, 9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq. of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Dominion Generation
Facility Name:	Altavista Power Station (APS)
Facility Location:	104 Wood Lane Altavista, Virginia
Registration Number:	30859
Permit Number:	BRRO30859

This permit includes the following enforcement programs:

Federally Enforceable Requirements Clean Air Act (Sections I through XI and XIII)

Federally Enforceable Requirements Title IV Acid Rain (Section XII)

Federally Enforceable Requirements - Clean Air Interstate Rule (Section XIV)

Permit Effective Date: January 1, 2009
Significant Modification Date: January 15, 2013
Permit Expiration Date: December 31, 2013

Robert J. Weld
Regional Director

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I. Facility Information

Permittee

Dominion Generation
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Glen Allen, VA 23060

Responsible Official

David W. Faison
Dominion – Altavista Power Station Director

Acid Rain Designated Representative

Charles D. Holley
Vice President-F&H System Operations
USEPA AAR ID number 002099

CAIR Designated Representative

(same as AR Designated Representative)

Facility

Altavista Power Station
104 Wood Lane
Altavista, VA 24517

Contact Person

Cathy C. Taylor
Director, Electric Environmental Services
(804) 273-2929

County-Plant Identification Number: 51-031-00156

ORIS Code: 10773

NATS Facility Identification Number: 010773000001, 010773000002

Facility Description: 2012 NAISC / SIC Codes: 221117 / 4911 – The Altavista Power Station (APS) operates two 394 MMBtu/hr biomass-fired, spreader stoker boilers to generate electricity. The facility uses associated biomass, lime, ash, and fuel oil handling systems to support its operations, as well as two small diesel engine sources used to provide emergency capability. Natural gas or No. 2 fuel oil is used for startup. One 146.4 MMBTU/hr natural gas/No. 2 oil fired auxiliary boiler is located at APS to provide steam during main boiler startup if needed.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description*	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
001	001	Primary boiler (Stoker) - fueled with biomass, No.2 F.O., and/or nat'l gas to generate process steam and electricity [2012]	394 MMBtu/hr	Ammonia injection, Dry lime scrubber, Fabric filter	EC-1 (a,b,c)	NO _x ,SO ₂ , PM/PM10/PM2.5, trace metals	5/22/2012
002	001	Primary boiler (Stoker) - fueled with biomass, No.2 F.O. and/or nat'l gas to generate process steam and electricity [2012]	394 MMBtu/hr	Ammonia injection, Dry lime scrubber, Fabric filter	EC-2 (a,b,c)	NO _x ,SO ₂ , PM/PM10/PM2.5, trace metals	5/22/2012
003	003	Auxiliary boiler-fueled with nat'l gas or No.2 F.O. to generate process steam	146.4 MMBtu/hr	Low NOx burners/Flue gas recirculation	EC-3 (a, b)	NO _x	5/22/2012
005	005	Emergency Diesel Feedwater Pump [prior to 2006]	126 BHP	---	---	---	5/22/2012
006	006	Diesel Firewater Pump Engine [prior to 2006]	208 BHP	---	---	---	5/22/2012
Biomass, Ash and Lime Handling Equipment							
010	010 (a,b,c,d)	storage silos (4)	180 tons (ea.)	Bin vent filter	EC-10	PM/PM10/PM2.5	5/22/2012
011	011	Boiler ash conveyor blower system A	27.8 tons	Fabric filter	EC-11	PM/PM10/PM2.5	5/22/2012
012	012	Boiler ash conveyor blower system B	27.8 tons	Fabric filter	EC-12	PM/PM10/PM2.5	5/22/2012
013	013	Boiler ash conveyor blower system C	27.8 tons	Fabric filter	EC-13	PM/PM10/PM2.5	5/22/2012
014	014	Recycled boiler ash storage bin	26.5 tons	Bin vent filter	EC-14	PM/PM10/PM2.5	5/22/2012
015	015	Ash storage silo	530 tons	Bin vent filter	EC-15	PM/PM10/PM2.5	5/22/2012
016	Fugitive	Ash unloading feeder (DustMaster mixer)	80 tph	Ash conditioning system (water spraying)	EC-16	PM/PM10/PM2.5	5/22/2012
017	017	Pebble lime storage silo	135 tons	Bin vent filter	EC-17	PM/PM10/PM2.5	5/22/2012
020	020 (a,b)	Wood storage silo	100 tons	Bin vent filter, fabric filter	EC-20 a,b	PM/PM10/PM2.5	5/22/2012
021 (a,b)	021 (a,b)	Wood pulverizers, No. 1 and 2	3.5 tph	Fabric filter	EC-21 a,b	PM/PM10/PM2.5	5/22/2012
022	Fugitive	Wood emergency loading spout	20 tph	---	---	---	5/22/2012

Emission Unit ID	Stack ID	Emission Unit Description*	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
023	023	Wood conveying to emergency loading	20 tph	Bin vent filter	EC-23	PM/PM10/PM2.5	5/22/2012
024	024	No.2 Fuel Oil Storage Tank	100,000 gal	---	---	---	5/22/2012
025	Fugitive	Wood Chip Handling Equipment [2008]	500 tons per hour	---	---	---	5/22/2012
101	Fugitive	Biomass truck tipper (2) to receiving hoppers (2) [2012]	269 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
102	Fugitive	Biomass storage pile [2012]	3x10 ⁶ ft ³	---	---	---	5/22/2012
103	Fugitive	Biomass stacker [2012]	269 tons/hr	---	---	---	5/22/2012
104-1&2	Fugitive	Truck tipper reclaimers 1&2 to Conveyor A transfer point [2012]	269 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-3	Fugitive	Conveyor A to B transfer point [2012]	269 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-4	Fugitive	Conveyor C to Diverter Gate #2 transfer point [2012]	269 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-5	Fugitive	Conveyor D to Stacker/reclaimer transfer point [2012]	269 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-6	Fugitive	Reclaimer to Conveyor E Transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-7	Fugitive	Emergency reclaimer to Conveyor E transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-8	Fugitive	Diverter Gate #2 to Conveyor E transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-9	Fugitive	Conveyor E to Conveyor F transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-10	Fugitive	Conveyor F to Conveyor G transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
104-11	Fugitive	Conveyor G to fuel Bunker Drag Chain transfer point [2012]	90 tons/hr	Partial enclosure	---	PM/PM10/PM2.5	5/22/2012
105	Fugitive	Cooling Tower	---	---	---	---	5/22/2012

*Date of construction for all equipment is June 1990 unless otherwise noted. The size/rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Primary Boilers Requirements - (001 and 002)

A. Limitations-Primary Boilers

1. Particulate emissions from the primary boilers (001,002) shall be controlled by an in-line multiple cyclone, a lime-water injection spray dryer, and a fabric filter rated at 99.9 percent control efficiency. The control systems shall be provided with adequate access for inspection. The fabric filter may be bypassed during boiler start-ups to alleviate potential moisture damage to the fabric filter at low start-up temperatures. Each fabric filter shall be equipped with a device to continuously measure pressure drop.
(9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 3 and 56 of NSR Permits dated 5/22/2012)
2. Sulfur dioxide emissions from the primary boilers (001,002) shall be controlled by a lime-water injection spray dryer. The control system shall be provided with adequate access for inspection.
(9 VAC 5-80-490, 40 CFR 60.42b, and Conditions 7 and 60 of NSR Permits dated 5/22/2012).
3. Nitrogen oxide emissions from the primary boilers shall be controlled by continuous biomass feed systems, staged combustion low excess air, and selective non-catalytic reduction.
(9 VAC 5-80-490 and Conditions 8 and 61 of NSR Permits dated 5/22/2012).
4. Each primary boiler shall not operate more than 8,400 hours per year.
(9 VAC 5-80-490 and Conditions 17 and 70 of NSR Permits dated 5/22/2012).
5. The maximum firing rate of each primary boiler shall not exceed 394×10^6 Btu per hour. The total heat input to the primary boilers combined shall not exceed $6,109,480 \times 10^6$ Btu per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 and Conditions 18 and 71 of NSR Permits dated 5/22/2012).

6. Emissions from the operation of each primary boiler shall not exceed the limitations specified below:

	lbs/10 ⁶ Btu	lbs/hr	tons/yr
Total PM			
Including condensable PM	---	12.00	50.41
Filterable PM only	0.019	7.5	---
Total PM10			
Including condensable PM	---	8.46	35.54
Filterable PM10 only	0.017	6.7	---
Total PM2.5			
Including condensable PM	---	7.92	33.28
Sulfur Dioxide	0.0125◆◆	4.9	19.1
Nitrogen Oxide*	0.135◆◆	53.2	206.2
Carbon Monoxide** (CO)	0.30◆◆	118.2	458.2
VOC**	---	5.14	21.61
Fluorides, as HF	---	0.38	1.62
Sulfuric Acid Mist	---	0.89	---

- * Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
- ** Lower limits may be imposed by the DEQ, after in-stack testing.
- ◆◆ Compliance is determined on 30-day rolling average

(9 VAC 5-80-490, 40 CRF 60.42b, 40 CFR 60.43b, 40 CFR 60.44b and Conditions 21 and 74 of NSR Permits dated 5/22/2012)

7. Visible emissions from the boiler stack (001) shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.
 (9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 27 and 80 of NSR Permits dated 5/22/2012)
8. The approved fuel for the primary boilers is biomass. A change to the fuel may require a permit to modify and operate.
 (9 VAC 5-80-490 and Conditions 31 and 84 of NSR Permits dated 5/22/2012)

9. The biomass shall meet the specifications below:
biomass means those residuals that are akin to traditional cellulosic biomass including forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, and tree harvesting residuals from logging and sawmill materials) wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, and clean biomass from land clearing operations, each as specified in the definition of Clean Cellulosic Biomass in 40 CFR 241.2, excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates. Approved biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.
(9 VAC 5-80-490 and Conditions 32 and 85 of NSR Permits dated 5/22/2012)
10. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-490, 40 CFR 60.45b, and Conditions 35 and 88 of NSR Permits dated 5/22/2012)
11. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the primary boilers shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)
12. The approved startup fuels for the primary boilers (001 and 002) are natural gas and No. 2 Fuel Oil meeting the sulfur content specified in Conditions III.A.10 and III.A.11. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 and Conditions 48 and 101 of NSR Permits dated 5/22/2012)
13. The yearly combustion of No. 2 fuel oil in the primary boilers (001 and 002) shall not exceed a total of 60,000 gallons, calculated monthly as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-490 and Conditions 49 and 102 of NSR Permits dated 5/22/2012)

B. Monitoring-Primary Boilers

1. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO₂ (at outlet of each spray dryer), NO_x (at each boiler outlet), and CO₂ or O₂ emitted from the primary boilers. They shall be maintained, located and calibrated in accordance with approved procedures (40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system

performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office.

(9 VAC 5-80-490, 40 CFR 60.13, 40 CFR 60.46b, 40 CFR 60.48b and Conditions 37 and 90 of NSR Permits dated 5/22/2012)

2. The continuous monitoring data generated by the SO₂ and NO_x monitors on the primary boilers (001, 002) shall be used to determine compliance with the lbs/MMBtu emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply.
(9 VAC 5-80-110, 40 CFR 60.13, 40 CFR 60 Subpart Db, and Conditions 39 and 92 of NSR Permits dated 5/22/2012)
3. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and Appendix B).
(9 VAC 5-80-490, 40 CFR 60.13, and Conditions 40 and 93 of NSR Permits dated 5/22/2012)
4. All continuous emission monitoring systems (CEMS) and continuous opacity monitor (COMS) shall be operated in accordance with the applicable procedures under Performance Specification 1, 2, and 3 of 40 CFR 60, Appendix B.
(9 VAC 5-80-490 E and 40 CFR 60.13)
5. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 60, Appendix B Performance Specification 4A, shall be installed to measure and record the emissions of CO from each primary boiler as lbs/MMBtu and lbs/hr. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendices B and F. Data shall be reduced to 30 day rolling averages per the procedures for NO_x contained in 40 CFR 60 Subpart Db. The monitor shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/MMBtu basis) as noted in Condition III.A.6.
(9 VAC 5-80-490 and Conditions 41 and 94 of NSR Permits dated 5/22/2012)
6. A flowmeter shall be used to measure the stack gas airflow from the common stack with the flow apportioned by steam flow rate for each primary boiler utilizing the procedures for Part 75 apportionment. The stack gas flowmeter shall be installed, operated, and maintained in accordance with the provisions of 40 CFR 75 Appendices A and B, with the exception that the relative accuracy test audit (RATA) be performed at least once every four (4) consecutive calendar quarters. The permittee shall submit stack gas flowmeter reports as required by 40 CFR 75 Appendices A and B. The CO emissions (lb/hr basis) shall be calculated from data obtained from the

CO continuous emissions monitoring system and stack gas flowmeter in accordance to the provisions of 40 CFR 75 Appendix F. These data shall be used to demonstrate compliance with the 30-day rolling average CO emission standard (lb/hr basis) as noted in Condition III.A.6.

(9 VAC 5-80-490 and Conditions 42 and 95 of NSR Permits dated 5/22/2012)

7. Performance evaluations of the CO continuous monitoring systems shall be conducted in accordance with 40 CFR Part 60, Appendix B. Two copies of the performance evaluations report shall be submitted to the Blue Ridge Regional Office within 45 days of the evaluation. The continuous monitoring systems shall be installed and operational prior to conducting initial performance evaluation. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Blue Ridge Regional Office.
(9 VAC 5-80-490 and Conditions 43 and 96 of NSR Permits dated 5/22/2012)
8. A CEMS quality control program which is equivalent to the requirements of 40 CFR 60.13 and Appendix B and F shall be implemented for the CO continuous monitoring systems.
(9 VAC 5-80-490 and Conditions 44 and 97 of NSR Permits dated 5/22/2012)
9. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation.
(9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 50 and 104 of NSR Permits dated 5/22/2012)
10. The permittee shall monitor, operate, calibrate and maintain the fabric filters controlling the primary boilers (001, 002) according to the following:

Table1: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan	
Description	Two Traveling Grate Stoker boilers fueled with biomass, No. 2 F.O, and/or Nat'l gas
Control Device	Baghouses
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Opacity.
Measurement Approach	Continuous opacity monitor system (COMS).
Monitoring Frequency	Continuous
Justification	COMS satisfies applicable monitoring requirements and performance specifications as specified in 40 CFR 64.3, “Special criteria for the use of continuous emission, opacity or predictive monitoring systems”.
II. Indicator Range	Continuous operation between 0% - 10% opacity per hour. Excursion is one six-minute period > 10% opacity.
III. Performance Criteria Data Representativeness	Location and installation of monitors is per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1).
Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer’s recommendations prior to the initial performance test.
QA/QC Practices and Criteria	COMS was installed and evaluated in accordance with PS-1. Zero and span drift are checked daily and annual filter audits are performed in accordance with PS-1.
Data Collection Procedures	Data are collected by computerized data acquisition and handling system (DAHS). The system collects and retains all relevant opacity data.
Averaging period	Six-minute block basis.

Table 2: Primary Boilers (Units 001, 002) Compliance Assurance Monitoring Plan	
Description	Two Traveling Grate Stoker boilers fueled with biomass, No. 2 F.O, and/or Nat'l gas
Control Device	Baghouses
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Operational Status of Equipment
Measurement Approach	<p>Actions taken in the event an opacity excursion is observed:</p> <ul style="list-style-type: none"> • Initiate a cleaning cycle for each baghouse. • Monitor the opacity as the baghouses (which are dedicated to either Unit 1 or Unit 2) go through a cleaning cycle. The opacity will drop when the compartment with the problem or leaking bag goes off line to clean. • Once the problem compartment is identified, the compartment is isolated and the issue resolved (e.g., replacement of bags)
Monitoring Frequency	As needed.
Justification	These actions are supplemental to the primary indicator of opacity and are taken to determine which of the two units may be causing an opacity excursion.
II. Indicator Range	Varies; these are work practices.
III. Performance Criteria Data Representativeness	NA. COMS satisfy 40 CFR 64.3(b).
Verification of Operational Status	Verification procedures for operation in accordance with manufacturer's recommendations, at a minimum.
QA/QC Practices and Criteria	NA
Data Collection Procedures	Events and corrective actions are logged as needed.
Averaging period	NA

Table 3: Primary Boilers (Units 001 and 002) Compliance Assurance Monitoring Plan	
Description	Two Traveling Grate Stoker boilers fueled with biomass, No. 2 F.O, and/or Nat'l gas
Control Device	Lime-water injection spray dryer
Applicable Requirement	9 VAC 5-80-1985 E, 9 VAC 5-50-280, 9 VAC 5-80-1705, 9 VAC 5-80-1180, and 9 VAC 5-50-260
Regulated Pollutant	PM, PM ₁₀ & PM _{2.5}
I. CAM Indicator	Exhaust Temperature
Measurement Approach	Monitor exhaust gas temperature between spray dryer and baghouse
Monitoring Frequency	Continuous
Justification	The spray dryer will cool the exhaust gas temperature from a typical value prior to the spray dryer of 400°F to approximately 300°F or less at the baghouse inlet.
II. Indicator Range	Exhaust gas temperature at the baghouse inlet (15 minute average) not to exceed value based on temperatures measured during stack testing that demonstrates compliance.
III. Performance Criteria Data Representativeness	Location and installation of temperature monitor at inlet duct to baghouse.
Verification of Operational Status	Verification procedures, including installation, calibration, and operation in accordance with manufacturer's recommendations, at a minimum.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation using procedures that are based on the manufacturer's specifications, at a minimum.
Data Collection Procedures	Data are collected by computerized data acquisition and handling system connected to the plant distributed control system. The system collects and retains all relevant temperature data.
Averaging period	One minute data values.

(9 VAC 5-80-490 and 40 CFR 64.6 (c))

11. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.

(9 VAC 5-80-490 and 40 CFR 64.6 (c))

12. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(9 VAC 5-80-490 and 40 CFR 64.7 (b))

13. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the primary boilers are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490, and 40 CFR 64.7 (c))
14. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the primary boilers (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 and 40 CFR 64.7 (d)(1))
15. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-490 and 40 CFR 64.7(d)(2))
16. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges

or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(9 VAC 5-80-490, 40 CFR 64.7(e), and 40 CFR 64.6 (c))

17. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the primary boilers for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection at the permitted facility. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9 VAC 5-80-490 and 40 CFR 64.8(a) and (b))

C. Recordkeeping-Primary Boilers

1. The permittee shall obtain the following biomass fuel quality data:
 - a. An analysis of the biomass heat content as-fired at least once per calendar week,
 - b. an ultimate analysis of the biomass as-fired at least once per calendar quarter, and,
 - c. an analysis of the biomass fluoride content as-fired at least once per calendar quarter.
 - d. The permittee shall submit a fuel shipment certification plan at least 60 days prior to facility startup for approval by the Blue Ridge Regional Office. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in this permit.

Details of the sampling procedures shall be arranged with the Blue Ridge Regional Office. Records of fuel quality data shall be available on site for inspection by Department personnel and shall be kept current for the most recent five year period

(9 VAC 5-80-490, and Conditions 53 and 107 of NSR Permits dated 5/22/2012)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The annual hours of operation for each boiler calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Records of the maximum firing rate of each primary boiler.
 - c. The total annual heat input to the primary boilers. The annual total shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. Continuous monitoring system requirements and emissions monitoring results to demonstrate compliance with Condition III.A.6.
 - e. Stack test results to demonstrate compliance with Condition III.A.6.
 - f. All reports required by 40 CFR 60 Subpart Db for the primary boiler including, but not limited to:
 - (i) reports of excess emission in accordance with 40 CFR 60.49b(h), and
 - (ii) reports containing the steam generating unit operating day information recorded in Condition III.C.2.g(ii).

(40 CFR 60.49b(h) and 40 CFR 60.49b(i))
 - g. Any additional information required by 40 CFR 60 Subpart Db for the primary boiler, including but not limited to:
 - (i) records of opacity in accordance with 40 CFR 60.49b(f), and
 - (ii) records required by 40 CFR 60.49b(g) for each steam generating unit operating day.

(40 CFR 60.49b(f) and 40 CFR 60.49b(g))
 - h. The daily and annual throughput of distillate oil, natural gas, and biomass, each in units of MMBtu, used for each primary boiler. The annual throughput shall be

calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(40 CFR 60.49b)

- i. All fuel oil supplier certifications in accordance with Condition IX.A.9 (40 CFR 60.47b and 40 CFR 60.49b)
- j. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Condition V.A.1 of this permit.
- k. All biomass fuel quality data in accordance with Condition III.C.1.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 115.a through k of the NSR Permits dated 5/22/2012)

3. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
(9 VAC 5-80-490 and 40 CFR 64.9(b))

D. Testing-Primary Boilers

1. Initial performance tests shall be conducted for SO₂, NO_x, CO, VOC, Sulfuric Acid Mist, and Fluorides, as HF from each primary boiler. These tests shall be conducted to determine compliance with the emission limits contained in Condition III.A.6. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after test completion, whichever is earlier, and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-490, 40 CFR 60.49b, and Conditions 51 and 105 of NSR Permits dated 5/22/2012)

2. For each primary boiler, four performance tests shall be conducted for each of the following pollutants: Filterable PM, Total PM, Filterable PM10, Total PM10, Total PM2.5. Concurrently with each performance test the fuel analyses in accordance with Condition III.C.1 shall be obtained. The performance tests shall be conducted to determine compliance with the emission limits contained in Condition III.A.6. The initial performances tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Subsequent performance tests shall be performed, at least 75 but not more than 105 days after the directly preceding test. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 or 40CFR51, Appendix M as applicable. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to the initial performance test. The protocol shall cover all performance tests for the respective pollutant. One copy of the initial performance test results shall be submitted to the Blue Ridge Regional Office within 180 days of startup or 45 days after completion of the test, whichever is earlier, and shall conform to the test report format enclosed with this permit. One copy of the test results shall be submitted to the Blue Ridge Regional Office within 45 days after completion of each subsequent performance test and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.46b, 40 CFR 60.49b, and Conditions 52 and 106 of NSR Permits dated 5/22/2012)

3. Concurrently with the initial performance tests required by Condition III.D.2, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted on the primary boilers. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Blue Ridge Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the Blue Ridge Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. One copy of the test result shall be submitted to the Blue Ridge Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-490, 40 CFR 60.46b and Conditions 54 and 108 of NSR Permits dated 5/22/2012)

4. A continuous opacity monitoring system may be used to satisfy the visible emission evaluation requirement in lieu of 40 CFR, Part 60, Appendix A, Method 9. The

reported test data shall include averages of all six minute continuous periods within the test period and within the duration of any mass emission performance tests being conducted. It is the responsibility of the permittee to demonstrate that the monitoring system has met the requirements of the applicable performance evaluation, that the monitoring system has been properly maintained and operated, and that the resulting data has not been altered in any way. If monitoring system data indicates compliance for a period during which Method 9 data indicates non-compliance, the Method 9 data shall be used to determine compliance with the visible emission limit.

(9 VAC 5-80-490, 40 CFR 60.46b and Conditions 55 and 109 of NSR Permits dated 5/22/2012)

5. See also Condition IX.A.7

E. Reporting-Primary Boilers

1. The permittee shall submit fuel oil quality reports to the Blue Ridge Regional Office, within 30 days after the end of each calendar semiannual period. If no shipments of distillate oil were received during the calendar semiannual period, the semiannual report shall consist of the dates included in the calendar semiannual period and a statement that no oil was received during the calendar semiannual period. If distillate oil was received during the calendar semiannual period the reports shall include:
 - a. The dates included in the calendar semiannual period,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar semiannual period or a semiannual summary from each fuel supplier that includes the information specified in Condition IX.A.9 for each shipment of distillate oil, and,
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-490, 9 VAC 5-50-50, 9 VAC 5-50-410, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

2. The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from the primary boilers monitored by the CO continuous monitoring system on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
 - a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

These reports shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-490 and Conditions 45 and 98 of NSR Permits dated 5/22/2012)

3. **Compliance Assurance Monitoring (CAM)** - The permittee shall submit CAM reports as part of the facility's Title V semi-annual monitoring reports required by General Condition XIII.J of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:
 - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-490 and 40 CFR 64.9(a))

IV. Auxiliary Boiler Requirements - (003)

A. Limitations-Auxiliary Boiler

1. Particulate emissions from the auxiliary boiler (003) shall be controlled by combustion efficiency.
(9 VAC 5-80-490 and Conditions 4 and 57 of NSR Permits dated 5/22/2012).
2. Emissions from the operation of the auxiliary boiler shall not exceed the limits specified below. Annual emissions are included in Condition V.A.2.

Natural Gas		
	<u>lbs/10⁶ Btu</u>	<u>lbs/hr</u>
NOx	0.073* (30-day roll. avg.)	10.2*
CO	0.082	11.4
VOC	0.041	5.7

No. 2 Fuel Oil		
	<u>lbs/10⁶ Btu</u>	<u>lbs/hr</u>
PM	0.04	5.6
PM10	0.03	4.2
SO ₂	0.31 (30-day roll. avg.)	43.2
NOx	0.2* (30-day roll. avg.)	27.9*
CO	0.082	11.4
VOC	0.041	5.7

*Based on high heat release rate.

During any 30-day period when both natural gas and distillate oil are fired, the allowable emission limit for the auxiliary boiler (003) for that period shall be calculated using the equation shown in 40 CFR 60.44b(b), modified as follows:

$$E_n = \frac{[(EL_g \times H_g) + (EL_o \times H_o)]}{(H_g + H_o)} \quad \text{where,}$$

E_n = the nitrogen oxides emission limit, expressed as NO₂, (lb/MMBtu)
 EL_g = the individual natural gas emission limit as shown in this condition, (lb/MMBtu)
 EL_o = the individual distillate oil emission limit as shown in this condition, (lb/MMBtu)
 H_g = the natural gas heat input (MMBtu/rolling 30-day period)
 H_o = the distillate oil heat input (MMBtu/rolling 30 day period)

(9 VAC 5-80-490, 40CFR60.42b, 40 CFR 60.44b, and Conditions 22 and 75 of NSR Permits dated 5/22/2012)

3. The approved fuels for the auxiliary boiler are natural gas and No. 2 Fuel Oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396 "Standard Specification for Fuel Oils" except as modified by Conditions IV.A.4 and IV.A.5. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-490 and Conditions 34 and 87 of NSR Permits dated 5/22/2012)

4. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the auxiliary boiler shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.

(9 VAC 5-80-490 and Conditions 35 and 88 of NSR Permits dated 5/22/2012)

5. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the auxiliary boiler shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.

(9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)

6. The auxiliary boiler stack shall be 200 feet or greater.

(9 VAC 5-80-490 and Conditions 47 and 100 of NSR Permits dated 5/22/2012)

7. Visible emissions from the auxiliary boiler stack (003) shall not exceed ten (10) percent opacity, except during one six minute period per hour which shall not exceed twenty (20) percent opacity.

(9 VAC 5-80-490, 40 CFR 60.43b, and Conditions 27 and 80 of NSR Permits dated 5/22/2012)

B. Monitoring-Auxiliary Boiler

1. Continuous emission monitors shall be installed to measure and record the concentration of opacity, SO₂, NO_x, and CO₂ or O₂ emitted from the auxiliary boiler (003). They shall be maintained, located and calibrated in accordance with approved procedures (reference to 40 CFR 60.13). A 30 day notification prior to the demonstration of continuous monitoring system performance and subsequent notifications are to be submitted to the Blue Ridge Regional Office. Fuel testing for sulfur content in accordance with NSPS Subpart Db may be substituted for the SO₂ continuous monitor with the approval of the BRRO.

(9 VAC 5-80-490, 40 CFR 60.47b, 40 CFR 60.48b, 40 CFR 60.13, and Conditions 38 and 91 of NSR Permits dated 5/22/2012)

2. The continuous monitoring data generated by the SO₂ monitor (if installed) and NO_x monitor on the auxiliary boiler (003) shall be used to determine compliance with the emission standards on a 30-day rolling average basis. All of the data capture, quality assurance provisions, and reporting requirements of NSPS Subpart Db shall apply. The excess emission report as required by NSPS Db for the auxiliary boiler shall include the emission limit for nitrogen oxides for each 30-day period as calculated in accordance with Condition IV.A.2 of this permit.

(9 VAC 5-80-110, 40 CFR 60.13, 40 CFR 60 Subpart Db, and Conditions 39 and 98 of NSR Permits dated 5/22/2012)

3. For all continuous monitors required by this permit, the continuous monitoring and quality assurance data may, at the discretion of the Board, be used as evidence of violation of the emission standards. These monitors are subject to such data capture requirements and/or quality assurance requirements as may be deemed appropriate by the Board (refer to 40 CFR 60.13 and 40 CFR 60, Appendix B).
(9 VAC 5-80-490, 40 CFR 60.13, and Conditions 40 and 93 of NSR Permits dated 5/22/2012)
4. All continuous emission monitoring systems (CEMS) and continuous opacity monitor (COMS) shall be operated in accordance with the applicable procedures under Performance Specification 1, 2, and 3 of 40 CFR 60, Appendix B.
(9 VAC 5-80-490 E and 40 CFR 60.13)
5. All continuous monitoring systems and monitoring devices, as may be applicable for this source type, shall be installed and operational prior to conducting performance tests under 9 VAC 5-50-30. Performance evaluations of the continuous monitoring system shall take place during the performance tests under 9 VAC 5-50-30 or within 30 days thereafter. The Blue Ridge Regional Office shall be furnished with two copies of the report of the performance evaluations within 60 days of the evaluation.
(9 VAC 5-80-490 and Conditions 50 and 104 of NSR Permits dated 5/22/2012)

C. Recordkeeping-Auxiliary Boiler

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The daily and annual throughput of distillate oil (in 1000 gallons) used for the auxiliary boiler (003). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel oil supplier certifications in accordance with Condition IX.A.9
 - c. The annual rolling average sulfur content of the distillate oil burned in the auxiliary boiler (003), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. The annual hours of operation for the auxiliary boiler (003) calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the

preceding 11 months

- e. Verification that the primary boilers and the auxiliary boiler were not operated concurrently in accordance with Condition V.A.1 of this permit.
- f. All reports required by 40 CFR 60 Subpart Db for the auxiliary boiler (003).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-490, and Conditions 115.l through q of the NSR Permits dated 5/22/2012)

D. Testing-Auxiliary Boiler

See Condition IX.A.7

E. Reporting-Auxiliary Boiler

1. The permittee shall submit fuel quality reports to the Blue Ridge Regional Office, within 30 days after the end of each calendar semiannual period. If no shipments of distillate oil were received during the calendar semiannual period, the semiannual report shall consist of the dates included in the calendar semiannual period and a statement that no oil was received during the calendar semiannual period. If distillate oil was received during the calendar semiannual period the reports shall include:
 - a. The dates included in the calendar semiannual period,
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the calendar semiannual period or a semiannual summary from each fuel supplier that includes the information specified in Condition IX.A.9 for each shipment of distillate oil, and
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-490, 9 VAC 5-50-50, 9 VAC 5-50-410, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

2. The permittee shall submit reports in accordance with 40 CFR 60 Subpart Db for the auxiliary boiler (003). Excess emission and monitoring system performance reports shall be submitted to the Blue Ridge Central Regional Office for every calendar quarterly period in accordance with 40 CFR 60.49b and 40 CFR 60.7.
(9 VAC 5-80-490, 9 VAC 5-50-50, 40 CFR 60.7, 40 CFR 60.49b, and Conditions 39 and 92 of the NSR Permits dated 5/22/2012)

V. Combined Boiler Limitations

A. Limitations-Combined Boilers

1. The auxiliary boiler (003) and the primary boilers (001, 002) shall not operate concurrently, except during start-up and shutdown, and then for no more than 12 hours over any consecutive 24-hour period, and unless both primary boilers are operating at 50 percent capacity or less.
(9 VAC 5-80-490 and Conditions 20 and 73 of NSR Permits dated 5/22/2012)
2. Combined emissions from the operation of the primary boilers (001 and 002) and the auxiliary boiler (003) shall not exceed the limitations specified below:

	<u>tons/yr</u>
PM	101.8
PM10	71.9
SO ₂	46.0
NO _x *	417.4
CO**	918.5
VOC**	44.2

These limitations are a summation of limits for the two primary boilers in accordance with Condition III.A.6 and the auxiliary boiler operating 360 hours per year.

- * Lower limits may be imposed by the DEQ after review of in-stack testing and optimizing the SNCR system at various loads.
- ** Lower limits may be imposed by the DEQ, after in-stack testing.

(9 VAC 5-80-490 and Conditions 23 and 76 of NSR Permits dated 5/22/2012)

VI. Diesel Engines Requirements - (005 and 006)

A. Limitations-Diesel Engines

1. The two diesel engines (005 and 006) shall not operate more than a combined total of 382 hours per year, calculated as the sum of the most recent 12-month period.
(9 VAC 5-80-490 and Conditions 19 and 72 of NSR Permits dated 5/22/2012)
2. Emissions from the operation of the diesel engines (005 and 006) shall not exceed the limits specified below:

	<u>lbs/hr</u>	<u>tons/yr</u>
Nitrogen Oxides (as NO ₂)	44.44	3.19
Carbon Monoxide	9.57	0.69

Annual limit calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 and Conditions 24 and 77 of NSR Permits dated 5/22/2012)

3. Visible emissions from the diesel engines (005 and 006) shall not exceed ten (10) percent opacity.
(9 VAC 5-80-490 and Conditions 29 and 82 of the NSR Permits dated 5/22/2012)
4. The approved fuel for the diesel engines (005 and 006) is diesel fuel (No. 2 Fuel Oil). A change in the diesel engine fuel may require a permit to modify and operate.
(9 VAC 5-80-490 and Conditions 33 and 86 of NSR Permits dated 5/22/2012)
5. The maximum sulfur content of the No. 2 Fuel Oil to be burned in the diesel engines shall not exceed 0.3 percent by weight per shipment. Altavista Power Station shall maintain records of all fuel oil shipments purchased indicating the sulfur content per shipment. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-490 and Conditions 35 and 88 of NSR Permits dated 5/22/2012)
6. The (annual rolling) average sulfur content of the No. 2 Fuel Oil to be burned in the diesel engines shall not exceed 0.2 percent by weight. Altavista Power Station shall maintain records of all fuel oil shipments purchased and the annual average sulfur content determined monthly. These records shall be available on site for inspection by Department personnel. They shall be kept on file for the most current five-year period.
(9 VAC 5-80-490 and Conditions 36 and 89 of NSR Permits dated 5/22/2012)
7. The emergency diesel feedwater pump (005) and diesel firewater pump engine (600) shall comply with all applicable requirements of 40 CFR 63 Subpart ZZZZ for compression ignition reciprocating internal combustion engines (CI RICE) by the compliance date of 5/3/13.
(9 VAC 5-60-95, 9 VAC 5-60-100, 9 VAC 5-80-110 and 40 CFR 63 Subpart ZZZZ)

B. Recordkeeping-Diesel Engines

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

1. Annual hours of operation of the diesel engines (005 and 006), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
2. The maximum sulfur content per shipment of distillate oil burned in the diesel engines (005 and 006).
3. The annual rolling average sulfur content of the distillate oil burned in the diesel

engines (005 and 006), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-490 and Conditions 115.r through t of NSR Permits dated 5/22/2012)

C. Testing-Diesel Engines

See Condition IX.A.7

D. Reporting-Diesel Engines

Upon request of the Department, the permittee shall provide reports in a manner and form using procedures acceptable to the Department.
(9 VAC 5-80-490)

VII. Biomass, Ash & Lime Handling Requirements - (010 through 017, 020 through 023, 025, and 101 through 104-11)

A. Limitations-Biomass, Ash & Lime Handling

1. Particulate emissions from the wood storage silo, the emergency truck loading station, lime storage silo, recycle bin and discharge storage silo shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-490 and Conditions 5 and 58 of NSR Permits dated 5/22/2012)
2. Particulate emissions from the biomass hog shall be controlled by total enclosure.
(9 VAC 5-80-490 and Conditions 6 and 59 of NSR Permits dated 5/22/2012)
3. The wood pulverizer systems shall include fabric filters for the collection of pulverized wood fuel. The fabric filters shall be provided with adequate access for inspection.
(9 VAC 5-80-490 and Conditions 9 and 62 of NSR Permits dated 5/22/2012)
4. Lime slaker emissions shall be controlled by fabric filter. The fabric filter shall be provided with adequate access for inspection and shall have a device for continuous measurement of pressure drop.
(9 VAC 5-80-490 and Conditions 10 and 63 of NSR Permits dated 5/22/2012)
5. The wood pulverizer shall be enclosed to prevent fugitive dust emissions. A fabric filter or other dust control methods, as approved by the Blue Ridge Regional Office, may be required after visible inspection by Agency personnel.
(9 VAC 5-80-490 and Conditions 11 and 64 of NSR Permits dated 5/22/2012)

6. All conveyor belt returns shall be equipped with a belt scraper system. Scrapings shall be returned in an enclosed manner to the main flow of material.
(9 VAC 5-80-490 and Conditions 12 and 65 of NSR Permits dated 5/22/2012)
7. Fugitive dust emissions from the ash and flue gas desulfurization product storage silo shall be controlled by mixing the discharge with water.
(9 VAC 5-80-490 and Conditions 13 and 66 of NSR Permits dated 5/22/2012)
8. Fugitive dust emissions from the furnace bottom ash handling system shall be controlled by quenching ash with water. Fugitive dust emissions from the boiler generator bank conveyor and the mechanical collector hopper conveyor shall be saturated by water spray nozzles.
(9 VAC 5-80-490 and Conditions 14 and 67 of NSR Permits dated 5/22/2012)
9. The yearly throughput of the biomass handling system shall not exceed 785,480 tons per year.
(9 VAC 5-80-490 and Conditions 16 and 69 of NSR Permits dated 5/22/2012)
10. Fugitive particulate emissions from the unloading, transfer and handling of biomass shall be minimized by utilizing methods approved by DEQ.
(9 VAC 5-80-440 and 9 VAC 5-80-490)
11. Particulate emissions from the operation of the wood dust, ash and lime storage and handling systems shall not exceed the limits specified below:

PM	6.5	tons/yr
PM10	6.5	tons/yr
PM2.5	6.5	tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions VII.A.1, VII.A.3 through VII.A.8, IX.A.1 through IX.A.3, and XIII.Y.

(9 VAC 5-80-490 and Conditions 25 and 78 of NSR Permits dated 5/22/2012)

12. Particulate emissions from the operation of the biomass handling system and storage pile shall not exceed the limits specified below:

PM	1.57 tons/yr
PM10	0.60 tons/yr
PM2.5	0.10 tons/yr

These emissions are derived from the estimated overall emissions contribution and are included for emission inventory purposes. Compliance shall be determined as stated in Conditions XIII.Y, VII.A.13, and VII.A.9.

(9 VAC 5-80-490 and Conditions 26 and 79 of NSR Permits dated 5/22/2012)

13. Visible emissions from biomass handling system shall not exceed 10 percent opacity as determined using the methods specified in 9 VAC 5-50-20 A.3.
(9 VAC 5-80-490 and Conditions 28 and 81 of NSR Permits dated 5/22/2012)

14. Visible emissions from all fabric filters associated with the lime, ash, biomass handling shall not exceed five (5) percent opacity.
(9 VAC 5-80-490 and Conditions 30 and 83 of NSR Permits dated 5/22/2012)

B. Monitoring-Biomass, Ash & Lime Handling

1. Visible emission observations from the fabric filter exhaust stacks and all fugitive emission points shall be conducted at least once a week. If visible emissions are observed, the permittee shall:
 - a. Take timely corrective action such that the equipment resumes operation with no visible emissions or,
 - b. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any fabric filter is less than five (5) percent opacity or any fugitive emission point is less than ten (10) percent opacity. The VEE shall be conducted for a minimum of six (6) minutes. If any of the 15-second observations exceeds the appropriate opacity value listed in Conditions VII.A.13 or VII.A.14, the VEE shall be conducted for a total of sixty (60) minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the equipment resumes operation with visible emissions of less than the allowable limits listed in Conditions VII.A.13 or VII.A.14.

A record of the date, time, observer, cause and corrective measures taken shall be made. If no visible emissions were observed, a record of the date, time and observer shall be made. These records shall be maintained on site by the permittee for the

most recent 5-year period.
(9 VAC 5-80-490 E)

C. Recordkeeping-Biomass, Ash & Lime Handling

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
 - a. The results of the weekly opacity observations of all emissions points associated with these processes (010 through 017, 020 through 023, 025, and 101 through 104-11), along with any corrective actions.
 - b. The annual throughput of the biomass handling system (in tons). The annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 and Condition 115.u of NSR Permits dated 5/22/2012)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-80-490 and 9 VAC 5-50-50)

D. Testing-Biomass, Ash & Lime Handling

See Condition IX.A.7

E. Reporting-Biomass, Ash & Lime Handling

Upon request of the Department, the permittee shall provide reports in a manner and form using procedures acceptable to the Department
(9 VAC 5-80-490)

VIII. Distillate Fuel Oil Storage Tank Requirements - (024)

The permittee shall keep readily accessible records showing tank dimensions and an analysis showing the capacity of the distillate oil storage tank (024) and shall report to the Blue Ridge Regional Office if the maximum true vapor pressure of the stored product exceeds 0.50 psi.
(9 VAC 5-80-490, 40 CFR 60.116b, 9 VAC 5-50-50 and Condition 115.v of NSR Permits dated 5/22/2012)

IX. Facility Wide Conditions

A. Requirements-Facility Wide

1. Fugitive emissions from all facility access roads shall be controlled by paving. Fugitive emissions from paved roads shall be controlled by wetting, sweeping, or other dust control methods, as approved by the Blue Ridge Regional Office.
(9 VAC 5-80-490 and Conditions 15 and 68 of NSR Permits dated 5/22/2012)

2. Visible emissions from the fugitive emission points shall not exceed ten (10) percent opacity.
(9 VAC 5-80-490 and Conditions 29 and 82 of NSR Permits dated 5/22/2012)
3. Visible emissions from all fabric filters (except those on the primary boilers) shall not exceed five percent opacity.
(9 VAC 5-80-490 and Conditions 30 and 83 of NSR Permits dated 5/22/2012)
4. Any host steam agreement, excluding financial terms, shall be made available on site for review by the DEQ upon request.
(9 VAC 5-80-490 and Conditions 46 and 99 of NSR Permits dated 5/22/2012)
5. No project shall result in a major modification as defined in 9 VAC 5-80-1615 without receiving a permit pursuant to 9 VAC 5-80 Article 8. For projects which rely on excluded emissions (subsection c of the definition of “projected actual emissions” in 9 VAC 5-80-1615) to be exempt from review under 9 VAC 5-80 Article 8, the following conditions shall apply:
 - a. The permittee shall maintain records sufficient to demonstrate the project did not result in a major modification as defined in 9 VAC 5-80-1615. Any increase in emissions without sufficient documentation shall be attributed to the project.
 - b. If annual emissions after the project (12 month rolling total) exceed the “baseline actual emissions” (as defined in 9 VAC 5-80-1615) for the project by a “significant” amount (as defined in 9 VAC 5-80-1615), the permittee shall notify the Blue Ridge Regional Office within fifteen (15) days after the event.

For each applicable project, Conditions IX.A.5.a and IX.A.5.b are effective for the projection period as prescribed in the definition of “projected actual emissions” located in 9 VAC 5-80-1615. Nothing in this condition shall restrict when the Board may find the permittee in violation of 9 VAC 5-80-1625 A.
(9 VAC 5-80-490 and Condition 103 of NSR Permit dated 5/22/2012)

6. Where there is a reasonable possibility a project may result in a significant emissions increase and the permittee elects to use the method specified in subdivisions a through c of the definition of "projected actual emissions" in 9 VAC 5-80-1615 for calculating projected actual emissions, the permittee shall comply with 9 VAC 5-80-1785 B, C and E.
(9 VAC 5-80-490 and 9 VAC 5-80-1785)
7. The electricity generating facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing

a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-80-490 and Condition 113 of NSR Permit dated 5/22/2012)

8. The permittee shall furnish written notification to the Blue Ridge Regional Office of:
 - a. The actual date on which start up of the biomass handling system occurred within 30 days of such date.
 - b. The actual start-up date of the modified electricity generating facility within 15 days after such date.
(40 CFR 60.49b)
 - c. The anticipated date of performance tests postmarked at least 30 days prior to such date.
 - d. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.
 - e. The intention to use continuous opacity monitoring system data results to demonstrate compliance with the applicable visible emission limit during a performance test in lieu of Reference Method 9 (reference 40 CFR Part 60, Appendix A), postmarked not less than 30 days prior to the date of the performance test.

Copies of the written notification referenced in items b, c and e above are to be sent to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 and Condition 114 of NSR Permit dated 5/22/2012)

9. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier
 - b. The date on which the distillate oil was received

- c. The volume of distillate delivered in the shipment
- d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
- e. The sulfur content of the distillate oil

(9 VAC 5-80-490 and Condition 116 of NSR Permit dated 5/22/2012)

10. Maintenance/Operating Procedures—The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-490 and Condition 120 of NSR Permit dated 5/22/2012)

X. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720 C)
---	Turbine Lube Oil Reservoir	9 VAC 5-80-720-B.2	VOC	
---	Solvent-based parts washer (non-halogenated)	9 VAC 5-80-720-B.2	VOC	
---	Used oil tank	9 VAC 5-80-720-C.3		200 gallons
---	Oil/Water Separator (sump)	9 VAC 5-80-720-C.3		280 gallons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-490.

XI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Non Applicability
40CFR60 Subpart Y	Standards of Performance for Coal Preparation and Processing Plants	Facility is being converted to biomass fired station; no coal on site
40CFR60 Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing	No crushing occurs in the limestone process

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the (i) administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-490 and 9 VAC 5-80-500)

XII. Title IV Requirements

The attached Phase II Acid Rain Permit Application is incorporated into this permit by reference (Attachment A). The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.

(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

A. Statutory and Regulatory Authorities

Statutory and Regulatory Authorities: In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to the Virginia Regulations for the Control and Abatement of Air Pollution (9 VAC 5 Chapter 80, Article 3 - Acid Rain Operating Permits).

B. SO₂ Allowance Allocations and NO_x Requirements for affected units

		2009	2010	2011	2012	2013
Unit 1	SO ₂ allowances, allocated by U.S. EPA (tons)	None ¹	None ¹	None ¹	None ¹	None ¹
	NO _x limit	Not applicable ²				

		2009	2010	2011	2012	2013
Unit 2	SO ₂ allowances, allocated by U.S. EPA (tons)	None ¹	None ¹	None ¹	None ¹	None ¹
	NO _x limit	Not applicable ²				

¹ See Condition XII.C.2

² See Condition XII.C.3

C. Additional Requirements, Comments, Notes, and Justifications

1. Dominion Generation shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Title IV, Phase II, Acid Rain permit. EPA forms shall be used. (9 VAC 5-80-430 C.5)

2. These units (Units 1 and 2) were not eligible for SO₂ allowance allocations by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program. SO₂ allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of these units to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of these units remain obligated to hold sufficient

allowances to account for SO₂ emissions from this unit in accordance with 40 CFR 72.9(c)(1).

(9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

3. Units 1 and 2 are spreader stoker boilers and are therefore not subject to NOx limitations under 40 CFR Part 76.

(9 VAC 5-80-490 and 40 CFR Part 76)

XIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-430, the right of the facility to operate shall be terminated upon permit expiration.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

C. Permit Expiration

The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

D. Permit Expiration

If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

E. Permit Expiration

No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

F. Permit Expiration

If an applicant submits a timely and complete application under section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the

previous permit, including any permit shield granted pursuant to 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

G. Permit Expiration

The protection under subsections F.1 and F.5(ii) of section 9 VAC 5-80-430 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D, and 9 VAC 5-80-530 B)

H. Recordkeeping and Reporting

All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-490 F)

I. Recordkeeping and Reporting

Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-490 F)

J. Recordkeeping and Reporting

The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- b. All deviations from permit requirements. For purposes of this permit, deviations

include, but are not limited to:

- (i) Exceedance of emissions limitations or operational restrictions,
 - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - (iii) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
(9 VAC 5-80-490 F)

K. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be sent to EPA in electronic format only. The certification document should be sent to the following electronic

mailing address:

[R3 APD Permits@epa.gov](mailto:R3_APD_Permits@epa.gov)

(9 VAC 5-80-490 K.5)

L. Permit Deviation Reporting

The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition XIII.J of this permit. (9 VAC 5-80-490 F.2 and 9 VAC 5-80-650)

M. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of the discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities and pollutants subject to the monitoring requirements of 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office. (9 VAC 5-20-180 C)

N. Failure/Malfunction Reporting

The emission units that have continuous monitors subject to 9 VAC 5-50-50 C are not subject to the 14 day written notification. (9 VAC 5-20-180 C, and 9 VAC 5-50-50)

O. Failure/Malfunction Reporting

The emission units subject to the reporting and the procedure requirements of 9 VAC 5-50-50 C are listed below:

- a. Main Boiler (001)
- b. Main Boiler (002)
- c. Auxiliary Boiler (003).

(9 VAC 5-20-180 C, and 9 VAC 5-50-50)

P. Failure/Malfunction Reporting

Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9 VAC 5-20-180 C, and 9 VAC 5-50-50)

Q. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-490 G.1)

R. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-490 G.2)

S. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-490 G.3)

T. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-550 and 9 VAC 5-80-660)

U. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-490 G.5)

V. Duty to Submit Information

The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-490 G.6)

W. Duty to Submit Information

Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-430 G.

(9 VAC 5-80-490 K.1)

X. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department

by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-490 H and 9 VAC 5-80-340 C)

Y. Fugitive Dust Emission Standards

Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:

1. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition.
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion.
5. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
6. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design.
7. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-80-490 and Condition 112 of NSR Permit dated 5/22/2012)

Z. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 40 CFR 60.11(d))

AA. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 3. (9 VAC 5-80-490 J)

BB. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times, substances, or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-490 K.2)

CC. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430

F. The conditions for reopening a permit are as follows:

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-490 D.

(9 VAC 5-80-490 L)

DD. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-490 and 9 VAC 5-80-510 E)

EE. Transfer of Permits

No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-490 and 9 VAC 5-80-520)

FF. Transfer of Permits

In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.

(9 VAC 5-80-490 and 9 VAC 5-80-520)

GG. Transfer of Permits

In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-560.

(9 VAC 5-80-490 and 9 VAC 5-80-520)

HH. Malfunction as an Affirmative Defense

A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph XIII.II of this condition are met.

(9 VAC 5-80-490 and 9 VAC 5-80-650)

II. Malfunction as an Affirmative Defense

The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

- b. The permitted facility was at the time being properly operated.
- c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
(9 VAC 5-80-490 and 9 VAC 5-80-650)

JJ. Malfunction as an Affirmative Defense

In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-490 and 9 VAC 5-80-650)

KK. Malfunction as an Affirmative Defense

The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-490 and 9 VAC 5-80-650)

LL. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-550 and 9 VAC 5-80-660)

MM. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-490 and 9 VAC 5-80-430 E)

NN. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(9 VAC 5-80-490 and 40 CFR Part 82, Subparts A - F)

OO. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-490 I)

PP. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-490 except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-490 I)

QQ. Violation of Ambient Air Quality Standard

The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-80-490 and Condition 123 of NSR Permit dated 5/22/2012)

XIV. Clean Air Interstate Rule (CAIR) Requirements

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is Attachment B to this document and expires upon expiration of this Title V permit

(9 VAC 5-80-490, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

Attachment A
Phase II Acid Rain Application

Attachment B
Clean Air Interstate Rule (CAIR) Application

ATTACHMENT C – SOURCE TESTING REPORT FORMAT

Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
 - a. Operating rate
 - b. Test Methods
 - c. Pollutants tested
 - d. Test results for each run and the run average
 - e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix

1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

* Not applicable to visible emission evaluations