State of Georgia
Department of Natural Resources
Environmental Protection Division
Air Protection Branch

AIR QUALITY PERMIT

Permit No.
4911-303-0051-P-01-0

Effective Date
APR 0 8 2010

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

Facility Name: **Plant Washington**

Mailing Address: 3625 Cumberland Blvd., Suite 1525
Atlanta, GA 30339

is issued a Permit for the following:

To construct and operate a 850 MW net output capacity coal fired power plant. The facility is designed to include: one supercritical pulverized coal fired 8300 MMBtu/hr boiler; one 240 MMBtu/hr auxiliary boiler; a steam turbine and associated generator; thirty four cell cooling tower; one 1500 HP emergency diesel fired generator; one 350 HP diesel fired pump; facilities for receiving, handling and storing of coal, anhydrous ammonia, limestone, mercury removal adsorbent and sulfur trioxide removal sorbent; facilities for handling and storing of process byproducts; facilities for on-site storage of process waste; diesel fuel oil storage tanks; and supporting plant equipment. The plant will be designed to burn sub-bituminous coal (Powder River Basin, or PRB coal) or up to a 50/50 blend (by weight) of eastern bituminous coal (Illinois #6) and sub-bituminous coal. Ultra low sulfur distillate fuel oil will be used as the start-up fuel for the coal fired boiler and for operation of the auxiliary boiler and emergency equipments.

Facility Location: Mayview Road
Sandersville, Georgia 31082 (Washington County)

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 17924 dated January 17, 2008; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 32 pages.

J. Allen Barnes

Director
Environmental Protection Division

NOTE A

Subsequent Submittals of Application No. 17924 dated January 17, 2008

Date	Description
January 17, 2008	Original Application Submittal
March 31, 2008	Submitted Additional Information (Modeling)
December 3, 2008	Revised Application Submittal (Application dated January 17, 2008 has been replaced by the application dated December 3, 2008)
April 16, 2009	Submitted Updated HF BACT Analysis
May 13, 2009	Submitted $PM_{2.5}$ BACT Analysis
May 19, 2009	Submitted Additional Information ($PM_{2.5}$ BACT)
May 28, 2009	Submitted Additional Information
July 27, 2009	Submitted Additional Information (Modeling)
August 4, 2009	Submitted Additional Information (Modeling)
January 18, 2010	Submitted Additional Information
March 16, 2010	Submitted Additional Information
March 26, 2010	Submitted Additional Information
April 1, 2010	Submitted Additional Information

NOTE B

LIST OF EMISSION UNITS

Emission Units		Air Pollution Control Devices	
ID No.	Description	ID No.	Description
Combustion Sources			
S1	Supercritical Pulverized Coal Fired Boiler – 8300 MMBtu/hr Maximum Heat Input Capacity	LN1 CO2 CO1 CO3 SI1 SI2	Low NOx Burners/Over-fire Air Selective Catalytic Reduction Fabric Filter Baghouse Wet Limestone Scrubber Sorbent Injection for Sulfuric Acid Mist Activated Carbon Injection for Mercury
S45	Ultra Low Sulfur Diesel Fired Auxiliary Boiler – 240 MMBtu/hr Maximum Heat Input Capacity	LN2	Low NOx Burner/Flue Gas Recirculation
Coal Handling Particulate Sources			
A4	Coal Rail Unloading	N/A	Dust Suppressant and/or Water Sprays and Partial Enclosure
S46	PRB Conveyor Stackout	C13	Insertable Filter
S47	Illinois # 6 Conveyor Stackout	C14	Insertable Filter
S40	Coal Crusher House	C08	Baghouse
S41	Tripper Deck	C09	Baghouse
A8	Active PRB Coal Pile and Transfer Point	N/A	Dust Suppressant and/or Water Sprays
A9	Active Illinois # 6 Coal Pile and Transfer Point	N/A	Dust Suppressant and/or Water Sprays
A6	Inactive PRB Coal Pile	N/A	Dust Suppressant and/or Water Sprays
A7	Inactive Illinois # 6 Coal Pile	N/A	Dust Suppressant and/or Water Sprays
Ash Management Particulate Sources			
S43	Fly Ash Mechanical Exhausters	C11	Baghouse

Emission Units		Air Pollution Control Devices	
ID No.	Description	ID No.	Description
S37	Fly Ash Silo	C05	Bin Vent Filter
A3	Bottom Ash Transfer to Bin And from Bin to Truck	N/A	Water Sprays
A1	Solid Material Handling-ash	N/A	Dust Suppressant and/or Water Sprays
Gypsum Management Particulate Sources			
A2	Solid Material Handling-Gypsum	N/A	Dust Suppressant and/or Water Sprays
Limestone Management Particulate Sources			
A5	Limestone Railcar Unloading Station	N/A	Dust Suppressant and/or Water Sprays and Partial Enclosure
S48	Limestone Stackout	C15	Insertable Filter
S42	Limestone Preparation Building Day Bin Silo	C10	Bin Vent Filter
A10	Limestone Pile and Transfer Point	N/A	Dust Suppressant and/or Water Sprays
Sorbent Management Particulate Sources			
S36	SO_3 Sorbent Silo	C04	Bin Vent Filter
S38	Mercury Sorbent Silo	C06	Bin Vent Filter
Pretreatment Material Management Particulate Sources			
S44	Pretreatment Soda Ash Silo	C12	Bin Vent Filter
S39	Pretreatment Hydrated Lime Silo	C07	Bin Vent Filter
Roadway Particulate Sources			
P1-P21	Paved Roadway Travel	N/A	Water sprays and/or Dust suppressant
U1-U15	Unpaved Roadway Travel	N/A	Water sprays and/or Dust suppressant
Cooling Tower Emissions			
S2-S35	Wet Cooling Towers 1-34	N/A	Drift eliminators

Emission Units		Air Pollution Control Devices	
ID No.	Description	ID No.	Description
Emergency Diesel Fired Engines			
EG1	1500 HP Ultra Low Sulfur Diesel Fired Emergency Generator	N/A	
EP1	350 HP Ultra Low Sulfur Diesel Fired Emergency Firewater Pump	N/A	
Fuel Storage Tanks			
TNK1	350,000 Gallon Ultra Low Sulfur Diesel Storage Tank	N/A	
TNK2	750 Gallon Ultra Low Sulfur Diesel Storage Tank	N/A	
TNK3	250 Gallon Ultra Low Sulfur Diesel Storage Tank	N/A	
Ammonia Storage			
TNK4	25,000 Gallon Ammonia Storage Tank	N/A	

1. General Requirements

1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.

1.2 The Permittee shall not build, erect, install or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged into the atmosphere.

1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change.

1.4 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and shall be retained for at least five (5) years following the date of entry.

1.5 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.

1.6 The Permittee shall comply with the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Da - " Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978," for operation of the Coal Fired Boiler, S1.
[40 CFR 60 Subparts A and Da]

1.7 The Permittee shall comply with the 40 CFR 63, Subpart A “General Provisions” and 40 CFR 63 Subpart B “Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)” for operation of the Coal Fired Boiler, S1.
[40 CFR 63 Subparts A and B]

1.8 The Permittee shall comply with the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Db - "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units," for operation of the Auxiliary Boiler, S45.
[40 CFR 60 Subparts A and Db]

1.9 The Permittee shall comply with the 40 CFR 63, Subpart A "General Provisions" and 40 CFR 63 Subpart B "Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)" for operation of the Auxiliary Boiler, S45.
[40 CFR 63 Subparts A and B]

1.10 The Permittee shall comply with the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Y – "Standards of Performance for Coal Preparation Plants" for the coal processing and conveying equipment, coal storage systems, coal transfer and loading systems and open storage piles which includes Emission Units A4, S40, S41, S46, S47 and A6 to A9.
[40 CFR 60 Subparts A and Y]

1.11 The Permittee shall comply with the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants" for the Limestone Management Particulate Sources (Emission Units A5, S42 and S48) and associated conveying system.
[40 CFR 60 Subparts A and OOO]

1.12 The Permittee shall comply with the 40 CFR 60, Subpart A "General Provisions" and 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" for operation of the Emergency Diesel Generator, EG1 and the Emergency Fire Water Pump, EP1.
[40 CFR 60 Subparts A and IIII]

1.13 The Permittee shall comply with the 40 CFR 63, Subpart A "General Provisions" and 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [RICE]" for operation of the Emergency Diesel Generator, EG1 and the Emergency Fire Water Pump, EP1.
[40 CFR 63 Subparts A and ZZZZ]

1.14 The Permittee shall comply with all applicable provisions of the Acid Rain Program as found in 40 CFR 72 "Permit Regulations", 40 CFR 73 "Sulfur Dioxide Allowance System", 40 CFR 75 "Continuous Emissions Monitoring", and 40 CFR 77 "Excess Emissions" for operation of the Coal Fired Boiler, S1.
[40 CFR Parts 72, 73, 75, and 77]

1.15 The Permittee shall comply with the 40 CFR 68, "Chemical Accident Prevention Provisions" for operation of Ammonia Storage Tank, TNK4.
[40 CFR 68]

2. Allowable Emissions

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

2.1 Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date. For purposes of this Permit, the definition of "commence" is given in 40 CFR 52.21(b)(9).
[40 CFR 52.21(r)(2)]

2.2 The Notice of MACT Approval for the Coal Fired Boiler S1 and Auxiliary Boiler S45 shall expire if construction or reconstruction has not commenced within 18 months of issuance, unless the Division has granted an extension which shall not exceed an additional 12 months.
[40 CFR 63.43(g)(4)]

2.3 The Permittee shall prepare and submit an initial Title V Operating Permit Application for the operation of the facility in accordance with 40 CFR 70.5 within 12 months after commencing operation. The Permittee shall address potential 40 CFR 64 "Compliance Assurance Monitoring" applicability in its initial Title V Operating Permit Application.
[40 CFR 64 and 40 CFR 70]

2.4 The Permittee shall install and operate, as BACT for NOx on Coal Fired Boiler S1, Low NOx Burners, Over-fire Air and Selective Catalytic Reduction.
[40 CFR 52.21(j)]

2.5 The Permittee shall install and operate, as BACT and MACT for CO and BACT for VOC on Coal Fired Boiler S1, good combustion controls.
[40 CFR 52.21(j) and 40 CFR 63 Subpart B]

2.6 The Permittee shall install and operate, as BACT for SO_2, BACT and MACT for HF and as MACT for HCl on Coal Fired Boiler S1, a Wet Limestone Scrubber.
[40 CFR 52.21(j) and 40 CFR 63 Subpart B]

2.7 The Permittee shall install and operate, as BACT for H_2SO_4 on Coal Fired Boiler S1, a Duct Sorbent Injection System.
[40 CFR 52.21(j)]

2.8 The Permittee shall install and operate, as BACT for PM/PM_{10} and as MACT for Filterable PM, a Fabric Filter Baghouse and as BACT for $PM_{2.5}$, a Fabric Filter Baghouse, a Duct Sorbent Injection System and good combustion controls on Coal Fired Boiler S1.
[40 CFR 52.21(j) and 40 CFR 63 Subpart B]

2.9 The Permittee shall install and operate, as BACT and MACT for Mercury on Coal Fired Boiler S1, an Activated Carbon Injection System.
[391-3-1-.02(2)(ttt) and 40 CFR 63 Subpart B]

2.10 The Permittee shall install and operate, as BACT for NOx on Auxiliary Boiler S45, Low NOx Burners and Flue Gas Recirculation.
[40 CFR 52.21(j)]

2.11 Except as provided in Condition No. 2.12, the Permittee shall only fire sub-bituminous coal (Powder River Basin, or PRB coal), or up to a 50/50 blend (by weight) of sub-bituminous and bituminous coal (washed Illinois #6) in the Coal Fired Boiler S1. Firing of bituminous and sub-bituminous coals with equivalent characteristics of PRB and Illinois #6 is permitted.
[40 CFR 52.21(j) and 391-3-1-.02(2)(g)(subsumed)]

2.12 The Permittee shall fire only ultra low sulfur diesel fuel that has a maximum sulfur content of 15 ppm (0.0015% by weight), in Auxiliary Boiler S45 and during startup in Coal Fired Boiler S1.
[40 CFR 52.21(j); 40 CFR 63 Subpart B; 391-3-1-.02(2)(g) (subsumed); 40 CFR 60.42b(k)(2) (subsumed) and 40 CFR 60.43b(h)(5) (subsumed)]

2.13 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from Coal Fired Boiler S1, any gases which

a. Contain Nitrogen Oxides (NOx) in excess of 0.050 lb/MMBtu on a 30-day rolling average.
[40 CFR 52.21(j); 391-3-1-.02(2)(d)(4) (subsumed) and 40 CFR 60.44Da(e)(1) (subsumed)]

b. Contain Carbon Monoxide (CO) in excess of 0.10 lb/MMBtu on a 30-day rolling average.
[40 CFR 63 Subpart B and 40 CFR 52.21(j)]

c. Contain Carbon Monoxide (CO) in excess of 0.30 lb/MMBtu on a 1-hour average.
[40 CFR 52.21(j)]

d. Contain Filterable PM/PM_{10} in excess of 0.010 lb/MMBtu on a 24-hour rolling average.
[40 CFR 63 Subpart B; 40 CFR 52.21(j); 391-3-1-.02(2)(d)(2) (subsumed) and 40 CFR 60.42Da(c) (subsumed)]

e. Contain Total PM/PM_{10} in excess of 0.018 lb/MMBtu on a 3-hour average and Total $PM_{2.5}$ in excess of 0.0123 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

f. Contain Sulfur Dioxide (SO_2) in excess of 0.052 lb/MMBtu on a 12-month rolling average.
[40 CFR 52.21(j) and 391-3-1-.02(2)(g) (subsumed)]

g. Contain Sulfur Dioxide (SO_2) in excess of 0.069 lb/MMBtu on a 30-day rolling average.
[40 CFR 52.21(j); 391-3-1-.02(2)(g) (subsumed) and 40 CFR 60.43Da(i)(l) (subsumed)]

h. Contain Sulfur Dioxide (SO_2) in excess of 959 lb/hr on a 3-hour rolling average.
[40 CFR 52.21(j)]

i. Contain Volatile Organic Compounds (VOC) in excess of 0.0024 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

j. Contain Lead (Pb) in excess of 1.6×10^{-5} lb/MMBtu on a 3-hour average.
[40 CFR 52.21 Avoidance]

k. Contain Fluorides (as HF) in excess of 1.40×10^{-4} lb/MMBtu on a 3-hour average.
[40 CFR 63 Subpart B and 40 CFR 52.21(j)]

l. Contain Sulfuric Acid Mist (H_2SO_4) in excess of 0.004 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

m. Contain Mercury (Hg) in excess of 7.64×10^{-6} lb/MW-hr (gross) on a 12-month rolling average while firing sub-bituminous coal or a computed weighted average on a 12-month rolling average based on the proportion of energy output in gross MW output contributed by each coal rank (sub-bituminous and bituminous) and its applicable Hg emissions limit while firing up to a 50/50 blend of sub-bituminous and bituminous coal. Hg emission limit of 6.0×10^{-6} lb/MW-hr (gross) shall be used for bituminous coal to calculate computed weighted average.
[40 CFR 63 Subpart B and 391-3-1-.02(2)(ttt)]

n. Contain Hydrogen Chloride (HCl) in excess of 3.22×10^{-4} lb/MMBtu on a 3-hour average while firing sub-bituminous coal or a computed weighted average based on the proportion of MMBtu input contributed by each coal rank (sub-bituminous and bituminous) and its applicable HCl emissions limit while firing up to a 50/50 blend of sub-bituminous and bituminous coal. HCl emission limit of 2.4×10^{-3} lb/MMBtu shall be used for bituminous coal to calculate computed weighted average.
[40 CFR 63 Subpart B]

o. Exhibit greater than 20 percent opacity on a 6-minute average except for one 6-minute period per hour of not more than 27 percent opacity.
[40 CFR 60.42Da(b) and 391-3-1-.02(2)(d)(3)]

p. Contain Sulfur Dioxide (SO_2) in excess of 0.08 lb/MMBtu on a 24-hour rolling average.
[40 CFR 52.21(m)]

q. Contain Filterable $PM_{2.5}$ in excess of 0.00636 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

r. Contain Nitrogen Oxides (NOx) in excess of 0.030 lb/MMBtu on a 12-month rolling average while firing sub-bituminous coal or a computed weighted average on a 12-month rolling average based on the proportion of MMBtu input contributed by each coal rank (sub-bituminous and bituminous) and its applicable NOx emissions limit while firing up to a 50/50 blend of sub-bituminous and bituminous coal. NOx emissions limit of 0.044 lb/MMBtu shall be used for bituminous coal to calculate computed weighted average. This condition becomes effective 6 months after initial start-up of Coal Fired Boiler S1, absent approval by the Division for an extension of this date.
[40 CFR 52.21(j)]

2.14 The Permittee shall maintain a minimum Sulfur Dioxide (SO_2) removal efficiency of 97.5 percent on a 30-day rolling average for the Wet Limestone Scrubber.
[40 CFR 52.21(j) and 40 CFR 60.43Da(i)(l) (subsumed)]

2.15 The Permittee shall limit Coal Fired Boiler S1 to a maximum design heat input of 8,300 MMBtu/hr on a 1-hour average.
[40 CFR 52.21(j)]

2.16 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from Auxiliary Boiler S45, any gases which

a. Contain Nitrogen Oxides (NOx) in excess of 0.1 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

b. Contain Carbon Monoxide (CO) in excess of 0.04 lb/MMBtu on a 3-hour average.
[40 CFR 63 Subpart B and 40 CFR 52.21(j)]

c. Contain Filterable PM/PM_{10} in excess of 0.014 lb/MMBtu on a 3-hour average, Total PM/PM_{10} in excess of 0.024 lb/MMBtu on a 3-hour average and Total $PM_{2.5}$ in excess of 0.012 lb/MMBtu on a 3-hour average.
[40 CFR 63 Subpart B; 40 CFR 52.21(j) and 391-3-1-.02(2)(d)(2) (subsumed)]

d. Contain Sulfur Dioxide (SO_2) in excess of 0.0017 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

e. Contain Volatile Organic Compounds (VOC) in excess of 0.003 lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

f. Contain Sulfuric Acid Mist (H_2SO_4) in excess of 6.0 x 10^{-5} lb/MMBtu on a 3-hour average.
[40 CFR 52.21(j)]

g. Exhibit greater than 20 percent opacity on a 6-minute average except for one 6-minute period per hour of not more than 27 percent opacity.
[391-3-1-.02(2)(d)(3) and 40 CFR 60.43b(f)]

2.17 After initial startup of the Coal Fired Boiler S1, the Permittee shall limit the hours of operation of Auxiliary Boiler S45 such that the total hours of operation does not equal to or exceed 876 hours during any twelve consecutive months. This condition shall take affect after the initial startup date for the Coal Fired Boiler S1 in accordance with the notification required in Condition 7.21.b.
[40 CFR 52.21(j) and 40 CFR 60.44b(l)(1)]

2.18 The Permittee shall install and operate, as BACT for cooling tower (Emission Units S2 to S35), drift eliminators and shall maintain documentation that a 0.0005% drift is guaranteed and limit the total dissolved solids (TDS) in the cooling tower makeup water to 3,300 mg/L.
[40 CFR 52.21(j)]

2.19 The Permittee shall install and operate, as BACT for PM/PM_{10} and $PM_{2.5}$ on PRB Conveyor Stackout S46, Illinois # 6 Conveyor Stackout S47 and Limestone Stackout S48, an Insertable Filter.
[40 CFR 52.21(j)]

2.20 The Permittee shall install and operate, as BACT for PM/PM_{10} and $PM_{2.5}$ on Coal Crusher House S40, Tripper Decker S41, Fly Ash Mechanical Exhausters S43 and Limestone Preparation Building S42, a baghouse.
[40 CFR 52.21(j)]

2.21 The Permittee shall install and operate, as BACT for PM/PM_{10} and $PM_{2.5}$ on Fly Ash Silo S37, SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44 and Pretreatment Hydrated Lime Silo S39, a Bin Vent Filter.
[40 CFR 52.21(j)]

2.22 The Permittee shall take all reasonable precautions to prevent fugitive dust from becoming airborne from the following operations. The Permittee shall use a combination of enclosures, telescopic chutes, lowering wells, dust suppression systems, covering and crusting agents where appropriate:
[40 CFR 52.21(j) and 391-3-1-.02(2)(n)(1)]

a. Coal handling particulate sources (Emission Units A4, A6 to A9)

b. Ash management particulate sources (Emission Units A1 and A3)

c. Gypsum management particulate sources (Emission Unit A2)

d. Limestone management particulate sources (Emission Units A5 and A10)

e. Roadway particulate sources (Emission Units P1 to P21 and U1 to U15)

2.23 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the Coal Handling Particulate Sources (Emission Units A4, A6 to A9, S40, S41, S46 and S47) and Coal Conveying Systems any visible emissions of which the percent opacity is equal to or greater than 10 percent.
[40 CFR 52.21(j); 40 CFR 60.254(b)(1) and 391-2-1-.02(2)(n)(2) (subsumed)]

2.24 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from Limestone Stackout S48, any stack emissions, which contain PM/PM_{10} in excess of 0.005 gr/dscf.
[40 CFR 52.21(j) and 40 CFR 60.672(a) (subsumed)]

2.25 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from Limestone Railcar Unloading Station A5, any visible emissions of which the percent opacity is equal to or greater than 7 percent.
[40 CFR 52.21(j) and 40 CFR 60.672(b)]

2.26 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from openings (except for vents) of Limestone Preparation Building S42, any visible fugitive emissions of which the percent opacity is equal to or greater than 7 percent.
[40 CFR 52.21(j) and 40 CFR 60.672(e)(1)]

2.27 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from vents of Limestone Preparation Building Day Bin Silo S42, any emissions, which contain PM/PM_{10} in excess of 0.005 gr/dscf.
[40 CFR 52.21(j)]

2.28 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from PRB Conveyor Stackout S46, Illinois # 6 Conveyor Stackout S47, Coal Crusher House S40, Tripper Decker S41, Fly Ash Mechanical Exhausters S43, Fly Ash Silo S37, SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44 and Pretreatment Hydrated Lime Silo S39, any stack emissions, which contain PM/PM_{10} in excess of 0.005 gr/dscf.
[40 CFR 52.21(j) and 40 CFR 60.254(b)(2) (subsumed)]

2.29 The Permittee shall not shall not discharge, or cause the discharge, into the atmosphere, from the Ash Management Particulate Sources (Emission Units A1, A3, S37 and S43) and Gypsum Management Particulate Sources (Emission Unit A2), any visible emissions of which the percent opacity is equal to or greater than 10 percent.
[40 CFR 52.21(j); 391-3-1-.02(2)(b) (subsumed) and 391-2-1-.02(2)(n)(2) (subsumed)]

2.30 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44, Pretreatment Hydrated Lime Silo S39 and Cooling Tower (Emission Units S2 to S35), any visible emissions the opacity of which is equal to or greater than 40 percent.
[391-3-1-.02(2)(b)]

2.31 The Permittee shall not discharge into or cause the discharge into the atmosphere from Roadway Particulate Sources (Emission Units P1 to P21 and U1 to U15), any visible emissions the opacity of which is equal to or greater than 20 percent.
[391-2-1-.02(2)(n)(2)]

2.32 The Permittee shall limit the hours of operation of the Emergency Diesel Generator EG1 and the Emergency Fire Water Pump EP1 such that the total hours of operation of each unit does not equal or exceed 500 hours during any twelve consecutive months.
[40 CFR 52.21(j) and 391-3-1-.03(6)(b)(11)(v)]

2.33 The accumulated non-emergency service (maintenance check and readiness testing) time for the Emergency Diesel Generator EG1 and the Emergency Fire Water Pump EP1 shall not exceed 100 hours during any twelve consecutive months for each unit. Any operation other than emergency operation, maintenance check and readiness testing is prohibited.
[40 CFR 60.4211(e)]

2.34 The Permittee shall fire only ultra low sulfur diesel fuel that has a maximum sulfur content of 15 ppm (0.0015% by weight) in the Emergency Diesel Generator EG1 and the Emergency Fire Water Pump EP1.
[40 CFR 52.21(j); 40 CFR 60.4207(b) and 391-3-1-.02(2)(g) (subsumed)]

2.35 The Permittee shall not discharge into or cause the discharge into the atmosphere from the Emergency Diesel Generator EG1 and the Emergency Fire Water Pump EP1, any visible emissions the opacity of which is equal to or greater than 40 percent.
[391-3-1-.02(2)(b)1]

2.36 The Permittee shall comply with the emission limitation in 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" for the Emergency Diesel Generator, EG1 and the Emergency Fire Water Pump, EP1. The emission limits are listed in the following table:
[40 CFR 52.21(j) and 40 CFR 60 Subpart IIII]

	g/kW-hr		
Pollutant →	NMHC+NO_x	CO	PM
Emergency Generator, EG1 Emission Limit →	6.4	3.5	0.2
Emergency Fire Water Pump, EP1 Emission Limit →	4	3.5	0.2

2.37 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from PRB Conveyor Stackout S46, Illinois # 6 Conveyor Stackout S47, Coal Crusher House S40 and Tripper Decker S41 any stack emissions, which contain filterable $PM_{2.5}$ in excess of 0.0008 gr/dscf, from Fly Ash Mechanical Exhausters S43 and Fly Ash Silo S37 any stack emissions, which contain filterable $PM_{2.5}$ in excess of 0.00265 gr/dscf, from SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44 any stack emissions, which contain filterable $PM_{2.5}$ in excess of 0.005 gr/dscf, from Pretreatment Hydrated Lime Silo S39, Limestone Stackout S48 and vents of Limestone Preparation Building Day Bin Silo S42 any stack emissions, which contain filterable $PM_{2.5}$ in excess of 0.00135 gr/dscf.
[40 CFR 52.21(j)]

2.38 The Permittee shall prepare and operate a fugitive coal dust emissions control plan for Open Storage Piles (Emission Units A6 to A9), which includes the equipment used in the loading, unloading, and conveying operations at the Coal Preparation Plant.
[40 CFR 60.254(c)(2)]

3. Fugitive Emissions

3.1 The Permittee shall take all reasonable precautions with any operation, process, handling, transportation, or storage facilities to prevent fugitive emissions of air contaminants.

4. Process & Control Equipment

Not applicable.

5. Monitoring

5.1 Any continuous monitoring system required by the Permit shall be in continuous operation and data recorded as set forth in this Permit during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

a. A Continuous Emissions Monitoring System (CEMS) for measuring NOx emissions discharged to the atmosphere from the Coal Fired Boiler, S1. The 1-hour average NOx emissions rates shall also be recorded in pound per million Btu heat input.
[40 CFR 52.21; 40 CFR 60.49Da(c)(1) and 391-3-1-.02(6)(b)1]

b. A Continuous Emissions Monitoring System (CEMS) for measuring SO_2 emissions from the Coal Fired Boiler, S1 at both the inlet and outlet of the SO_2 control device. The 1-hour average SO_2 emissions rates shall also be recorded in pound per million Btu heat input.
[40 CFR 52.21; 40 CFR 63 Subpart B; 40 CFR 60.49Da(b) and 391-3-1-.02(6)(b)1]

c. A Continuous Emissions Monitoring System (CEMS) for measuring Filterable Particulate matter emissions discharged to the atmosphere from the Coal Fired Boiler, S1. The 1-hour average Filterable Particulate matter emissions rates shall also be recorded in pound per million Btu heat input.
[40 CFR 52.21; 40 CFR 63 Subpart B; 40 CFR 60.48Da(p) and 391-3-1-.02(6)(b)1]

d. A Continuous Emissions Monitoring System (CEMS) for measuring CO emissions discharged to the atmosphere from the Coal Fired Boiler, S1. The 1-hour average CO emissions rates shall also be recorded in pound per million Btu heat input.
[40 CFR 52.21; 40 CFR 63 Subpart B and 391-3-1-.02(6)(b)1]

e. For the purpose of this Permit, a valid hour of emissions data means any 60-minute period commencing on the hour and it must be based on at least 30 minutes of operation and include at least 2 data points representing two 15-minute periods.
[391-3-1-.02(6)(b)1]

f. A Continuous Monitoring System for measuring oxygen or carbon dioxide at each location where SO_2, PM, CO or NOx emission monitors are required.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

g. A Continuous Emissions Monitoring Systems (CEMS) for measuring Mercury emissions discharged to the atmosphere from the Coal Fired Boiler, S1. The 1-hour average Mercury emissions rates shall also be recorded in pound per MW-hr electrical output.
[40 CFR 52.21; 40 CFR 63 Subpart B and 391-3-1-.02(6)(b)1]

h. If at any time prior to the commencement of operations of the facility, the Division determines that a Continuous Emissions Monitoring System (CEMS) exists that can reliably and accurately measure hydrochloric acid and/or hydrogen fluoride emissions from the Coal Fired Boiler S1 in the operating concentrations required by this permit, then the Permittee shall install such device(s) no later than 12 months following receipt of written notice from the Division or prior to the startup of the Coal Fired Boiler, S1, whichever is later. Any written notice from the Division shall include the basis (e.g., example installations) supporting the Division's determination. The CEMS(s) shall measure and record the hydrochloric acid and/or hydrogen fluoride emissions discharged to the atmosphere from the Coal Fired Boiler, S1. The one-hour average hydrochloric acid emissions and/or hydrogen fluoride rates shall also be recorded in pound per million Btu heat input.
[391-3-1-.02(6)(b)1]

5.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The cumulative total hours of operation, during all periods of operation, for the auxiliary boiler S45. Data shall be recorded monthly.

b. The heat input to Coal Fired Boiler, S1. Data shall be recorded hourly using heat input determined in accordance with 40 CFR 75.

c. The gross electrical output in MW for the Power Plant. Data shall be recorded on a continuous basis.

5.4 The Permittee shall install, calibrate, maintain, and operate a non-resettable continuous monitoring system (or device) for the Emergency Diesel Generator, EG1 and the Emergency Fire Water Pump, EP1 to track the hours operated during emergency service and the hours of operation in non-emergency service (maintenance and/or testing), to record the reason the engine was in operation during those time, and to record the cumulative total hours of operation. Data shall be recorded monthly. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 60.4209 and 391-3-1-.02(6)(b)1]

5.5 The Permittee shall perform the monitoring on Limestone stackout S48 and the vents of Limestone Preparation Building Day Bin Silo S42, according to the methods and procedures contained in 40 CFR 60.674(c), (d) or (e).
[40 CFR 52.21, 40 CFR 60 Subpart OOO and 391-3-1-.02(6)(b)1]

5.6 The Permittee shall perform periodic inspection of dust suppression system to control fugitive emissions from the Limestone Railcar Unloading Station A5 and from openings (except for

vents) from Limestone Preparation Building Day Bin Silo S42, according to the methods and procedures contained in 40 CFR 60.674(b).
[40 CFR 52.21, 40 CFR 60 Subpart OOO and 391-3-1-.02(6)(b)1]

5.7 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record scrubbant pH on the Wet Limestone Scrubber.
[40 CFR 63 Subpart B and 391-3-1-.02(6)(b)1]

5.8 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record H_2SO_4 sorbent injection rate.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

5.9 The Permittee shall perform an analysis of the cooling tower makeup water to measure the total dissolved solids (TDS). The measurement shall be performed and recorded during each calendar quarter.
[40 CFR 52.21(j) and 391-3-1-.02(6)(b)1]

6. Performance Testing

6.1 The Permittee shall cause to be conducted a performance test at any specified emission point when so directed by the Division. The following provisions shall apply with regard to such tests:

a. All tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.

b. All test results shall be submitted to the Division within sixty (60) days of the completion of testing.

c. The Permittee shall provide the Division thirty (30) days prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.

d. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

6.2 The methods for the determination of compliance with emission limits listed under Section 2.0 are as follows:

a. Method 1 shall be used for the determination of sample point locations,

b. Method 2 shall be used for the determination of stack gas flow rate,

c. Method 3 shall be used for the determination of stack gas molecular weight,

d. Method 3B shall be used for the determination of the emissions rate correction factor or excess air, Method 3A may be used as an alternative,

e. Method 4 shall be used for the determination of stack gas moisture,

f. Method 5 or Method 17, as applicable, shall be used for the determination of Particulate Matter concentration from the Material Handling and Storage Facilities,

g. Method 5 or Method 17, as applicable in conjunction with Method 202 shall be used for the determination of total PM/PM_{10} concentration,

h. Method 5 or Method 17, as applicable in conjunction with Method 202 shall be used for the determination of total $PM_{2.5}$ concentration until the Director approves a test method for the determination of $PM_{2.5}$,

i. Method 7 or 7E for the determination of nitrogen oxide concentration from the Auxiliary Boiler, S45,

j. Method 8 or CTM 013 shall be used for the determination of sulfur acid mist emissions,

k. Method 9 and the procedures contained in Section 1.3 of the Division's Procedures for Testing and Monitoring Sources of Air Pollutants shall be used for the determination of opacity,

l. Method 10 shall be used for the determination of carbon monoxide concentration,

m. Method 19 shall be used for the determination of particulate matter, carbon monoxide, sulfur dioxide, and nitrogen oxides emission rates and to determine sulfur dioxide removal efficiency,

n. Method 25A shall be used to determine total organic compounds and to calculate volatile organic compound emissions,

o. Method 18 shall be used for the determination of methane emissions,

p. Method 26A shall be used for the determination of hydrogen fluoride and hydrogen chloride emissions,

q. Method 29 shall be used for the determination of lead emissions,

r. Method 22 shall be used for the determination of fugitive emissions from Material Handling Sources,

s. Compliance with the NOx limits in Condition 2.13.a and 2.13.r, SO_2 limits in Condition 2.13.f, 2.13.g, 2.13.h and 2.13.p and the removal efficiency for Wet Limestone Scrubber in Condition 2.14 shall be determined using the CEMS required by Condition 5.2.
[40 CFR 63 Subpart B; 40 CFR 52.21; 40 CFR 60.49Da and 391-3-1-.02(6)(b)1]

t. Compliance with the CO limit in Condition 2.13.c shall be determined using the CEMS required by Condition 5.2.
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

u. Compliance with the filterable PM limit in Condition 2.13.d shall be determined using the CEMS required by Condition 5.2.
[40 CFR 63 Subpart B; 40 CFR 52.21; 40 CFR 60.48Da(p) and 391-3-1-.02(6)(b)1]

v. [Reserved]

w. Compliance with the mercury limit in Condition 2.13.m shall be determined using the CEMS required by Condition 5.2.
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

Minor changes in methodology may be specified or approved by the Director or his/her designee when necessitated by process variables, changes in facility design, or improvement or corrections, which, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

6.3 Within 60 days after achieving the maximum production rate on each coal type (sub-bituminous coal and a 50/50 blend of sub-bituminous and bituminous coal) in Coal Fired Boiler S1, but not later than 180 days after the initial startup of the boiler, the Permittee shall conduct the following performance tests and furnish to the Division a written report of the results of such performance tests:
[391-3-1-.02(3)]

a. Performance test on Coal Fired Boiler S1, for volatile organic compounds at base load and at 50 percent load to verify compliance with Condition 2.13.i.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

b. Performance tests on Coal Fired Boiler S1, for PM/PM_{10} to verify compliance with Condition 2.13.e.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

c. Performance tests on Coal Fired Boiler S1, for $PM_{2.5}$ to verify compliance with Conditions 2.13.e and 2.13.q.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

d. Performance test on Coal Fired Boiler S1, for fluoride emissions (as HF) to verify compliance with Condition 2.13.k.
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

e. Performance test on Coal Fired Boiler S1, for sulfuric acid mist to verify compliance with Condition 2.13.l.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

f. Performance test on Coal Fired Boiler S1, for hydrochloric acid to verify compliance with Condition 2.13.n.
[40 CFR 63 Subpart B and 391-3-1-.02(6)(b)1]

g. Performance test on Coal Fired Boiler S1, for lead to verify compliance with Condition 2.13.j.
[40 CFR 52.21 avoidance and 391-3-1-.02(6)(b)1]

h. In addition to the initial performance tests, the Permittee shall conduct performance tests as described in Condition 6.3.a. through 6.3.g. on an annual basis.

6.4 Within 60 days after achieving the maximum production rate at which the Auxiliary Boiler, S45, will be operated, but not later than 180 days after the initial startup of the boiler, the Permittee shall conduct the following performance tests and furnish to the Division a written report of the results of such performance tests:
[391-3-1-.02(3)]

a. Performance test on the Auxiliary Boiler, S45, for nitrogen oxide to verify compliance with Condition No. 2.16.a.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

b. Performance test on the Auxiliary Boiler, S45, for carbon monoxide to verify compliance with Condition No. 2.16.b.
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

c. Performance tests on the Auxiliary Boiler, S45, for PM/PM_{10} and $PM_{2.5}$ to verify compliance with Condition No. 2.16.c.
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

d. Performance test on the Auxiliary Boiler, S45, for sulfur dioxide or fuel sampling to verify compliance with Condition No. 2.16.d.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

e. Performance test on the Auxiliary Boiler, S45, for volatile organic compounds to verify compliance with Condition No. 2.16.e.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

f. Performance test on the Auxiliary Boiler, S45, for sulfuric acid mist to verify compliance with Condition No. 2.16.f.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

g. Performance test on the Auxiliary Boiler, S45, for opacity to verify compliance with Condition No. 2.16.g.
[391-3-1-.02(6)(b)1 and 40 CFR Subpart Db]

6.5 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup, the Permittee shall conduct the performance test on the Coal Handling Particulate Sources (Emission Units A4, A6 to A9, S40, S41, S46 and S47) and coal conveying systems, for opacity to verify compliance with Condition No. 2.23 and furnish to the Division a written report of the results of the performance test. Testing shall be conducted according to the methods and procedures contained in 40 CFR 60.254.
[40 CFR 52.21, 40 CFR 60.254 and 391-3-1-.02(3)]

6.6 The Permittee shall maintain records showing the guaranteed manufacturer's specifications for the insertable filters and/or bin vent filters on the PRB Conveyor Stackout S46, Illinois # 6 Conveyor Stackout S47, Fly Ash Silo S37, SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44, Pretreatment Hydrated Lime Silo S39, Limestone stackout S48 and the vents of Limestone Preparation Building Day Bin Silo S42. These records shall be used to demonstrate compliance with the PM limits in Conditions 2.24, 2.27 and 2.28. These records shall be maintained in a format suitable for inspection or submittal to the Division.
[40 CFR 52.21 and 391-3-1-.02(3)]

6.7 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup, the Permittee shall conduct performance testing on the Limestone Railcar Unloading Station A5 and the openings (except for vents) of Limestone Preparation Building Day Bin Silo S42, for opacity to verify compliance with Condition No. 2.25 and 2.26 and furnish to the Division a written report of the results of the performance test. Testing shall be conducted according to the methods and procedures contained in 40 CFR 60.675.
[40 CFR 52.21, 40 CFR 60.675 and 391-3-1-.02(3)]

6.8 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup, the Permittee shall conduct performance testing on the Coal Crusher House S40, Tripper Decker S41 and Fly Ash Mechanical Exhausters S43 for Particulate Matter to verify compliance with Condition No. 2.28 and furnish to the Division a written report of the results of the performance test.
[40 CFR 52.21 and 391-3-1-.02(3)]

6.9 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup (and annually thereafter), the Permittee shall conduct tests for HF and HCl on the Wet Limestone Scrubber. During tests, the Permittee shall use pH monitor per Condition 5.7 to determine average pH from test runs. The Permittee shall furnish to the Division a written report of the results of the test.
[40 CFR 52.21, 40 CFR 63 Subpart B and 391-3-1-.02(3)]

6.10 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup, the Permittee shall conduct performance tests for sulfuric acid mist. During tests, the Permittee shall use sorbent injection rate monitor per Condition 5.8 to determine average sorbent injection rate from test runs. The Permittee shall furnish to the Division a written report of the results of the performance test.
[40 CFR 52.21 and 391-3-1-.02(3)]

6.11 Within 60 days after achieving the maximum production rate at which the sources will be operated, but not later than 180 days after the initial startup, the Permittee shall conduct performance testing on the Coal Crusher House S40, Tripper Decker S41 and Fly Ash Mechanical Exhausters S43 for $PM_{2.5}$ to verify compliance with Condition No. 2.37 and furnish to the Division a written report of the results of the performance test.
[40 CFR 52.21 and 391-3-1-.02(3)]

6.12 The Permittee shall maintain records showing the guaranteed manufacturer's specifications for the insertable filters and/or bin vent filters on the PRB Conveyor Stackout S46, Illinois # 6 Conveyor Stackout S47, Fly Ash Silo S37, SO_3 Sorbent Silo S36, Mercury Sorbent Silo S38, Pretreatment Soda Ash Silo S44, Pretreatment Hydrated Lime Silo S39, Limestone stackout S48 and the vents of Limestone Preparation Building Day Bin Silo S42. These records shall be used to demonstrate compliance with the $PM_{2.5}$ limit in Condition 2.37. These records shall be maintained in a format suitable for inspection or submittal to the Division.
[40 CFR 52.21 and 391-3-1-.02(3)]

7. Notification, Reporting and Record Keeping Requirements

Record Keeping Requirements

7.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.
[391-3-1-.02(6)(b)1]

7.2 The Permittee shall use the hour meters required by Condition No. 5.3.a to determine and record the net operating hours for the auxiliary boiler S45, during every calendar month. The Permittee shall use these records to determine the total operating hours for the boiler for the twelve consecutive month period ending with each calendar month. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or

submittal. A twelve consecutive month total shall be the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

7.3 For each shipment of diesel fuel oil received, as defined in Condition 2.12 and 2.34, the Permittee shall obtain from the supplier of the fuel oil, a statement certifying that the oil complies with the specifications of ultra low sulfur diesel fuel oil contained in ASTM D975. As an alternative to the procedure described above, the Permittee may, for each shipment of diesel fuel oil received, obtain a sample for analysis of the sulfur content. The procedures of ASTM D4057 shall be used to acquire the sample. Sulfur content shall be determined using the procedures of Test Method ASTM D129 or by some other test method approved by the US EPA and acceptable to the Division. The Permittee shall keep records of the verification.
[40 CFR 63 Subpart B; 40 CFR 52.21; 40 CFR 60 Subpart IIII and 391-3-1-.02(6)(b)1]

7.4 The Permittee shall retain records of all fuel burned in the Coal Fired Boiler S1, at the frequency specified below. The records shall be available for inspection or submittal to the Division, upon request, and contain the following:

a. Monthly quantity (tons) of each coal type burned.

b. Monthly quantity (gallons) of ultra low sulfur diesel fuel oil burned.

7.5 The Permittee shall determine compliance with the NOx emissions limitations in Condition No. 2.13.a and 2.13.r using emissions data acquired by the NOx CEMS. The 30-day rolling average and 12-month rolling average shall be determined as follows:
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The 30-day average shall be the average of all valid hours of NOx emissions data for any 30 successive operating days.

b. After the first 30-day average, a new 30-day rolling average shall be calculated after each operating day.

c. For the purpose of this Permit, an operating day is a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time. It is not necessary for the fuel to be combusted continuously for the entire 24-hour period.

d. A 12-month average shall be the average for any 12 consecutive months.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

7.6 The Permittee shall determine compliance with the SO_2 emissions limitations in Condition No. 2.13.f, g, h and p and with the minimum SO_2 removal efficiency in Condition No 2.14 using emissions data acquired by the SO_2 CEMS. The 30-day rolling average (emission rate

and efficiency), 12-month rolling average, 3-hour rolling average and 24-hr rolling average shall be determined as follows:
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The 30-day average shall be the average of all valid hours of SO_2 emissions data for any 30 successive operating days.

b. After the first 30-day average, a new 30-day rolling average shall be calculated after each operating day.

c. For the purpose of this Permit, an operating day is a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time. It is not necessary for the fuel to be combusted continuously for the entire 24-hour period.

d. After the first 3-hour average, a new 3-hour rolling average shall be calculated after each operating hour.

e. After the first 24-hour average, a new 24-hour rolling average shall be calculated after each operating hour.

f. A 12-month average shall be the average for any 12 consecutive months.

g. The 30-day average removal efficiency shall be the average of all valid hours of SO_2 removal efficiency data for any 30 successive operating days. The Permittee shall use the inlet and outlet SO_2 CEMS data per Condition 5.2.b to determine SO_2 removal efficiency for each operating hour and for each day of operation.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

7.7 The Permittee shall determine compliance with the PM Filterable emissions limitations in Condition No. 2.13.d using emissions data acquired by the PM CEMS. The 24-hour rolling average shall be determined as follows:
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. After the first 24-hour average, a new 24-hour rolling average shall be calculated after each operating hour.

These records (including calculations) shall be maintained as part of the monthly records suitable for inspection or submittal.

7.8 The Permittee shall determine compliance with the CO emissions limitations in Condition No. 2.13.b and c using emissions data acquired by the CO CEMS. The 1-hour average and 30-day rolling average shall be determined as follows:
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. After the first 1-hour average, a new 1-hour average shall be calculated after each operating hour.

b. The 30-day average shall be the average of all valid hours of CO emissions data for any 30 successive operating days.

c. After the first 30-day average, a new 30-day rolling average shall be calculated after each operating day.

d. For the purpose of this Permit, an operating day is a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time. It is not necessary for the fuel to be combusted continuously for the entire 24-hour period.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

7.9 The Permittee shall determine compliance with the Mercury emissions limitations in Condition No. 2.13.m using emissions data acquired by the Mercury CEMS. The 12-month rolling average shall be determined as follows:
[40 CFR 63 Subpart B; 40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The Permittee shall determine and record the emission rate (lb/MW-hr) of Mercury from the Coal Fired Boiler S1, while firing coal. The emission rate from the stack shall be recorded continuously.

b. Using the above records the Permittee shall determine the monthly emission rate, in lb/MW-hr per month, of mercury from the Coal Fired Boiler S1.

c. A 12-month average shall be the average for any 12 consecutive months.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

7.10 The Permittee shall maintain the following records as they relate to the startup and shutdown of the Coal Fired Boiler S1:
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The type of startup initiated, per day; the hours attributed to the startup, and the hours attributed to shutdown. If the Coal Fired Boiler was not in operation on any given day, the records shall so note.

b. Identify startup of the pollution control systems – SCR, Wet Scrubber, Fabric Filter Baghouse, Sorbent Injection for Sulfuric Acid Mist and Activated Carbon Injection for Mercury.

7.11 The Permittee shall maintain files of all measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(2)(c)]

7.12 The Permittee shall determine and record the heat input rate in MMBtu/hr from the Coal Fired Boiler S1, to ensure that the boiler operates under the maximum design heat input rate as stated in Condition No. 2.15.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

7.13 The Permittee shall determine and record the gross electrical output in MW-hr for the Power Plant. Data shall be recorded on a continuous basis.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

7.14 The Permittee shall maintain records that the drift eliminator from cooling tower (Emission Units S2 to S35) operates in a manner that is consistent with Condition No. 2.18.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

7.15 The Permittee shall keep records of the monitoring on Limestone stackout S48 and the vents of Limestone Preparation Building S42, in accordance with 40 CFR 60.676(b).
[40 CFR 52.21, 40 CFR 60 Subpart OOO and 391-3-1-.02(6)(b)1]

7.16 The Permittee shall keep records of inspections of dust suppression system to control fugitive emissions from the Limestone Railcar Unloading Station A5 and from openings (except for vents) from Limestone Preparation Building Day Bin Silo S42, according to 40 CFR 60.676(b).
[40 CFR 52.21, 40 CFR 60 Subpart OOO and 391-3-1-.02(6)(b)1]

7.17 The Permittee shall develop and implement a Dust Suppression Plan in accordance with Condition 2.22 to suppress fugitive dust from the Coal handling particulate sources (Emission Units A4, A6 to A9), the Ash management particulate sources (Emission Units A1 and A3), the Gypsum management particulate sources (Emission Unit A2), the Limestone management particulate sources (Emission Units A5 and A10) and the Roadway Particulate Sources (Emission Units P1 to P21 and U1 to U15). The plan shall be subject to review and approval by the Division and shall include records sufficient to show that the plan is followed. In particular, any deviations from the plan, or failure to follow plan procedures, shall be noted.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

7.18 The Permittee shall use the hour meters required by Condition No. 5.4 to determine and record the net operating hours for the Emergency Diesel Generator EG1 and the Emergency Fire Water Pump EP1 during emergency and non-emergency service during every calendar month. The Permittee shall use these records to determine the total operating hours for each of these engines for the twelve consecutive month period ending with each calendar month.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal. A twelve consecutive month total shall be the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[40 CFR 52.21; 40 CFR 60 Subpart IIII and 391-3-1-.02(6)(b)1]

7.19 The Permittee shall demonstrate compliance with the NSPS Subpart IIII emission limits for the Emergency Diesel Generator EG1 and for the Emergency Fire Water Pump EP1, by purchasing certified engines. The engines shall be installed and configured according to the manufacturer/s specifications. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4211(c)]

Reporting Requirements

7.20 [Reserved]

7.21 The Permittee shall furnish the Division written notification as follows:
[40 CFR 63 Subpart B; 40 CFR 52.21 and 40 CFR 60.7]

a. A notification of the date of construction of the Coal Fired Boiler S1, Auxiliary Boiler S45, and the Coal Handling Particulate Sources (Emission Units A4, A6 to A9, S40, S41, S46 and S47), is commenced postmarked no later than 30 days after such date.

b. A notification of the actual date of initial startup of the Coal Fired Boiler S1, Auxiliary Boiler S45, Coal Handling Particulate Sources (Emission Units A4, A6 to A9, S40, S41, S46 and S47) and Limestone Management Particulate Sources (Emission Units A5, A10, S42 and S48), postmarked within 15 days after such date. For purposes of this permit, "startup" shall mean the setting in operation of an affected facility for any purpose.

c. Certification that a final inspection has shown that construction of the Coal Fired Boiler S1 has been completed in accordance with the application, plans, specifications and supporting documents submitted in support of this permit. The certification shall be included with the notification in paragraph (b).

7.22 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emission control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report, which shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.
[391-3-1-.02(6)(b)1.(iv)]

7.23 Excess Emissions

a. Excess emissions resulting from startup, shutdown, malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]

i. The best operational practices to minimize emissions are adhered to;

ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and

iii. The duration of excess emissions is minimized.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of this Permit.
[391-3-1-.02(2)(a)7(ii)]

c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

7.24 The Permittee shall submit a written report containing excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each quarterly period ending March 31, June 30, September 30, and December 31 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, April 30, July 30, October 30, and January 30, respectively. Reporting required by this condition shall begin at the end of the quarter in which initial startup is completed. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the Division's Procedures for Testing and Monitoring Sources of Air Pollutants, including any failure to follow required work practice procedures.

b. Total operating time during each reporting period.

c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any

conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.

d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

f. Certification that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

7.25 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition No. 7.24 (and all others in this Condition), the following excess emissions, exceedances, and excursions shall be reported:
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. Excess emissions: (means for the purpose of this Condition and Condition No. 7.24, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition No. 7.24.

b. Exceedances: (means for the purpose of this Condition and Condition No. 7.24, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. Any 30-day rolling average NOx emission rate which exceeds 0.050 lb/MMBtu for the Coal Fired Boiler S1,

ii. Any 1-hour average CO emission rate which exceeds 0.30 lb/MMBtu for the Coal Fired Boiler S1,

iii. Any 30-day rolling average CO emission rate which exceeds 0.10 lb/MMBtu for the Coal Fired Boiler S1,

iv. Any 24-hour rolling average for Filterable PM/PM_{10} emission rate which exceeds 0.010 lb/MMBtu for the Coal Fired Boiler S1,

v. Any 12-month rolling average sulfur dioxide emission rate which exceeds 0.052 lb/MMBtu for the Coal Fired Boiler S1,

vi. Any 30-day rolling average sulfur dioxide emission rate which exceeds 0.069 lb/MMBtu for the Coal Fired Boiler S1,

vii. Any 3-hour rolling average sulfur dioxide emission rate which exceeds 959 lb/hr for the Coal Fired Boiler S1,

viii. Any 24-hour rolling average sulfur dioxide emission rate which exceeds 0.08 lb/MMBtu for the Coal Fired Boiler S1,

ix. Any 30-day rolling average of the SO_2 removal efficiency of the Wet Limestone Scrubber, as calculated per Conditions 5.2.b and 7.6.g, which is less than 97.5 percent,

x. Any 12-month rolling average mercury emission rate that exceeds 7.64×10^{-6} lb/MW-hr (while firing sub-bituminous coal) or the computed weighted average as per Condition 2.13.m (while firing blend of sub-bituminous and bituminous coal) for the Coal Fired Boiler S1,

xi. Any 12-month rolling average NOx emission rate that exceeds 0.030 lb/MMBtu (while firing sub-bituminous coal) or the computed weighted average as per Condition 2.13.r (while firing blend of sub-bituminous and bituminous coal) for the Coal Fired Boiler S1. This condition becomes effective 6 months after initial start-up of Coal Fired Boiler S1, absent approval by the Division for an extension of this date.

xii. Any time ultra low sulfur fuel oil combusted for startup in the Coal Fired Boiler S1, Auxiliary Boiler S45, Emergency Generator EG1 and Firewater Pump EP1 exceeds 0.0015 percent sulfur by weight,

xiii. Any twelve consecutive month period during which hours of operation of the Auxiliary Boiler exceeds 876 hours,

xiv. Any twelve consecutive month period during which hours of operation of Emergency Generator EG1 or Firewater Pump EP1 exceed 500 hours,

xv. Any hour that the Coal Fired Boiler S1, has a heat input rate that exceeds 8,300 MMBtu/hr,

c. Excursions: (means for the purpose of this Condition and Condition No. 7.24, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring).

i. Any exceedance of the PM emissions limits in Condition 2.13 is an excursion for opacity,

ii. Any exceedance of the SO_2 emission limits in Condition 2.13 or 2.14 is an excursion for HF and HCl,

7.26 The Permittee shall submit a written report containing the following information for each quarterly period ending March 31, June 30, September 30, and December 31 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, April 30, July 30, October 30, and January 30, respectively. Reporting required by this condition shall begin at the end of the quarter in which initial startup is completed.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

a. The 30-day average NOx emission rate in lb/MMBtu from the Coal Fired Boiler S1, for each 30-day average period that ends during the quarterly reporting period.

b. The 30-day average CO emission rate in lb/MMBtu from the Coal Fired Boiler S1, for each 30-day average period that ends during the quarterly reporting period.

c. The maximum 1-hour CO emission rate in lb/MMBtu from the Coal Fired Boiler S1, during the quarterly reporting period.

d. The twelve-month rolling average SO_2 emission rate in lb/ MMBtu from the Coal Fired Boiler S1 for each month in the quarterly reporting period.

e. The 30-day average SO_2 emission rate in lb/MMBtu from Coal Fired Boiler S1, for each 30-day average period that ends during the quarterly reporting period.

f. The maximum 3-hour rolling average SO_2 emission rate in lb/MMBtu from the Coal Fired Boiler S1, during the quarterly reporting period.

g. The maximum 24-hour rolling average SO_2 emission rate in lb/MMBtu from the Coal Fired Boiler S1, during the quarterly reporting period.

h. The 30-day average removal efficiency of the Wet Limestone Scrubber, for each 30-day average period that ends during the quarterly reporting period.

i. The maximum 24-hour rolling average Filterable PM/PM_{10} emission rate in lb/MMBtu from the Coal Fired Boiler S1, during the quarterly reporting period.

j. The twelve-month rolling average mercury emission rate in lb/MW-hr from the Coal Fired Boiler S1 for each month in the quarterly reporting period.

k. Fuel oil certifications for ultra low sulfur diesel fuel oil burned for startup in the Coal Fired Boiler S1, Auxiliary Boiler S45, Emergency Generator EG1, and Emergency

Firewater Pump EP1, and a statement signed by a responsible official of the affected facility that the Permittee burned only ultra low sulfur diesel fuel oil during the quarter.

l. The maximum hourly heat input for the Coal Fired Boiler S1, during the reporting period.

m. The twelve-month rolling average NOx emission rate in lb/MMBtu from the Coal Fired Boiler S1 for each month in the quarterly reporting period.

8. Special Conditions

8.1 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.

8.2 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."