



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

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www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

September 30, 2015

Mr. David A. Craymer
Vice President Power Generation System Operations
Dominion Resources Services, Inc.
5000 Dominion Boulevard
Glen Allen, VA 23060

Location: Wise County, VA
Registration No. 11526

Dear Mr. Craymer:

Attached is a significant modification to the Article 3 Federal Operating Permit for the Virginia City Hybrid Energy Center (VCHEC) electric power generation facility pursuant to 9 VAC 5 Chapter 80, Article 3, of the Virginia Regulations for the Control and Abatement of Air Pollution. The purpose of this modification is to incorporate the renewed Phase II Acid Rain Permit for the VCHEC facility. The attached Phase II Acid Rain Permit will be in effect from January 1, 2016, through December 31, 2020. A Phase II Acid Rain permit renewal application is to be submitted no later than July 1, 2020.

This significant modification to the Article 3 Federal Operating Permit document replaces the permit document issued January 1, 2014 (as modified June 1, 2015), however, the expiration date remains unchanged.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil charges. Please read all conditions carefully.

In evaluating the significant modification request and arriving at a final decision for approval, the Department deemed the application complete on July 21, 2015.

This permit modification approval does not relieve Virginia Electric and Power Company of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit modification is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

In the event that you receive this permit by mail, three days are added to the thirty day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please call me at (276) 676-4835.

Sincerely,



Rob Feagins
Air Permit Manager

GRF/TMD/td/P-11526T4T5-15.docx

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Office of Permits and Air Toxics (3AP11), U.S. EPA, Region 3
(electronic file submission)



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Article 3 Federal Operating Permit

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 of the State Air Pollution Control Board 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, 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:	Virginia Electric and Power Company
Facility Name:	Virginia City Hybrid Energy Center
Facility Location:	3425 Russell Creek Road St. Paul, Wise County, Virginia
VA Registration Number:	11526
Permit Number:	SWRO11526

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VIII)

Federally Enforceable Requirements - Title IV Acid Rain (Section IX)

Federally Enforceable Requirements – Cross-State Air Pollution Rule Requirements (Section X)

January 1, 2014

Effective Date

June 1, 2015

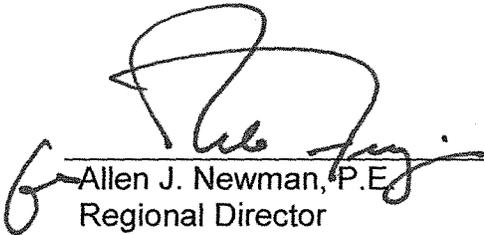
Minor Modification Date

September 30, 2015

Significant Modification Date

December 31, 2018

Expiration Date


Allen J. Newman, P.E.
Regional Director

SEPTEMBER 30, 2015
Signature Date (as modified)

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Permit Conditions, 54 pages

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I. Facility Information

Permittee Information

Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen Virginia 23060

Facility

Virginia City Hybrid Energy Center
3425 Russell Creek Road
St. Paul, Virginia 24283

Responsible Official

O. Preston Sloane
Station Director

Contact Person

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

Acid Rain and CSAPR Trading Programs Designated Representative

Edward H. Baine
Vice President, Power Generation, System Operations

County-Plant Identification Number: 51-195-00210

ORIS Code: 56808

Facility Description: NAICS 221112 – Fossil Fuel Electric Power Generation -
The Virginia City Hybrid Energy Center is an electric power generation facility. Electric power is generated using steam produced by two circulating fluidized bed (CFB) boilers, each with a maximum rated input heat capacity of 3,132 million Btu per hour (MMBtu/hr), which drives a single steam turbine generating unit. The CFB boilers are fueled with coal, coal refuse, coke-derived solid fuel and biomass (wood), which are combusted in a matrix of fuel and limestone, supported as a fluidized bed by the upward flow of combustion air. Ultra low sulfur distillate oil is used for boiler start-up. Other combustion units at the facility, each fired with ultra low sulfur distillate oil or ultra low sulfur diesel fuel, consist of an emergency generator engine with a maximum rated input heat capacity of 5.8 MMBtu/hr, and a fire-water pump engine with a maximum rated input heat capacity of 2.8 MMBtu/hr.

Support operations at the facility include handling, processing, and storage of fuel, ash, activated carbon, limestone and lime.

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/Utility Units							
CFB1	S1	Foster Wheeler circulating fluidized bed boiler	3,132 MMBtu/hr heat input capacity (Nominal)	Foster Wheeler limestone injection, Allied flue gas desulfurization	CFB1-1, CFB1-2	SO ₂ , HCl, HF, H ₂ SO ₄	PSD permit dated 5/2/14, and MACT permit dated 6/26/14
				Lechler selective non-catalytic converter with ammonia injection	CFB1-3,	NO _x ,	
				Allied baghouse	CFB1-4	PM/PM-10/ PM-2.5, Hg	
				ADA activated carbon injection	CFB1-5	Hg, VOC	
CFB2	S2	Foster Wheeler circulating fluidized bed boiler	3,132 MMBtu/hr heat input capacity (Nominal)	Foster Wheeler limestone injection, Allied flue gas desulfurization	CFB2-1, CFB2-2	SO ₂ , HCl, HF, H ₂ SO ₄	PSD permit dated 5/2/14, and MACT permit dated 6/26/14
				Lechler selective non-catalytic converter with ammonia injection	CFB2-3,	NO _x ,	
				Allied baghouse	CFB2-4	PM/PM-10/ PM-2.5, Hg	
				ADA activated carbon injection	CFB2-5	Hg, VOC	

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
EDG	EDGS	Cummins model QSK23-G7 NR2 emergency diesel generator, (2009)	1,220 brake horsepower/5.8 MMBtu/hr heat input capacity, (Nominal)	Miratech Corp/HUG Engineering selective catalytic converter	SCR1	NOx	PSD permit dated 5/2/14
EFP	S4	John Deere Clarke model JW6H-UFAD70 emergency fire pump, (2009)	376 brake horsepower/2.8 MMBtu/hr heat input capacity, (Nominal)	Ignition timing retard	N/A	NOx	PSD permit dated 5/2/14
Material Receiving, Handling, Processing, and Storage Equipment							
P1	----	Automated coal reclaim system	1,500 tons/hr	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
P2	P2S	Coal crusher building: two Pennsylvania Crusher model SXCB227 reversible hammermills	750 tons/hr, each crusher	SLY baghouse	CBB	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
P3	P3S	Coal/Limestone tripper: two cars (conveyor drop points to boiler silos)	750 tons/hr, each car	SLY baghouse	TBB	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
P4 & P5	P4S & P5S	Two fly ash silos	160 tons/hr, each silo	One Torit model 162MBT-10 baghouse, each silo	FAS1B & FAS2B	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
P6	P6S & P6Sa	Bed ash silo	160 tons/hr	Two Torit model 243MBT-10 baghouses	BASB1 & BASB2	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
HLS-1 & HLS-2	P7S & P8S	Two hydrated lime silos	300 tons, each	One FLSmith – Dust Collector #1 model 36TA8FM, each silo	HLSB-1 & HLSB-2	PM/PM-10/ PM-2.5	Article 6 permit dated 3/23/09
ACS-1 & ACS-2	P9S & P10S	Two activated carbon silos	100 tons, each	One Torit model TBV-4 cartridge collector, each silo	ACISB-1 & ACISB-2	PM/PM-10/ PM-2.5	Article 6 permit dated 3/23/09
FOM	-----	Fuel oil storage tank (above ground)	575,200 gallons	Conservation vent	N/A	VOC	PSD permit dated 5/2/14
MHCU	-----	Coal truck unloading facility	1,500 tons/hr	Partial enclosure & wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHCS	-----	Coal screens	1,500 tons/hr	Partial enclosure & wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHCB	-----	Coal breaker	400 tons/hr	Partial enclosure & wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHST	-----	Coal stackers (stacking to storage pile)	1,500 tons/hr	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHRS	-----	Breaker reject storage silo	250 tons	Vent filter	-----	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
LTU	LTUS	Limestone truck unloading facility	325 tons/hr	Wheelabrator model 120 TA-SB Modular Jet 3 continuous automatic pulse type dust collector	LTUSB	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHLS	-----	Limestone stacking to storage piles	325 tons/hr	Enclosure	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHLR	-----	Limestone reclaim system	400 tons/hr	Enclosure	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
MHLC	-----	Six limestone crushers	20 tons/hr, each crusher	Vented to CFB boilers	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHBU	-----	Biomass truck unloading facility	300 tons/hr	Partial enclosure & wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHBR	-----	Biomass reclaim system	150 tons/hr	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
AHHT	-----	Ash hauling (trucks)	40 tons/truck	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
AHAP	-----	Ash placement in Solid Waste Management Facility (SWMF)	N/A	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHHR	-----	Facility haul roads	N/A	Wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHSP	-----	Storage pile activity	N/A	PM/PM-10/ PM-2.5	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
AHSC	-----	Soil cover operation at the SWMF	N/A	Vegetative cover/wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14
MHTU	-----	Railcar coal unloading facility (not constructed)	1,500 tons/hr	Partial enclosure & wet suppression	N/A	PM/PM-10/ PM-2.5	PSD permit dated 5/2/14

*The Size/Rated Capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – Circulating Fluidized Bed Boilers (CFB1 and CFB2), Emergency Generator Engine (EDG) and Emergency Fire Pump Engine (EFP)

A. Limitations

1. Particulate matter emissions and particulate hazardous air pollutant emissions from each CFB boiler shall be controlled by a fabric filter baghouse. Each fabric filter baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C, Condition 2 of 5/2/14 PSD Permit and Condition 2 of 6/26/14 MACT Permit)
2. Sulfur dioxide and sulfuric acid mist emissions from the CFB boilers shall be controlled by limestone injection into each boiler and a flue gas desulfurization system for each boiler. Each limestone injection and flue gas desulfurization system shall be provided with adequate access for inspection. This condition applies at all times except during startup and shutdown of the CFB boilers.
(9 VAC 5-80-490 B & C and Condition 3 of 5/2/14 PSD Permit)
3. Emissions of nitrogen oxides from the CFB boilers shall be controlled by selective non-catalytic reduction using ammonia injection for each boiler. Each selective non-catalytic reduction system shall be provided with adequate access for inspection. This condition applies at all times except during startup and shutdown of the CFB boilers.
(9 VAC 5-80-490 B & C and Condition 4 of 5/2/14 PSD Permit)
4. Carbon monoxide and volatile organic compound emissions from the CFB boilers, the emergency generator engine and the fire pump engine shall be controlled by good combustion practices. Each boiler and engine shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C and Condition 5 of 5/2/14 PSD Permit)
5. Emissions of nitrogen oxides from the emergency generator engine and the fire pump engine shall be controlled by ignition timing retard or an equivalent control technology or method, at a minimum.
(9 VAC 5-80-490 B & C and Condition 6 of 5/2/14 PSD Permit)
6. Hydrogen chloride and hydrogen fluoride emissions from the CFB boilers shall be controlled by limestone injection into each boiler, a flue gas desulfurization system for each boiler, and a fabric filter baghouse for each boiler. Each limestone injection, flue gas desulfurization system and fabric filter baghouse shall be provided with adequate access for inspection. This condition applies at all times except during startup and shutdown of the CFB boilers.
(9 VAC 5-80-490 B & C and Condition 3 of 6/26/14 MACT Permit)
7. Volatile organic hazardous air pollutant emissions from the CFB boilers shall be controlled by good combustion practices, an activated carbon injection system for

each boiler and a fabric filter baghouse for each boiler. Each boiler, activated carbon injection system, and fabric filter baghouse shall be provided with adequate access for inspection.

(9 VAC 5-80-490 B & C and Condition 4 of 6/26/14 MACT Permit)

8. Mercury emissions from the CFB boilers shall be controlled by a flue gas desulfurization system for each boiler, an activated carbon injection system for each boiler and a fabric filter baghouse for each boiler. Each flue gas desulfurization system, activated carbon injection system and fabric filter baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C, 40 CFR 63.43(g) and Condition 5 of 6/26/14 MACT Permit)
9. The permittee shall operate and maintain the emergency generator engine and fire pump engine and associated control devices in accordance with the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. The permittee may only change those settings that are permitted by the manufacturer. The emergency generator engine and fire pump engine shall be certified to the emission standards in 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, National Fire Protection Association nameplate) engine power. Each engine must be installed and configured according to the manufacturer's specifications, at a minimum. The permittee shall operate each engine that achieves the emission standards as required in 40 CFR 60.4205 over the entire life of the engine.
(9 VAC 5-80-490 B & C, 40 CFR 60.4206, 40 CFR 60.4211(a) and (c), and Condition 18 of 5/2/14 PSD Permit)
10. Operation of the emergency generator engine and fire pump engine for the purpose of maintenance checks and readiness testing shall not exceed 100 hours per year, each, provided the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. If additional time is needed for maintenance checks and readiness testing, the permittee shall submit a written request for additional time to the Director, Southwest Regional Office prior to the additional operation. A written request is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency engines more than 100 hours per year. The engines shall not be operated more than 500 hours per year, each for any reason, including maintenance, testing and emergency purposes.
(9 VAC 5-80-490 B & C, 40 CFR 60.4211(f) and Condition 19 of 5/2/14 PSD Permit)
11. Heat input to each CFB boiler shall not exceed $27,436,320 \times 10^6$ 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 B & C, Condition 20 of 5/2/14 PSD Permit and Condition 7 of 6/26/14 MACT Permit)

12. The approved fuels for the CFB boilers are bituminous coal, coal refuse, coke-derived solid fuel, wood/bark, distillate oil and diesel fuel. The fuels shall meet the following specifications:

COAL, COAL REFUSE and COKE-DERIVED SOLID FUEL:

Maximum sulfur content as-fired: 2.28% as determined by ASTM D3177, D4239, or a DEQ-approved equivalent method.

COAL, COAL REFUSE and COKE-DERIVED SOLID FUEL:

Maximum annual average sulfur content: 1.5% calculated monthly as the average of the previous 12-month period using results from weekly sampling and analysis required in Condition 26.

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment: 0.0015%

WOOD/BARK excluding any wood which contains chemical treatments or has affixed thereto paint and/or finishing materials or paper or plastic laminates.

DIESEL FUEL which meets the ASTM D975 specification for numbers 1-D S15 or 2-D S15 diesel fuel:

Maximum sulfur content per shipment: 0.0015%

(9 VAC 5-80-490 B & C, Condition 21 of 5/2/14 PSD Permit and Condition 8 of 6/26/14 MACT Permit)

13. In the event the permittee desires to burn waste coal, it shall present a plan to DEQ, in consultation with the Virginia Department of Mines, Minerals and Energy (DMME), for approval detailing the proposed pile or piles to be burned. The DEQ, in consultation with DMME, may approve, reject, or amend the plan, including requiring the permittee to burn or remove and store safely all coal from one or more piles. The DEQ shall not require through this approval process, the use of more waste coal than would otherwise be burned in the facility.
(9 VAC 5-80-490 B & C and Condition 22 of 5/2/14 PSD Permit)

14. After the first 36 months of commercial operation, the company shall use at least 5 percent biomass per year. Starting in the fifth year of commercial operation, the company shall increase the use of biomass by an additional 1 percent per year up to no less than 10 percent per year thereafter. For purposes of such biomass requirement, the percent shall be determined by the total biomass heat input for any given year divided by the total heat input for any given year averaged over a rolling three years.

Should market conditions indicate that biomass fuel has a significant ratepayer impact or promotes tree cutting, such biomass requirement shall be reduced or eliminated until market conditions correct. Dominion shall retain an independent consultant to advise with such matters and shall obtain approvals for the elimination or reduction of the practice from DEQ.
 (9 VAC 5-80-490 B & C and Condition 24 of 5/2/14 PSD Permit)

15. The throughput of coal, coal refuse and coke-derived solid fuel to each CFB boiler shall not exceed 1,760,760 tons 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 B & C and Condition 10 of 6/26/14 MACT Permit)

16. The throughput of wood/bark to each CFB boiler shall not exceed 685,000 tons 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 B & C, Condition 25 of 5/2/14 PSD Permit and Condition 11 of 6/26/14 MACT Permit)

17. The approved fuels for the emergency generator engine and fire pump engine are distillate oil and diesel fuel. The distillate oil shall meet the ASTM D396 specification for numbers 1 or 2 fuel oil except that the maximum sulfur content shall not exceed 0.0015 percent by weight per shipment. The diesel fuel shall meet the ASTM D975 specification for numbers 1-D S15 or 2-D S15 diesel fuel. A change in the fuels may require a permit to modify and operate.
 (9 VAC 5-80-490 B & C, 40 CFR 60.4207(b) and Condition 26 of 5/2/14 PSD Permit)

18. Emissions from the operation of the CFB boilers shall not exceed the following limits:

	<u>Each Boiler (lb/MMBtu)</u>	<u>Each Boiler (lb/hr)^a</u>	<u>Combined Total (tons/yr)</u>
Filterable Particulate Matter (PM)			246.92
3-hour average	0.010	31.32	
30-day rolling average	0.009		
Total PM-10 (filterable & condensable)			329.24
3-hour average	0.012	37.58	
Total PM-2.5 (filterable & condensable)			329.24
3-hour average	0.012	37.58	

	<u>Each Boiler (lb/MMBtu)</u>	<u>Each Boiler (lb/hr)^a</u>	<u>Combined Total (tons/yr)</u>
Sulfur Dioxide ^b			603.6
3-hour average	0.035	109.62	
24-hour average	0.029	90.83	
30-day rolling average	0.022	0.21 lb/MWh (gross)	
Nitrogen Oxides (as NO ₂)			1,920.54
30-day rolling average	0.07 ^c	219.24	
Carbon Monoxide			2,743.63
30-day rolling average	0.10 ^d	313.2	
Volatile Organic Compounds			137.18
3-hour average	0.005	15.66	
Sulfuric Acid Mist (H ₂ SO ₄)			96.03
3-hour average	0.0035	10.96	
Hydrogen Fluoride			12.90
3-hour average	0.00047	1.47	
Hydrogen Chloride			79.54
3-hour average	0.0029	9.08	
	<u>(lb/MW/hr)</u>		
Mercury ^e	0.00000088	(0.090 lb/TBtu equivalent)	

^a Compliance with the lb/hr limit is based on the averaging period indicated in the appropriate row.

^b Start-up is defined as the period beginning with initial firing of distillate oil and ending at 40 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. Shutdown is defined as the period beginning with the load decreasing from 40 percent and ending when the bed material fluidizing air has been discontinued. Emissions occurring during start-up and shutdown shall be monitored, recorded, reported and included in the calculation of the 24-hour rolling average, 30-day rolling average, and annual emission rates, but not the 3-hour rolling average.

^c Emission limit applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limit for loads equal to or greater than 75 percent is fixed at 0.07 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent.

The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:

$$EL_{NOx\ 30d\ L} = \frac{\sum_{i=1}^n EL_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$EL_{NOx\ 30d\ L}$ = 30-day weighted average nitrogen oxides emission limit; lb/MMBtu

EL_i = 0.07 lb/MMBtu for loads equal to or greater than 75 percent, 0.11 lb/MMBtu for loads equal to or greater than 50 percent but less than 75 percent, or 0.15 lb/MMBtu for loads less than 50 percent

IR_i = the heat input rate corresponding to the incremental CEMS reading; MMBtu

i = incremental CEMS reading having a non-zero heat input rate

n = the number of CEMS readings in the rolling 30-day period when there is a heat input rate in the load range

- ^d Emission limit applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limit for loads equal to or greater than 75 percent is fixed at 0.10 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent. The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:

$$EL_{CO\ 30d\ L} = \frac{\sum_{i=1}^n EL_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$EL_{CO\ 30d\ L}$ = 30-day weighted average carbon monoxide emission limit; lb/MMBtu

- EL_i = 0.10 lb/MMBtu for loads equal to or greater than 75 percent, or 0.20 lb/MMBtu for loads less than 75 percent
- IR_i = the heat input rate corresponding to the incremental CEMS reading; MMBtu
- i = incremental CEMS reading having a non-zero heat input rate
- n = the number of incremental CEMS readings in the rolling 30-day period when there is a heat input rate in the load range

^e Compliance with the emission limit shall be based on the total mercury emissions from each CFB boiler contributed by each fuel burned during the compliance period and total MWhr contributed by each fuel burned during the compliance period. The permittee shall calculate the mercury emission rate in lb/MWhr for each calendar month of the year, using hourly mercury concentrations measured in accordance with Condition 30 and in conjunction with hourly stack gas volumetric flow rates measured in accordance with Condition 29, and hourly gross electrical outputs, determined in accordance with Condition 33. Compliance with the mercury emission limits shall be determined on a 12-month rolling average basis and using stack test data if stack testing is conducted during that month. Mercury emissions contributed by wood/bark and fuel oil combustion shall be calculated using emission factors or methods approved by the Director, Southwest Regional Office. Compliance with the applicable emission limit shall be determined on a 12-month rolling average basis.

Annual emissions are derived from the estimated overall emission contribution from operating limits including startup and shutdown. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Annual emissions are calculated monthly as the sum of each consecutive 12-month period. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions 1 – 4, 6 – 8, 11, 12, 15, 16, 21, 28, 30, 31, 36, 37, 40 and 41.

(9 VAC 5-80-490 B & C, Condition 29 of 5/2/14 PSD Permit and Condition 13 of 6/26/14 MACT Permit)

19. Emissions from the operation of the emergency generator engine shall not exceed the following limits:

	<u>g/hp-hr</u>	<u>lb/hr</u>	<u>tons/yr</u>
Particulate Matter/PM-10	0.075		
Nitrogen Oxides (as NO ₂)	2.6	5.73	1.43
Carbon Monoxide	2.6	5.73	1.43
Volatile Organic Compounds	0.3		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these

emission limits may be determined as stated in, but not limited to, Conditions 4, 5, 9, 10, 17 and 22.
 (9 VAC 5-80-490 B & C, 40 CFR 60.4205(b), 40 CFR 60.4212(c) and Condition 30 of 5/2/14 PSD Permit)

20. Emissions from the operation of the fire pump engine shall not exceed the following limits:

	<u>g/hp-hr</u>	<u>lb/hr</u>	<u>tons/yr</u>
Particulate Matter/PM-10	0.15		
Nitrogen Oxides plus Volatile Organic Compounds	4.8	12.70	3.17
Carbon Monoxide	2.6	6.89	1.72

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions 4, 5, 9, 10, 17 and 22.
 (9 VAC 5-80-490 B & C, 40 CFR 60.4205(c) and Condition 31 of 5/2/14 PSD Permit)

21. Visible emissions from the common exhaust stack with individual flues for the CFB boilers shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
 (9 VAC 5-80-490 B & C, Condition 38 of 5/2/14 PSD Permit and Condition 14 of 6/26/14 MACT Permit)
22. Visible emissions from the emergency generator engine exhaust stack and the fire pump engine exhaust stack shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
 (9 VAC 5-80-490 B & C and Condition 39 of 5/2/14 PSD Permit)
23. The permittee shall comply with all applicable requirements contained in 40 CFR Part 63, Subpart A.
- a. In particular, for the CFB boilers, the permittee shall comply with the following applicable requirements of 40 CFR 63, Subpart A, related to startup, shutdown and malfunction as defined at 40 CFR 63.2:
- i. The permittee shall at all times, including periods of startup, shutdown, and malfunction as defined at 40 CFR 63.2, operate the CFB boilers and associated air pollution control equipment and monitoring equipment, in

a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard(s) or comply with the applicable Startup, Shutdown and Malfunction Plan (Plan), as required below.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department and USEPA, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the Plan), review of operation and maintenance records, and inspection of the CFB boilers.

- ii. The permittee shall correct malfunctions as soon as practicable after their occurrence in accordance with the applicable Plan. To the extent that an unexpected event arises during a startup, shutdown or malfunction, the permittee shall comply by minimizing emissions during such a startup, shutdown and malfunction event consistent with safety and good air pollution control practices.
 - iii. These operations and maintenance requirements, which are established pursuant to Section 112 of the Clean Air Act, are enforceable independent of applicable emissions limitations and other applicable requirements.
- b. The permittee shall develop, implement and maintain written Startup, Shutdown and Malfunction Plans (Plans) that describe, in detail, the plant during periods of startup, shutdown and malfunction and a program of corrective action for a malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant emission standards. These Plans shall be developed to satisfy the purposes set forth in 40 CFR 63.6(e)(3)(i)(A), (B) and (C).
- i. During periods of startup, shutdown and malfunction of an emission unit, the permittee shall operate and maintain such unit, including associated air pollution control and monitoring equipment, in accordance with the procedures specified in the applicable Plan required in paragraph b of this condition.
 - ii. When actions taken by the permittee during startup, shutdown or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the applicable Plan, the permittee shall keep records for that event which demonstrate that the procedures specified in the Plan were followed. In addition, the permittee shall keep records of these events as specified in 40 CFR 63.10(b), including records of occurrence and duration of each startup, shutdown or malfunction and monitoring equipment. Furthermore, the permittee shall confirm in the periodic compliance report that actions taken during periods of startup, shutdown and malfunction were consistent with the applicable Plan, as required by 40 CFR 63.10(d)(5).

- iii. If an action taken by the permittee during a startup, shutdown or malfunction (including an action taken to correct a malfunction) of an emission unit is not consistent with procedures specified in the applicable Plan, and the emission unit exceeds a relevant emission standard, then the permittee must record the actions taken for that event and must promptly report such actions as specified by 40 CFR 63.6(d)(5), unless otherwise specified elsewhere in this permit.
 - iv. The permittee shall make changes to the Plan for an emission unit if required by the Department or USEPA, as provided for by 40 CFR 63.6(e)(3)(vii), or as otherwise required by 40 CFR 63.6(e)(viii).
 - v. These Plans are records required by this permit, which the permittee must retain in accordance with the general requirements for retention and availability of records. In addition, when the permittee revises a Plan, the permittee must also retain and make available the previous version of the Plan for a period of at least 5 years after such revision.
(9 VAC 5-80-490 B & C, 40 CFR Part 63 Subpart A, and Condition 15 of 6/26/14 MACT Permit)
24. The permittee shall comply with applicable provisions of 40 CFR Part 63, Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units no later than April 16, 2015.
(9 VAC 5-80-490 B & C and 40 CFR 63.9984(b))
25. The permittee shall follow the startup or shutdown requirements for coal-fired electric generating units indicated in Table 3 of 40 CFR Part 63, Subpart UUUUU. The permittee shall use either distillate oil or diesel fuel as specified in this permit during periods of startup or shutdown.
(9 VAC 5-80-490 B & C, 40 CFR 63.10000(a), 40 CFR 63.10005(j), 40 CFR 63.10011(f) & (g) and 40 CFR 63.10021(a))

B. Monitoring

26. The permittee shall sample and analyze the fuel as fired in each CFB boiler for mercury, fluorides, chlorides, sulfur and Btu content no less than once each calendar week using methods approved by the Director, Southwest Regional Office. Results of analyses shall be used in calculations to verify compliance with mercury, hydrogen fluoride, hydrogen chloride and sulfuric acid mist emission limits for the CFB boilers. A record of each analysis shall be maintained and shall include, at a minimum, content of each parameter, company and individual collecting the sample, identification of sampling method used, sample mass, number of samples, date sample collected, location of fuel when the sample was taken, date of analysis, company and individual conducting the analysis.
(9 VAC 5-80-490 E, Condition 23 of 5/2/14 PSD Permit and Condition 9 of 6/26/14 MACT Permit)

27. The permittee shall obtain a certification from the fuel supplier with each shipment of coal, coal refuse, coke-derived solid fuel, wood/bark, distillate oil and diesel fuel. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the fuel was received;
 - c. The quantity of fuel delivered in the shipment;
 - d. A statement that the oil meets the ASTM D396 specification for fuel oil numbers 1 or 2, or ASTM D975 for diesel fuel numbers 1-D S15 or 2-D S15;
 - e. The sulfur content of the fuel, excluding wood/bark;
 - f. Documentation of sampling of the fuel indicating the location of the fuel when the sample was taken; and
 - g. The methods used to determine the sulfur content of the fuel.

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. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-490 F, Condition 27 of 5/2/14 PSD Permit) and Condition 12 of 6/26/14 MACT Permit)

28. The permittee shall install, calibrate, maintain, operate and record the output of continuous emission monitoring systems (CEMS) for measuring emissions of sulfur dioxide, nitrogen oxides and carbon monoxide from each CFB boiler, and either the oxygen or carbon dioxide content of the flue gases from each CFB boiler at each location where emissions of sulfur dioxide or nitrogen oxides are monitored. Each CEMS shall be installed, calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR 60.13, 40 CFR 60.49Da(w)(1) through (w)(4), DEQ approved procedures and approved CEMS Quality Assurance/Quality Control Plan, which shall be kept on site and available for inspection.
- (9 VAC 5-80-490 E, 40 CFR 63.10000(c)(1)(v), 40 CFR 63.10007(a)(1), 40 CFR 63.10010(b) & (f)(1) – (4), 40 CFR 63.10020, Condition 42 of 5/2/14 PSD Permit and Condition 16 of 6/26/14 MACT Permit)

29. The permittee shall install, calibrate, maintain, operate and record the output of continuous flow monitoring systems for measuring the volumetric flow rate of exhaust gases discharged to the atmosphere from each CFB boiler. Each flow monitoring system shall be installed, calibrated, maintained and operated in accordance with the applicable requirements of 40 CFR 60.13, 40 CFR 60.49Da(l) or (m), and DEQ approved procedures.

(9 VAC 5-80-490 E, 40 CFR 63.10007(a)(1), 40 CFR 63.10010(c), 40 CFR 63.10020, Condition 43 of 5/2/14 PSD Permit and Condition 17 of 6/26/14 MACT Permit)

30. The permittee shall install, calibrate, maintain and operate a CEMS to measure and record the concentration of mercury in the exhaust gases from each CFB boiler, as follows:
- a. The owner or operator must install, operate and maintain each CEMS according to Performance Specification 12A in appendix B of 40 CFR Part 60.
 - b. The owner or operator must conduct a performance evaluation of each CEMS according to the requirements of 40 CFR 60.13 and Performance Specification 12A in appendix B of 40 CFR Part 60.
 - c. The owner or operator must operate each CEMS in accordance with the following requirements:
 - i. As specified in 40 CFR 60.13(e)(2), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute period;
 - ii. The owner or operator must reduce CEMS data as specified in 40 CFR 60.13(h);
 - iii. The owner or operator shall use all valid data points collected during the hour to calculate the hourly average mercury concentration; and
 - iv. The owner or operator must record the results of each required certification and quality assurance test of the CEMS.
 - d. Mercury CEMS data collection must conform to the following requirements:
 - i. For each calendar month in which the affected unit operates, valid hourly mercury concentration data, stack gas volumetric flow rate data, moisture data (if required), and electrical output data (i.e., valid data for all of these parameters) shall be obtained for at least 75 percent of the unit operating hours in the month.
 - ii. Data reported to meet the requirements of paragraph d.i of this condition shall not include hours of unit startup, shutdown or malfunction. In addition, data reported shall not include data substituted using the missing data procedures in 40 CFR part 75, subpart D, nor shall the data have been bias adjusted according to the procedures of 40 CFR part 75.
 - iii. If valid data are obtained for less than 75 percent of the unit operating hours in a month, you must discard the data collected in that month and replace the data with the mean of the individual monthly emission rate values determined in the last 12 months. In the 12-month rolling average calculation, this substitute Hg emission rate shall be weighted according to the number of unit operating hours in the month for which the data capture requirement of paragraph d.i. of this condition was not met.

- iv. Notwithstanding the requirements of Condition 23.a.iii, if valid data are obtained for less than 75 percent of the unit operating hours in another month in that same 12-month rolling average cycle, discard the data collected in that month and replace the data with the highest individual monthly emission rate determined in the last 12 months. In the 12-month rolling average calculation, this substitute mercury emission rate shall be weighted according to the number of unit operating hours in the month for which the data capture requirement of paragraph d.i. of this condition was not met.

The requirement to install, calibrate, maintain and operate the mercury CEMS may be deferred upon written approval by DEQ in the event that the permittee makes an adequate demonstration that mercury CEMS are not reliable compliance indicators at the detection levels needed to demonstrate compliance with this permit. For any period during which installation and operation of mercury CEMS is deferred, the permittee shall install, certify, maintain and operate a mercury sorbent trap monitoring system to measure the concentration of mercury in the exhaust gases from each CFB boiler, in accordance with the procedures described in 40 CFR Part 60, Appendix B, Performance Specification 12B (PS-12B) and Appendix F, Procedure 5 and 40 CFR Part 63, Subpart UUUUU, Appendix A. The request to defer the mercury CEMS and install a sorbent trap monitoring system was approved by DEQ by letter dated April 21, 2009. (9 VAC 5-80-490 E, 9 VAC 5-50-40, 40 CFR 63.10010(g), 40 CFR 63.10020, 40 CFR 63.10021(b), Condition 44 of 5/2/14 PSD Permit and Condition 18 of 6/26/14 MACT Permit)

31. The permittee shall install, certify, maintain, operate and record the output of CEMS for measuring filterable PM emissions from each CFB boiler. Each CEMS shall be installed, certified, maintained and operated in accordance with the applicable requirements of 40 CFR 60.48Da(p) and 40 CFR 60.49Da(v), DEQ approved procedures and approved CEMS Quality Assurance/Quality Control Plan, which shall be kept on site and available for inspection. Each CEMS shall reflect the level of technological advancement commensurate with the current state of technology in the industry. (9 VAC 5-80-490 E, 40 CFR 63.10000(c)(1)(iv), 40 CFR 63.10007(a)(1), 40 CFR 63.10010(i)(1) – (5), 40 CFR 63.10020, Condition 45 of 5/2/14 PSD Permit and Condition 19 of 6/26/14 MACT Permit)
32. A CEMS/COMS quality control program which meets the requirements of 40 CFR 60.13 and Appendix B or F as applicable shall be implemented for all continuous monitoring systems except that Relative Accuracy Test Audits (RATA's) may be required less frequently if approved by DEQ. (9 VAC 5-80-490 E, 40 CFR 63.10007(a), Condition 47 of 5/2/14 PSD Permit and Condition 21 of 6/26/14 MACT Permit)

33. The permittee shall install, calibrate, maintain and operate the following:
- A meter measuring gross electrical output of the facility in megawatt hours (MWh); and

- A meter measuring steam production for each CFB boiler.

Steam production measurements shall be used to allocate gross electrical output to each CFB boiler. Each meter shall be operated and the output recorded on a continuous basis. Each meter shall be provided with adequate access for inspection.

(9 VAC 5-80-490 E, Condition 48 of 5/2/14 PSD Permit and Condition 22 of 6/26/14 MACT Permit)

34. The permittee shall install, calibrate, maintain and continuously operate in accordance with the manufacturer's recommendations a non-resettable hour meter to record the hours of operation of the emergency generator engine and fire pump engine.

(9 VAC 5-80-490 E, 9 VAC 5-170-160, 40 CFR 60.4209(a) and Condition 49 of 5/2/14 PSD Permit)

35. The permittee shall install, calibrate, maintain and operate a system for monitoring the throughput of each type of fuel to each CFB boiler. Each monitoring system shall be installed, calibrated and maintained in accordance with the manufacturer's recommendations at a minimum and shall be provided with adequate access for inspection.

(9 VAC 5-80-490 E, 40 CFR 63.43(g), Condition 50 of 5/2/14 PSD Permit and Condition 23 of 6/26/14 MACT Permit)

36. The average nitrogen oxides emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit of 0.07 lb/MMBtu applicable at loads equal to or greater than 75 percent of maximum. The permittee shall calculate the average nitrogen oxides emission rate for each CFB boiler using all valid CEMS values measured at loads of 75 percent or greater for each rolling 30-day period using the following formula:

$$ER_{NOx\ 30d\ H} = \frac{\sum_{i=1}^n ER_i}{n}$$

where,

$ER_{NOx\ 30d\ H}$ = 30-day average nitrogen oxides emission rate, for the load range of 75 percent and greater; lb/MMBtu;

ER_i = the incremental CEMS-measured nitrogen oxides emission rate at loads 75 percent and greater; lb/MMBtu;

i = incremental CEMS reading;

n = the number of incremental CEMS readings in the rolling 30-day period when the heat input rate was in the load range of 75 percent and greater.

The 30-day load weighted average nitrogen oxides emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit calculated in accordance with Condition 18, for loads less than 75 percent of maximum. The permittee shall calculate the 30-day load weighted average nitrogen oxides emission rate for each CFB boiler using all valid CEMS values measured at all loads greater than zero using the following formula:

$$ER_{NOx\ 30d\ L} = \frac{\sum_{i=1}^n ER_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$ER_{NOx\ 30d\ L}$ = 30-day weighted average nitrogen oxides emission rate; lb/MMBtu;

ER_i = the incremental hour's CEMS-measured nitrogen oxides emission rate; lb/MMBtu;

IR_i = the heat input rate corresponding to the incremental CEMS reading; MMBtu;

i = incremental CEMS reading having a non-zero heat input rate;

n = the number of incremental CEMS readings in the rolling 30-day period when there is a heat input rate.

Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The requirements of this condition shall not limit the validity or use of other methods of compliance determination as may be required in this permit or approved by DEQ.

(9 VAC 5-80-490 E and Condition 57 of 5/2/14 PSD Permit)

37. The average carbon monoxide emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit of 0.10 lb/MMBtu applicable at loads equal to or greater than 75 percent of maximum. The permittee shall calculate the average carbon monoxide emission rate for each CFB boiler using all valid CEMS values measured at loads of 75 percent or greater for each rolling 30-day period using the following formula:

$$ER_{CO\ 30d\ H} = \frac{\sum_{i=1}^n ER_i}{n}$$

where,

$ER_{CO\ 30d\ H}$ = 30-day average carbon monoxide emission rate, for the load range of 75 percent and greater; lb/MMBtu

ER_i = the incremental CEMS-measured carbon monoxide emission rate at loads of 75 percent and greater; lb/MMBtu

i = incremental CEMS reading

n = the number of incremental CEMS readings in the rolling 30-day period when the heat input rate was in the load range of 75 percent and greater

The 30-day load weighted average carbon monoxide emission rate for each CFB boiler shall be used to demonstrate compliance with the emission limit calculated in accordance with Condition 18, for loads less than 75 percent of maximum. The permittee shall calculate the 30-day load weighted average carbon monoxide emission rate for each CFB boiler using all valid CEMS values measured at all loads greater than zero using the following formula:

$$ER_{CO\ 30d\ L} = \frac{\sum_{i=1}^n ER_i \times IR_i}{\sum_{i=1}^n IR_i}$$

where,

$ER_{CO\ 30d\ L}$ = 30-day weighted average carbon monoxide emission rate; lb/MMBtu

ER_i = the incremental hour's CEMS-measured carbon monoxide emission rate; lb/MMBtu

IR_i = the heat input rate corresponding to the incremental CEMS reading; MMBtu

i = incremental CEMS reading having a non-zero heat input rate

n = the number of incremental CEMS readings in the rolling 30-day period when there is a heat input rate

Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The requirements of this condition shall not limit the validity or use of other

methods of compliance determination as may be required in this permit or approved by DEQ.
(9 VAC 5-80-490 E and Condition 27 of 6/26/14 MACT Permit)

38. The permittee shall conduct a performance tune-up according to 40 CFR 63.10021(e) of each CFB boiler burner and combustion controls. For each CFB boiler not employing neural network combustion optimization during normal operation, each performance tune-up must be no more than 36 calendar months after the previous performance tune-up. For each CFB boiler employing neural network combustion optimization systems during normal operation, each performance tune-up must be no more than 48 calendar months after the previous performance tune-up. As part of the initial compliance demonstration, a tune-up may occur prior to April 16, 2012, so that existing sources without neural networks have up to 42 calendar months or, in the case of units employing neural network combustion controls, up to 54 calendar months after the date specified for existing sources in 40 CFR 63.9984.
(9 VAC 5-80-490 E, 40 CFR 63.9991(a)(1), 40 CFR 63.10000(e), 40 CFR 63.10005(e) & (f), 40 CFR 63.10006(i) and 40 CFR 63.10021(a) & (e))

C. Recordkeeping

39. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. Monthly and annual hours of operation of the emergency generator engine and the fire pump engine. Annual hours of operation 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 individual monthly totals for the preceding 11 months.
 - b. Monthly and annual heat input to each CFB boiler. Annual heat input 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 individual monthly totals for the preceding 11 months.
 - c. Monthly and annual throughput of each type of fuel and limestone to each CFB boiler. 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.
 - d. Emissions calculations, based on data from fuel analyses, stack tests and CEMS, for each CFB boiler using calculation methods approved by the

Director, Southwest Regional Office, to verify compliance with the applicable emission limits.

- e. Nitrogen oxides and carbon monoxide emission limit calculations in accordance with Condition 18.
- f. Nitrogen oxides and carbon monoxide emission rate calculations in accordance with Conditions 36 and 37, respectively.
- g. All fuel supplier certifications.
- h. Results of each as-fired fuel sample analysis.
- i. Annual sulfur content of coal, coal refuse and coke-derived solid fuel determined on a 12-month rolling average basis using results from weekly sampling and analysis required in Condition 26.
- j. Information required in each Excess Emission Report and continuous monitoring system Semi-Annual Report as required in this permit.
- k. Gross electrical output, in MWh, for the facility and steam production for each CFB boiler.
- l. Continuous monitoring system calibrations and calibration checks, percent operating time, excess emissions, and adjustments and maintenance performed on continuous monitoring systems and devices.
- m. Results of all stack tests, visible emission evaluations and performance evaluations.

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

(9 VAC 5-80-490 F, 40 CFR 63.43(g), 9 VAC 5-50-50, 9 VAC 5-50-410, 40 CFR 63.10032, 40 CFR 63.10033, Condition 60 of 5/2/14 PSD Permit, and Condition 28 of 6/26/14 MACT Permit)

D. Testing

- 40. Annually and upon request by the DEQ, the permittee shall conduct performance tests for sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, PM-10, PM-2.5, volatile organic compounds, mercury, sulfuric acid mist, hydrogen chloride and hydrogen fluoride from each CFB boiler exhaust to demonstrate compliance with the emission limits contained in this permit. In a calendar year when a relative accuracy test audit (RATA) is conducted on a CEMS, then a stack test for the pollutant monitored by that CEMS is not required. The details of the tests shall be arranged with the Director, Southwest Regional Office. In addition to performance tests, continuous compliance with emission standards and permit limits shall be determined by CEMS data.

(9 VAC 5-80-490 E & F, 40 CFR 63.10007(a)(1) & (2), (b), (d), & (e), Condition 56 of 5/2/14 PSD Permit and Condition 26 of 6/26/14 MACT Permit)

E. Reporting

41. The permittee shall submit written reports to the Director, Southwest Regional Office of excess emissions from any process monitored by a continuous monitoring system (COMS/CEMS) on a quarterly basis, postmarked by the 30th day following the end of the calendar quarter. The permittee may submit the reports in electronic format as approved by DEQ. Each report shall include the following information, at a minimum:
- 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;
 - 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.
- (9 VAC 5-80-490 F, Condition 51 of 5/2/14 PSD Permit and Condition 24 of 6/26/14 MACT Permit)
42. The permittee shall submit written reports to the Director, Southwest Regional Office for each continuous monitoring system on a semi-annual basis, postmarked by the 30th day following the end of each six-month period. The permittee may submit the reports in electronic format as approved by DEQ. Reports submitted in electronic format shall be submitted on a quarterly basis. Each report, written or electronic, shall include the following, at a minimum:
- a. Company name and address;
 - b. Date of report and beginning and ending dates of the reporting period;
 - c. A signed statement indicating whether:
 - i. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified;
 - ii. The data used to show compliance was or was not obtained in accordance with approved methods and procedures and is representative of plant performance;
 - iii. The minimum data requirements have or have not been met; or, the minimum data requirements have or have not been met for errors that were unavoidable. If the minimum quantity of emission data as required

- by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, the information indicated in 40 CFR 60.51Da(c) shall be submitted; and
- iv. Compliance with the standards has or has not been achieved during the reporting period.
- d. With regard to particulate matter, carbon monoxide, sulfur dioxide and nitrogen oxides emissions and emissions monitoring for the CFB boilers:
- i. The average particulate matter, carbon monoxide, sulfur dioxide and nitrogen oxide emission rates in lb/MMBtu for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for noncompliance with the standard; and, description of corrective actions taken;
 - ii. Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions;
 - iii. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions;
 - iv. Identification of the "F" factor used in calculations, method of determination, and type of fuel combusted;
 - v. Identification of times when hourly averages have been obtained based on manual sampling methods;
 - vi. Identification of any times when the pollutant concentration exceeded the full span of the continuous emissions monitor;
 - vii. Description of any modifications to the continuous emissions monitors which could effect the ability of the CEMS to comply with the performance specifications under 40 CFR 60, Appendices B and F;
 - viii. Summary of the results of daily continuous emissions monitor drift tests and quarterly and annual accuracy assessments as required under 40 CFR 60, Appendix F, Procedure 1; and
 - ix. For any periods for which emissions data are not obtained, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and the affected boiler during periods of data unavailability are to be compared with operation of the control system and the affected boiler before and following the period of data unavailability.

- e. With regard to mercury emissions and emissions monitoring for the CFB boilers:
 - i. The number of unit operating hours for each month in the reporting period;
 - ii. The number of unit operating hours with valid data for mercury concentration, stack gas flow rate, moisture (if required), and electrical output for each month in the reporting period;
 - iii. The monthly mercury emission rate for each month in the reporting period;
 - iv. The number of hours of valid data excluded from the calculation of the monthly mercury emission rate, due to unit startup, shutdown and malfunction for each month in the reporting period;
 - v. The 12-month rolling average mercury emission rate in lbs/year for each month in the reporting period;
 - vi. The data assessment report required by 40 CFR Part 60, Appendix F or an equivalent summary of QA test results if the QA of 40 CFR Part 75 are implemented;
 - vii. The applicable mercury emission limit; and
 - viii. The monthly average ppmv mercury content of coal burned, the monthly average Btu value of coal burned, and the mercury emission rate in both lbs/month and lbs/MW-hr for each month in the reporting period.

One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency at the following address:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 F, Condition 52 of 5/2/14 PSD Permit and Condition 25 of 6/26/14 MACT Permit)

- 43. The permittee shall furnish written notification to the Director, Southwest Regional Office of:
 - a. The anticipated date of continuous monitoring system performance evaluations postmarked not less than 30 days prior to such date.
 - b. The anticipated date of performance tests of the electric power generating equipment postmarked at least 30 days prior to such date.

Copies of the written notifications referenced in this condition are to be sent to:

Associate Director
Office of Air Enforcement (3AP40)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 F, 40 CFR 63.10030(d), Condition 61 of 5/2/14 PSD Permit and Condition 29 of 6/26/14 MACT Permit)

44. The permittee shall submit to the Director, Southwest Regional Office, each report specified in 40 CFR Part 63, Subpart UUUUU that applies to the CFB boilers, which includes, but is not limited to, the following:
- a. Mercury emissions reports required under Appendix A to Subpart UUUUU at the specified frequency.
 - b. Compliance reports on a semiannual basis according to the requirements in 40 CFR 63.10031(b). Each compliance report shall include the following, at a minimum:
 - i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi);
 - ii. The total fuel use by each CFB boiler, for each calendar month within the semiannual reporting period, including but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure;
 - iii. Indicate whether new types of fuel were burned during the reporting period. If new types of fuel were burned, include the date of the performance test where that fuel was in use;
 - iv. Include the date of the most recent tune-up for each CFB boiler. Include the date of the most recent burner inspection if it was not done every 36 (or 48) months and was delayed until the next scheduled unit shutdown;
 - v. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to the CFB boilers under 40 CFR Part 63, Subpart UUUUU and there are no deviations from the requirements for work practice standards in Table 3 of Subpart UUUUU applicable to the CFB boilers, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CEMS for particulate matter and sulfur dioxide and the mercury sorbent trap monitoring systems were out-of-control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the monitoring systems were out-of-control during the reporting period;

- vi. If there is a deviation from any emission limitation (emission limit and operating limit) or work practice standard that applies to the CFB boilers under 40 CFR Part 63, Subpart UUUUU during the reporting period, the report must contain the information in 40 CFR 63.10031(d). If there were periods during which CEMS for particulate matter or sulfur dioxide or the mercury sorbent trap monitoring systems were out-of-control, as specified in 40 CFR 63.8(c)(7), the report must contain the information in 40 CFR 63.10031(e); and
 - vii. If there is a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.
- c. Performance test results.
The required reports shall include activities and periods of startup and shutdown, if applicable. A copy of each report shall be submitted to the U.S. Environmental Protection Agency in electronic or written format, as required, in accordance with the provisions of 40 CFR 63.10031(f).
(9 VAC 5-80-490 F, 40 CFR 63.10021(f), (g) and (i), and 40 CFR 63.10031(a)-(d))

IV. Process Equipment Requirements – Material Receiving, Handling, Processing and Storage Equipment

A. Limitations

- 45. Particulate matter emissions from unloading coal, coal refuse, coke-derived solid fuel and wood/bark delivered to the facility shall be controlled by partially enclosed unloading facilities and wet suppression. The unloading facilities and wet suppression systems shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 7 of 5/2/14 PSD Permit)
- 46. Particulate matter emissions from coal screens and coal breakers shall be controlled by partial enclosures and wet suppression. The screens, breakers, enclosures and wet suppression systems shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 8 of 5/2/14 PSD Permit)
- 47. Particulate matter emissions from conveyor transfers shall be controlled by wet suppression or equivalent, at a minimum. The conveyor transfers and wet suppression systems shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 9 of 5/2/14 PSD Permit)
- 48. Particulate matter emissions from truck loading facilities for ash and coal breaker reject material shall be controlled by partial enclosures and wet suppression. Ash shall be wetted by a pug mill prior to discharge from storage silos or loaded into

tanker trucks through enclosed transfer systems. Air displaced from tanker trucks shall be vented back into the storage silos. The loading facilities, wet suppression systems, pug mills and enclosed transfer systems shall be provided with adequate access for inspection.

(9 VAC 5-80-490 C and Condition 10 of 5/2/14 PSD Permit)

49. Particulate matter emissions from coal crushing shall be controlled by a fabric filter baghouse. Each crusher and fabric filter baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 11 of 5/2/14 PSD Permit)
50. Particulate matter emissions from limestone crushing and drying shall be vented to the CFB boilers. Each crusher shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 12 of 5/2/14 PSD Permit)
51. Particulate matter emissions from handling, transfer and storage of fuel and limestone at the boiler house shall be controlled by the tripper building fabric filter baghouse. The fabric filter baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 13 of 5/2/14 PSD Permit)
52. Particulate matter emissions from the limestone unloading facility and each storage silo shall be controlled by fabric filter baghouses. Each fabric filter baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 14 of 5/2/14 PSD Permit)
53. Particulate matter emissions from pneumatic loading of the hydrated lime and activated carbon storage silos shall be controlled by fabric filters on the silo exhaust vents. The fabric filters shall be provided with adequate access for inspection and shall be in operation when the respective silo is being loaded.
(9 VAC 5-80-490 C and Condition 2 of 3/23/09 Article 6 Permit)
54. Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. Equipment for conveying or transporting coal, coal refuse, coke-derived solid fuel, wood/bark or limestone shall be covered or enclosed. Ash shall be conveyed between boiler systems, control devices and storage silos through enclosed mechanical or pneumatic transfer systems.
 - b. The loading of coal, coal refuse and coke-derived solid fuel onto storage piles shall be through stackers with telescoping chutes.
 - c. All material being stockpiled shall be kept adequately moist using water or surfactant to control dust during storage and handling or covered at all times to minimize emissions.

d. Dust from haul roads, traffic areas and construction operations shall be controlled by the application of asphalt, water or suitable chemicals.
(9 VAC 5-80-490 C and Condition 15 of 5/2/14 PSD Permit)

55. Volatile organic compound emissions from the distillate oil storage tank, emission unit ID: FOM, shall be controlled by a conservation vent. The conservation vent shall be provided with adequate access for inspection.
(9 VAC 5-80-490 C and Condition 16 of 5/2/14 PSD Permit)

56. Emissions from the limestone unloading facility baghouse exhaust shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	1.88 tons/yr
Total PM-10	0.38 lb/hr	1.66 tons/yr
Total PM-2.5	0.38 lb/hr	1.66 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.8 and IV.A.19.

(9 VAC 5-80-490 B and Condition 32 of 5/2/14 PSD Permit)

57. Emissions from the crusher building baghouse exhaust shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	2.72 tons/yr
Total PM-10	0.55 lb/hr	2.41 tons/yr
Total PM-2.5	0.55 lb/hr	2.41 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.5 and IV.A.19.

(9 VAC 5-80-490 B and Condition 33 of 5/2/14 PSD Permit)

58. Emissions from the tripper building baghouse exhaust shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	1.14 tons/yr
Total PM-10	0.23 lb/hr	1.01 tons/yr
Total PM-2.5	0.23 lb/hr	1.01 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.7 and IV.A.19.

(9 VAC 5-80-490 B and Condition 34 of 5/2/14 PSD Permit)

59. Emissions from each fly ash silo baghouse exhaust shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	1.45 tons/yr
Total PM-10	0.29 lb/hr	1.27 tons/yr
Total PM-2.5	0.29 lb/hr	1.27 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.8 and IV.A.19.

(9 VAC 5-80-490 B and Condition 35 of 5/2/14 PSD Permit)

60. Total emissions from the bed ash silo baghouse exhausts shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	3.11 tons/yr
Total PM-10	0.63 lb/hr	2.76 tons/yr
Total PM-2.5	0.63 lb/hr	2.76 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.8 and IV.A.19.

(9 VAC 5-80-490 B and Condition 36 of 5/2/14 PSD Permit)

61. Total fugitive emissions from the operation of the material handling equipment shall not exceed the following limits:

Particulate Matter (PM)	22.98 lb/hr	29.44 tons/yr
Total PM-10	6.22 lb/hr	7.80 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Conditions IV.A.1 – 4, IV.A.10, and IV.A.20.

(9 VAC 5-80-490 B and Condition 37 of 5/2/14 PSD Permit)

62. Emissions from the operation of the hydrated lime and activated carbon storage silos shall not exceed the following limits:

Filterable Particulate Matter (PM)	0.005 gr/dscf	
	0.80 tons/yr combined total	
PM-10	0.05 lb/hr each hydrated lime silo	
	0.03 lb/hr each activated carbon silo	
	0.72 tons/yr combined total	

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in, but not limited to, Condition 65. (9 VAC 5-80-490 B and Condition 4 of 3/23/09 Article 6 Permit)

63. Visible emissions from each material handling fabric filter baghouse exhaust shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-490 B and Condition 40 of 5/2/14 PSD Permit)
64. Visible emissions from each loading and unloading facility, coal screen and breaker enclosure, conveyor transfer, stockpile and any other material handling, processing and storage equipment shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-490 B, 40 CFR 60.254(b)(1), 9 VAC 5-50-410 and Condition 41 of 5/2/14 PSD Permit)
65. Visible emissions from each of the hydrated lime and activated carbon storage silos shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-490 B and Condition 5 of 3/23/09 Article 6 Permit)
66. Fugitive emissions from limestone handling and processing equipment without capture systems and fugitive emissions escaping capture systems shall not exceed 7 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-490 B, 40 CFR 60.672(b) and 9 VAC 5-50-410)
67. Fugitive emissions from the boiler building and the limestone unloading facility shall not exceed 7 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-80-490 B, 40 CFR 60.672(e)(1) and 9 VAC 5-50-410)

B. Monitoring

68. The permittee shall visually observe all wood fuel processing, conveying and transfer equipment at least once each calendar week to determine the presence of visible emissions while operating (does not include condensed water vapor/steam). If during the observation, visible emissions are observed that appear to exceed five percent opacity, a visible emission evaluation (VEE) shall be conducted on the affected unit in accordance with 40 CFR 60, Appendix A, EPA Method 9. The VEE shall be conducted for a minimum of six minutes. If

during the six minutes, any readings exceed 10 percent opacity, the VEE shall be conducted for a total of 60 minutes. A Method 9 VEE shall not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exist; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer. A record of each VEE shall be maintained and shall include, at a minimum, any data required by the 40 CFR 60, Appendix A, Method 9.
(9 VAC 5-80-490 E)

69. The permittee shall conduct monthly visual observations of all coal truck dump processes and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.
(9 VAC 5-80-490 E, 40 CFR 60.255(h)(2) and 9 VAC 5-50-410)
70. The permittee shall visually observe each hydrated lime and activated carbon storage silo exhaust at least once each calendar week while product is being transferred to the silos to determine the presence of visible emissions while operating (does not include condensed water vapor/steam). If during the observation, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted on the affected unit in accordance with 40 CFR 60, Appendix A, EPA Method 9. The VEE shall be conducted for a minimum of six minutes. If during the six minutes, any readings exceed 5 percent opacity, the VEE shall be conducted for a total of 60 minutes. A Method 9 VEE shall not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exist; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer. A record of each VEE shall be maintained and shall include, at a minimum, any data required by the 40 CFR 60, Appendix A, Method 9.
(9 VAC 5-80-490 E)
71. The permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems controlling emissions from limestone processing and handling equipment. The permittee shall initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the permittee finds water is not flowing properly during an inspection of the water spray nozzles. The permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under 40 CFR 60.676(b).
(9 VAC 5-80-490 E, 40 CFR 60.674(b) and 9 VAC 5-50-410)

72. Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the fabric filter baghouses controlling the coal crusher building, tripper building, limestone truck unloading facility, the fly ash silos and bed ash silo according to the table on Pages 35 and 36.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))
73. 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 E and 40 CFR 64.6 (c))
74. 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 E and 40 CFR 64.7 (b))
75. 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 coal crusher building, tripper building, limestone truck unloading facility, fly ash silos or bed ash silo is 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 E and 40 CFR 64.7 (c))

Coal Crusher Building, Tripper Building, Limestone Truck Unloading Facility, Fly Ash Silos and Bed Ash Silo Compliance Assurance Monitoring Plan

	Indicator No. 1	Indicator No. 2	Indicator No. 3
	Baghouse Differential Pressure	Opacity	Internal Inspection
I. Indicator Measurement Approach	The permittee shall install calibrate, maintain and operate a device for measuring the pressure drop across each affected baghouse.	The permittee shall conduct Reference Method 22-like visible emission observations for the presence of visible emissions from each affected baghouse monthly, at minimum.	The permittee shall conduct an internal inspection of each affected baghouse annually, at minimum.
II. Indicator Range	An excursion is defined as a pressure drop outside of the following indicator ranges: Limestone Unloading: 0.5 – 15 inches of water column; Coal Crusher Building: 0.5 – 8 inches of water column; Tripper Building: 0.5 – 7.5 inches of water column; Bed Ash Silo: 0.5 – 6 inches of water column; and Fly Ash Silos (2): 0.5 – 6 inches of water column. Upon detecting an excursion, the permittee shall initiate corrective action within 24 hours to return the affected baghouse and/or emissions unit to normal operation.	An excursion is defined as the presence of visible emissions. Upon detecting an excursion, the permittee shall initiate corrective action within 24 hours to return the affected baghouse and/or emissions unit to normal operation.	An excursion is defined as failure to perform the annual inspection. An excursion shall trigger an inspection.

	Indicator No. 1	Indicator No. 2	Indicator No. 3
	Baghouse Differential Pressure	Opacity	Internal Inspection
III. Performance Criteria	Pressure measurement devices shall be installed at the inlet and outlet of each affected baghouse. The accuracy of each device shall be commensurate with the current state of technology in the industry.	Visible emission observations are conducted at the baghouse exhaust.	Each affected baghouse shall be visually inspected for deterioration of bags/filters and structural integrity.
A. Data Representativeness			
B. Verification of Operational Status	Pressure gauges and alarms shall be installed to indicate operational status of each affected baghouse.	N/A	N/A
C. QA/QC Practices and Criteria	Each monitoring device shall be calibrated annually, at a minimum, or more frequently in accordance with manufacturer's specifications.	The observer shall be familiar with Reference Method 22 and follow Method 22-like procedures.	Trained personnel shall perform inspections and maintenance.
D. Monitoring Frequency	Continuously	Monthly	Annually
E. Data Collection Procedures	Pressure drop of each affected baghouse shall be manually recorded each day in an operator log. Data Control System shall automatically record a reading once per hour.	Results of each observation shall be recorded and maintained on site.	Results of inspections and maintenance shall be recorded and maintained on site.
F. Averaging Period	None.	In accordance with Reference Method	N/A

76. Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of the coal crusher building, tripper building, limestone truck unloading facility, fly ash silos or bed ash silo (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 E and 40 CFR 64.7 (d)(1))
77. 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 E and 40 CFR 64.7(d)(2))
78. 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 Director, Southwest 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 E and 40 CFR 64.7(e))
79. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the coal crusher building, tripper building, limestone truck unloading facility, fly ash silos or bed ash silo 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. 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 E and 40 CFR 64.8(a) and (b))

C. Recordkeeping

80. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrated compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
 - a. Monthly and annual amounts of each type fuel and limestone delivered to the facility. Annual amounts 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 individual monthly totals for the preceding 11 months.
 - b. Dimensions of the distillate oil storage tank, emission unit ID: FOM, and an analysis showing the capacity of the storage vessel.
 - c. Results of all stack tests, visible emission evaluations and performance evaluations.
 - d. A written or electronic logbook for coal processing and handling operations in accordance with 40 CFR 60.258(a).
 - e. A written or electronic logbook for limestone processing and handling operations in accordance with 40 CFR 60.676(b).

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

(9 VAC 5-80-490 F, 40 CFR 60.258(a), 40 CFR 60.676(b), 9 VAC 5-50-410, Condition 60 of 5/2/14 PSD Permit, and Condition 28 of 6/26/14 MACT Permit)

81. 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 §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 E and 40 CFR 64.9(b))

D. Testing

82. The permittee shall repeat the performance test for particulate matter from the coal crusher building and tripper building baghouse exhausts as follows:
- a. Within 12 calendar months of the date that the previous performance test was required to be completed if the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emission standard; or
 - b. Within 24 calendar months of the date that the previous performance test was required to be completed if the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emission standard.
 - c. The tripper building is exempt from the requirements of paragraphs a. and b. of this condition provided all of the following requirements are met:
 - i. Particulate emissions from the tripper building baghouse exhaust, as determined by the most recent performance test, are less than or equal to the applicable limit;
 - ii. The control device manufacturer's recommended maintenance procedures are followed; and
 - iii. All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in 40 CFR 60.255(f) are followed.

Each test 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. The details of the tests are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Southwest 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 E & F, 40 CFR 60.255(b)(1), 40 CFR 60.255(d) and 9 VAC 5-50-410)

83. Except as provided for in 40 CFR 60.255(f) and (g), the permittee shall conduct a visible emission evaluation on the coal crusher building baghouse exhaust, the tripper building baghouse exhaust and each piece of coal processing and conveying equipment, coal storage system, and each coal transfer and loading system as follows:

- a. Within 90 operating days of the date that the previous performance test was required to be completed if any six minute average opacity reading in the most recent VEE exceeds half the applicable opacity limit; or
- b. Within 12 calendar months of the date that the previous VEE was required to be completed if all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit.

Each test shall consist of ten sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. If, during the initial 30 minutes of the observation, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. The details of the test are to be arranged with the Director, Southwest Regional Office. Two copies of the test results shall be submitted to the Southwest 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 E & F, 40 CFR 60.255(b)(2) and 9 VAC 5-50-410)

84. Visible emission evaluations in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted by the permittee on each coal truck dumping operation. Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position. Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events. The details of each test are to be arranged with the Director, Southwest Regional Office. Two copies of each test result shall be submitted to the Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. The permittee shall repeat the visible emission evaluation on each coal truck dumping operation at least once every 5 calendar years in accordance with this condition.
(9 VAC 5-80-490 E & F, 40 CFR 60.255(h)(1) and (3), and 9 VAC 5-50-410)

E. Reporting

85. The permittee shall submit reports pertaining to coal preparation and processing operations to the Director, Southwest Regional Office in accordance with 40 CFR 60.258(b) and (c), as follows:
 - a. On a semiannual basis, all 6-minute average opacities that exceed the applicable standard.
 - b. Results of initial performance tests.

Within 60-days of completing each performance evaluation, test data shall be submitted to the United States Environmental Protection Agency electronically and in accordance with 40 CFR 60.258(d).

(9 VAC 5-80-490 E, 40 CFR 60.258(b), (c) and (d) and 9 VAC 5-50-50)

86. Compliance Assurance Monitoring (CAM) Reporting - the permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 98 of this permit to the Director, Southwest 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 §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 E and 40 CFR 64.9(a))

V. Facility-Wide Conditions

A. Limitations

87. Except where this permit is more restrictive than the applicable requirement, equipment subject to new source performance standards shall be operated in compliance with the requirements of 40 CFR 60, Subpart Da, Subpart Y, Subpart IIII and Subpart OOO, as applicable.
(9 VAC 5-80-490 B and Condition 28 of 5/2/14 PSD Permit)
88. 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 B, Condition 65 of 5/2/14 PSD Permit, Condition 33 of 6/26/14 MACT Permit, and Condition 11 of 3/23/09 Article 6 Permit)

B. Monitoring and Recordkeeping

- 89. The permittee shall conduct an ambient air quality analysis of the emissions of PM-2.5 from the facility within 180 days after USEPA promulgates final rules for PM-2.5 analysis, USEPA promulgates revised implementation guidance or policy for PM-2.5 analysis, or DEQ establishes a more appropriate implementation methodology for PM-2.5, or as may be directed by the Director, Southwest Regional Office.
 (9 VAC 5-80-490 E and Condition 59 of 5/2/14 PSD Permit)
- 90. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to scheduled and unscheduled maintenance and operator training. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
 (9 VAC 5-80-490 F, Condition 60 of 5/2/14 PSD Permit, Condition 28 of 6/26/14 MACT Permit, and On-Site Records Condition of 3/23/09 Article 6 Permit)

C. Testing

- 91. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. 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 E & F, Condition 17 of 5/2/14 PSD Permit, Condition 6 of 6/26/14 MACT Permit, and Condition 3 of 3/23/09 Article 6 Permit))

VI. Insignificant Emission Units

- 92. 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 9 VAC 5-80-720 A, or B, or C	Pollutant(s) Emitted (if applicable to 9 VAC 5-80-720 B)	Rated Capacity (if applicable to 9 VAC 5-80-720 C)
IS-2	Lube oil/use oil/hydraulic oil systems	9 VAC 5-80-720 B	VOC	17,120 gallons
IS-5	Oil/Water separator	9 VAC 5-80-720 B	VOC	28,685 gallons

Emission Unit No.	Emission Unit Description	Citation 9 VAC 5-80-720 A, or B, or C	Pollutant(s) Emitted (if applicable to 9 VAC 5-80-720 B)	Rated Capacity (if applicable to 9 VAC 5-80-720 C)
IS-6	Degreaser	9 VAC 5-80-720 B	VOC	N/A
IS-7	Antifreeze usage on coal conveyors	9 VAC 5-80-720 B	VOC	N/A
IS-8	Water treatment chemicals	9 VAC 5-80-720 B	Sodium hypochlorite, caustic, sulfuric acid, amines, ammonia	6,600 (approx.)
IS-9	Ammonia storage	9 VAC 5-80-720 B	Ammonia	60,000 gallons each – 2 tanks
IS-10	Generator diesel day tank	9 VAC 5-80-720 B	VOC	150 gallons
IS-11	Fire pump diesel tank	9 VAC 5-80-720 B	VOC	460 gallons
IS-12	Welding shop	9 VAC 5-80-720 B	PM	N/A

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, monitoring, recordkeeping and reporting shall not be required for these emission units in accordance with 9 VAC 5-80-490 C, E, and F.

VII. Permit Shield & Inapplicable Requirements

93. 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
There were no specific inapplicable requirements identified in the application for this permit.		

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 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 5-80-500)

VIII. General Conditions

A. Federal Enforceability

94. 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

95. This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of the permit. Unless the owner submits a timely and complete renewal application to DEQ consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.
- a. 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.
 - b. 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.
 - c. 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.
 - d. 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.
 - e. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 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)

C. Recordkeeping and Reporting

96. 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)
97. 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)
98. 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)

D. Annual Compliance Certification

99. 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. 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 VAC 5-80-430 G, and shall include:
- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - e. 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 certification period.
 - f. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov
(9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

100. The permittee shall notify the Director, Southwest 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 5-40-50 C and 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 5-40-40 and 9 VAC 5-50-40.

The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition 98 of this permit.
(9 VAC 5-80-490 F.2)

F. Failure/Malfunction Reporting

101. 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 discovery, notify the Director, Southwest Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 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 5-40-40 and 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 Director, Southwest Regional Office.
(9 VAC 5-20-180 C)
102. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) to the board for every calendar quarter. 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) or 9 VAC 5-40-41 B 6, 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.
- (9 VAC 5-20-180 C, 9 VAC 5-40-50 and 9 VAC 5-50-50)

G. Severability

103. 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)

H. Duty to Comply

104. 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 grounds 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)

I. Need to Halt or Reduce Activity not a Defense

105. 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)

J. Permit Modification

106. 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)

K. Property Rights

107. The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490 G.5)

L. Duty to Submit Information

108. 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)

109. 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 5-80-80 G and 9 VAC 5-80-430 G.
(9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

110. 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 et seq. 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)

N. Fugitive Dust Emission Standards

111. During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:
- a. Use, where possible, 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;
 - b. 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;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
 - d. 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; and
 - e. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-50-90 and 9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

112. 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 9 VAC 5-80-490)

P. Alternative Operating Scenarios

113. 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)

Q. Inspection and Entry Requirements

114. The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. 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.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. 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)

R. Reopening For Cause

115. 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 or more years. Such a reopening shall be completed not 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.

- a. 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.
- b. 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.
- c. 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)

S. Permit Availability

116. 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 5-80-510 G)

T. Transfer of Permits

117. No person shall transfer a permit from one location to another or from one piece of equipment to another.
(9 VAC 5-80-520)
118. 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 5-80-520)
119. 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 5-80-520)

U. Malfunction as an Affirmative Defense

120. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 121 are met.
121. 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 promptly report deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
122. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
123. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

124. 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 5-80-490 G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

125. 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 submits 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 5-80-430 E)

X. Stratospheric Ozone Protection

126. 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.
(40 CFR Part 82, Subparts A - F)

Y. Asbestos Requirements

127. The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490 A)

Z. Accidental Release Prevention

128. If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

129. 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)

BB. Emissions Trading

130. 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:

- a. All terms and conditions required under 9 VAC 5-80-490, except subsection N, shall be included to determine compliance.
- b. 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.
- c. 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)

IX. Title IV Permit Allowances and Requirements

131. **Phase II Acid Rain Permit** - The attached Phase II Acid Rain permit is incorporated into this permit by reference. 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)

X. Cross-State Air Pollution Rule (CSAPR) Requirements

132. The permittee shall comply with all applicable CSAPR requirements (40 CFR Part 97, Subparts AAAAA - DDDDD) by the compliance date specified in 40 CFR Part 97, Subparts AAAAA – DDDDD, as amended.
(9 VAC 5-80-490, and 40 CFR Part 97, Subparts AAAAA - DDDDD)

Phase II Acid Rain Permit



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

355-A Deadmore Street, Abingdon, Virginia 24210

Phone (276) 676-4800 Fax (276) 676-4899

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

PHASE II ACID RAIN PERMIT

Issued To: Virginia City Hybrid Energy Center
Operated By: Virginia Electric and Power Company
Location: 3421 Russell Creek Road
St. Paul, Virginia
Effective Date: January 1, 2016 to December 31, 2020

Registration No: 11526
ORIS Code: 56808
Facility ID No: 51-195-00210

Acid Rain Permit Contents

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Additional requirements or conditions, and any comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process.
- 4) The permit application submitted for this source.

Permit Approval

Approved on September 30, 2015.

Allen J. Newman, P.E.
Regional Director

Permit consists of 10 pages, including the attached permit application.

1) Statement of Basis:

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, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permits for Acid Rain Sources).
 (9 VAC 5-80-490 B.2)

2) SO₂ Allowance Allocations and NO_x Requirements for each Affected Unit:
 (9 VAC 5-80-490 A.4)

Units	CFB1 and CFB2				
Year	2016	2017	2018	2019	2020
SO₂ Allowances under Table 2 of 40 CFR 73.10 (tons)	Not Applicable. These units were not eligible for SO ₂ allowance allocations by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program. Therefore, these units have no SO ₂ allowances listed in Table 2 of 40 CFR 73.10. SO ₂ 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 each unit remain obligated to hold sufficient allowances to account for SO ₂ emissions from each unit in accordance with 40 CFR 72.9(c)(1).				
NO_x Limits	Not Applicable. Circulating fluidized bed boilers are not subject to a NO _x limitation under 40 CFR Part 76.				

3) Comments, Notes, and Justifications:

None

4) Acid Rain Permit Application:

The attached permit application is incorporated into the Phase II Acid Rain permit by reference. 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)

Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Sulfur Dioxide Requirements, Cont'd.**STEP 3, Cont'd.**

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.**STEP 3, Cont'd.**

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

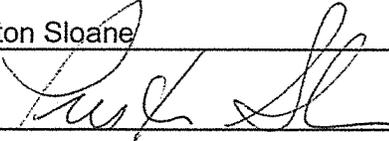
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Preston Sloane	
Signature 	Date 6-9-2015

Certificate of Representation Report

06/11/2015

Facility Information

Facility ID (ORISPL): 56808

Facility Name: Virginia City Hybrid Energy Center

State: VA

County: Wise

EPA AIRS ID:

Latitude: 36.9161 **Longitude:** -82.3381

Facility Detail (Mini Detail)

Primary Representative Information

Name: David Craymer

Company: Dominion Resources Services, Inc

Title: VP Power Generation System Operations

Address: VA 23060

Phone: (804) 273-3685

Fax: (804) 273-2303

Alternate:

Email: david.craymer@dom.com

People Detail Layout (Multiple)

Alternate Representative Information

Name: O Preston Sloane

Company: Virginia Electric & Power Company

Title: Station Director

Address: VA 23323

Phone: (757) 485-6800

Fax: (757) 485-6871

Alternate:

Email: preston.sloane@dom.com

People Detail Layout (Multiple)

Current Representatives

Program	Primary Representative, Effective Date	Alternate, Effective Date	Primary Representative, End Date	Alternate, End Date
ARP	David Craymer, 06/11/2015	O Preston Sloane, 07/14/2009	Edward H Baine, 06/11/2015	
CAIRNOX	David Craymer, 06/11/2015	O Preston Sloane, 07/14/2009	Edward H Baine, 06/11/2015	
MATS	David Craymer, 06/11/2015	O Preston Sloane, 09/17/2014	Edward H Baine, 06/11/2015	
TRNOX	David Craymer, 06/11/2015	O Preston Sloane, 09/27/2011	Edward H Baine, 06/11/2015	
TRNOXOS	David Craymer, 06/11/2015	O Preston Sloane, 09/27/2011	Edward H Baine, 06/11/2015	
TRSO2G1	David Craymer, 06/11/2015	O Preston Sloane, 09/27/2011	Edward H Baine, 06/11/2015	

Basic Table Layout

Units

Unit ID	Program	Unit Classification	Operating Status	Unit Type	Indian Country	Source Category	NAICS Code	Commence Operation Date	Commence Operation Date Code	Comm. Commercial Operation Date	Commence Commercial Operation Date Code	Unit Monitoring Certification Begin Date
1	ARP	Phase 2	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	03/07/2012
1	CAIRNOX	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	03/07/2012
1	CAIROS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	03/07/2012
1	CAIRSO2	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	03/07/2012
1	MATS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	01/01/2015
1	TRNOX	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	01/01/2015
1	TRNOXOS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	05/01/2015
1	TRSO2G1	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/10/2011	A	03/07/2012	A	01/01/2015
2	ARP	Phase 2	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	03/07/2012
2	CAIRNOX	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	03/07/2012
2	CAIROS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	03/07/2012
2	CAIRSO2	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	03/07/2012
2	MATS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	01/01/2015
2	TRNOX	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	01/01/2015
2	TRNOXOS	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	05/01/2015
2	TRSO2G1	Affected	Operating	CFB	No	Electric Utility	Fossil fuel electric power generation	11/25/2011	A	03/07/2012	A	01/01/2015

Basic Table Layout

Generator Information

Generator ID	Unit ID	ARP Nameplate Capacity	CAIR/MATS/Transport Rule Nameplate Capacity	Effective Date
1	1	668	668	03/17/2009
1	2	668	668	03/17/2009

Basic Table Layout

Current Owners and Operators

Unit ID	Owner/Operator Company Name	Type	Effective Date	End Date
1	Dominion Generation	Operator	03/17/2009	
1	Virginia Electric & Power Company	Owner	03/17/2009	
2	Dominion Generation	Operator	03/17/2009	
2	Virginia Electric & Power Company	Owner	03/17/2009	

Basic Table Layout