

PERMIT NO. 4911-015-0011-V-04-0

ISSUANCE DATE: 3/6/2019



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit

Facility Name: Bowen Steam-Electric Generating Plant

Facility Address: 317 Covered Bridge Road
Cartersville, Georgia (Bartow County)

Mailing Address: 241 Ralph McGill Blvd. N.E., Bin 10221
Atlanta, Georgia 30308

Parent/Holding Company: Southern Company/Georgia Power

Facility AIRS Number: 04-13-015-00011

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

The operation of an electric utility plant including four steam electric generating units.

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. Unless modified or revoked, this Permit expires five years after the issuance date indicated above.

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, for any misrepresentation made in Title V Application TV-43911 signed on November 29, 2016, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of 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 **72** pages.



[Signed]

Richard E. Dunn, Director
Environmental Protection Division

Table of Contents

PART 1.0	FACILITY DESCRIPTION	1
1.1	Site Determination	1
1.2	Previous and/or Other Names	1
1.3	Overall Facility Process Description.....	1
PART 2.0	REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY	2
2.1	Facility Wide Emission Caps and Operating Limits	2
2.2	Facility Wide Federal Rule Standards.....	2
2.3	Facility Wide SIP Rule Standards.....	2
2.4	Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit	2
PART 3.0	REQUIREMENTS FOR EMISSION UNITS	3
3.1	Emission Units	3
3.2	Equipment Emission Caps and Operating Limits	4
3.3	Equipment Federal Rule Standards	6
3.4	Equipment SIP Rule Standards	8
3.5	Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit	13
PART 4.0	REQUIREMENTS FOR TESTING.....	14
4.1	General Testing Requirements	14
4.2	Specific Testing Requirements	16
PART 5.0	REQUIREMENTS FOR MONITORING (Related to Data Collection)	18
5.1	General Monitoring Requirements.....	18
5.2	Specific Monitoring Requirements	18
PART 6.0	RECORD KEEPING AND REPORTING REQUIREMENTS	31
6.1	General Record Keeping and Reporting Requirements	31
PART 7.0	OTHER SPECIFIC REQUIREMENTS.....	45
7.1	Operational Flexibility	45
7.2	Off-Permit Changes	45
7.3	Alternative Requirements.....	46
7.4	Insignificant Activities	46
7.5	Temporary Sources	46
7.6	Short-term Activities.....	46
7.7	Compliance Schedule/Progress Reports	46
7.8	Emissions Trading.....	46
7.9	Acid Rain Requirements	47
7.10	Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA).....	52
7.11	Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)	53
7.12	Revocation of Existing Permits and Amendments.....	54
7.13	Pollution Prevention.....	54
7.14	Specific Conditions	54
7.15	Cross State Air Pollution Rule (CSAPR) Allowance Trading Program Requirements.....	55
PART 8.0	GENERAL PROVISIONS	56
8.1	Terms and References	56
8.2	EPA Authorities	56
8.3	Duty to Comply.....	56
8.4	Fee Assessment and Payment	57

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

8.5	Permit Renewal and Expiration	57
8.6	Transfer of Ownership or Operation	57
8.7	Property Rights.....	57
8.8	Submissions.....	58
8.9	Duty to Provide Information	58
8.10	Modifications	59
8.11	Permit Revision, Revocation, Reopening and Termination.....	59
8.12	Severability	60
8.13	Excess Emissions Due to an Emergency	60
8.14	Compliance Requirements	61
8.15	Circumvention.....	63
8.16	Permit Shield.....	64
8.17	Operational Practices	64
8.18	Visible Emissions.....	64
8.19	Fuel-burning Equipment	65
8.20	Sulfur Dioxide.....	65
8.21	Particulate Emissions	66
8.22	Fugitive Dust.....	66
8.23	Solvent Metal Cleaning.....	67
8.24	Incinerators.....	67
8.25	Volatile Organic Liquid Handling and Storage	68
8.26	Use of Any Credible Evidence or Information	68
8.27	Internal Combustion Engines.....	69
8.28	Boilers and Process Heaters	71
Attachments		72
A. List of Standard Abbreviations and List of Permit Specific Abbreviations		
B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups		
C. List of References		
D. U.S. EPA Acid Rain Program Phase II Permit Application		
E. U.S. EPA Acid Rain NOx Averaging Plan		

PART 1.0 FACILITY DESCRIPTION**1.1 Site Determination**

Plant Bowen is currently contracting with an ash processing facility located on site to process and sell some of the coal ash produced from the electric generating process at Plant Bowen. Even though the ash processing facility and Plant Bowen are located on contiguous property, they are deemed to be separate sources for purposes of Title V permitting due to the fact that there is no common control between Georgia Power Company and the ash processing facility. Therefore, the Title V permit for Plant Bowen covers only those operations controlled solely by Georgia Power. The ash processing facility, which is itself a minor source under 40 CFR Part 70, will continue to operate under its minor source SIP permit.

1.2 Previous and/or Other Names

This facility is commonly known and referred to as Plant Bowen. No other names were identified.

1.3 Overall Facility Process Description

Plant Bowen burns fossil fuel to generate electricity. This facility includes four steam electric generating units, which primarily burn coal. During normal operation, the Steam Generating Units (SG01, SG02, SG03 and SG04) use flue gas desulfurization (FGD) scrubbers, selective catalytic reduction, and electrostatic precipitators, and exhaust through a separate liner of one of the two wet 675-foot stack. There are some operations when it will be necessary to bypass the scrubber. In these cases the units will exhaust through one of the two existing 1000-foot stacks. Other support equipment includes one 349 MMBtu/hr and one 471 MMBtu/hr fuel-oil or propane fired start up boilers, a coal handling system, ash handling system, and a material handling system.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

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.

3.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
SG01	Steam Generator Unit 1	391-3-1-.02(2)(b), (d), (g), (jjj), (sss), (uuu), 40 CFR 96 and Acid Rain, 40 CFR 63 Subpart A, 40 CFR 63 Subpart UUUUU	3.2.1, 3.2.2, 3.2.4, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.7, 3.4.11, 3.4.12, 3.4.15, 3.4.17, 3.4.18, 4.2.1, 4.2.3, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.13, 5.2.14, 5.2.15, 5.2.16, 5.2.17, 5.2.19, 5.2.20, 5.2.21, 6.1.7, 6.2.1, 6.2.2, 6.2.5, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15, 6.2.16, 6.2.17, 6.2.18, 6.2.19, 6.2.20, 6.2.21, 6.2.22	EP01 SCR1 FGD1 ACI1 ALK1	ESP SCR FGD Activated Carbon Injection Alkali Sorbent Injection
SG02	Steam Generator Unit 2	391-3-1-.02(2)(b), (d), (g), (jjj), (sss), (uuu), 40 CFR 96 and Acid Rain, 40 CFR 63 Subpart A, 40 CFR 63 Subpart UUUUU	3.2.1, 3.2.2, 3.2.4, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.8, 3.4.11, 3.4.12, 3.4.14, 3.4.17, 3.4.18, 4.2.1, 4.2.2, 5.2.1, 5.2.2, 5.2.3, 5.2.5, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.13, 5.2.14, 5.2.15, 5.2.16, 5.2.17, 5.2.18, 5.2.20, 5.2.21, 6.1.7, 6.2.1, 6.2.2, 6.2.5, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15, 6.2.16, 6.2.17, 6.2.18, 6.2.19	EP02 SCR2 FGD2 ACI2 ALK2	ESP SCR FGD Activated Carbon Injection Alkali Sorbent Injection
SG03	Steam Generator Unit 3	391-3-1-.02(2)(b), (d), (g), (jjj), (sss), (uuu), 40 CFR 96 and Acid Rain, 40 CFR 63 Subpart A, 40 CFR 63 Subpart UUUUU	3.2.1, 3.2.2, 3.2.4, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.9, 3.4.11, 3.4.12, 3.4.14, 3.4.17, 3.4.18, 4.2.1, 4.2.2, 5.2.1, 5.2.2, 5.2.3, 5.2.6, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.13, 5.2.14, 5.2.15, 5.2.16, 5.2.17, 5.2.18, 5.2.20, 5.2.21, 6.1.7, 6.2.1, 6.2.2, 6.2.5, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15, 6.2.16, 6.2.17, 6.2.18, 6.2.19	EP03 SCR3 FGD3 BH03	ESP SCR FGD Baghouse with Powdered Activated Carbon (PAC)

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
SG04	Steam Generator Unit 4	391-3-1-.02(2)(b), (d), (g), (j), (k), (l), (m), (n), (o), (p), (q), (r), (s), (t), (u), (v), (w), (x), (y), (z), 40 CFR 96 and Acid Rain, 40 CFR 63 Subpart A, 40 CFR 63 Subpart UUUUU	3.2.1, 3.2.2, 3.2.4, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.10, 3.4.11, 3.4.12, 3.4.14, 3.4.17, 3.4.18, 4.2.1, 4.2.2, 5.2.1, 5.2.2, 5.2.3, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.13, 5.2.14, 5.2.15, 5.2.16, 5.2.17, 5.2.18, 5.2.23, 5.2.24, 6.1.7, 6.2.1, 6.2.2, 6.2.5, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15, 6.2.16, 6.2.17, 6.2.18, 6.2.19	EP04 SCR4 FGD4 BH04	ESP SCR FGD Baghouse with Powdered Activated Carbon (PAC)
SB03	Start-up Boiler Unit 3	391-3-1-.02(2)(b), (d), and (g), 40 CFR 63 Subpart A & DDDDD	3.2.3, 3.3.3, 3.3.4, 3.4.2, 3.4.3, 3.4.4, 5.2.20, 5.2.21, 6.1.7, 6.2.20, 6.2.21, 6.2.22	None	n/a
SB04	Start-up Boiler Unit 4	391-3-1-.02(2)(b), (d), and (g), 40 CFR 60 Subpart A & Subpart Db, 40 CFR 63 Subpart A & DDDDD	3.2.3, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.4.17, 3.4.18, 5.2.21, 5.2.22, 6.1.7, 6.2.20, 6.2.21, 6.2.22	LNB FGR	Low NOx Burners Flue Gas Recirculation
CHS	Coal Handling System	391-3-1-.02(2)(n)	3.4.5, 3.4.6, 6.2.6	None	n/a
AHS	Ash Handling System	391-3-1-.02(2)(n)	3.4.5, 3.4.6, 6.2.6	None	n/a
MHS	Materials Handling System	391-3-1-.02(2)(e) 391-3-1-.02(2)(n) 40 CFR 60 Subpart A 40 CFR 60 Subpart OOO	3.3.1, 3.4.5, 3.4.6, 3.4.14, 5.2.12	None	n/a

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

3.2.1 The Permittee shall not fire any fuel other than coal in the steam generating units (Emission Unit IDs SG01, SG02, SG03, and SG04) except for the following:
[391-3-1-.03(2)(c)]

- a. No. 2 fuel oil, biodiesel, or biodiesel blends may be burned for start-up, shutdown, to assist in achieving peak load, and flame stabilization.
- b. Sawdust may be blended and fired with the coal.
- c. Biomass may be blended and fired with the coal. Biomass, as used in this permit, shall include, but not be limited to paper, vegetative matter, or wood chips. Biomass shall not include sawdust (sawdust is covered by 3.2.1b.) or municipal solid waste except as may be specifically listed above.

- d. Used oil, as indicated in Condition 3.2.2, may be burned.
- e. Coal-derived synthetic fuel, manufactured using a binder with mercury of content less than or equal to 0.2 ppm on a dry basis and the binder constitutes approximately 2.5% by weight or less of the coal-derived synthetic fuel shall be considered coal for the purposes of this permit.

State Only Enforceable Condition

- 3.2.2 The Permittee shall not burn used oil in any steam generating unit (Emission Unit IDs SG01, SG02, SG03, or SG04) during periods of startup or shutdown. For the purposes of this condition, startup shall be defined as the period lasting from the time the first oil fire is established in the furnace until the time that mill/burner performance and secondary air temperature are adequate to maintain an exiting gas temperature above the sulfuric acid dew point. Shutdown shall be defined as the cessation of the operation of a source or facility for any purpose.
[391-3-1-.03(2)(c)]
- 3.2.3 The Permittee shall not fire any fuel other than No. 2 fuel oil, or propane in the start-up boilers (emission unit IDs SB03 and SB04).
[391-3-1-.03(2)(c)]

NOx Emission Limit for the 7-Plant Plan

- 3.2.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere NOx emissions, including emissions occurring during startup and shutdown, from the combined operations of all affected units (Emission Unit IDs SG01, SG02, SG03, SG04 at Plant Bowen (AFS No. 015-00011); SG01, SG02, SG03, SG04 at Plant Branch (AFS No. 237-00008); SG01, SG02, SG03, SG04 at Plant Hammond (AFS No. 115-00003); SGM1, SGM2 at Plant McDonough (AFS No. 067-00003); SG01, SG02, SG03, SG04 at Plant Scherer (AFS No. 207-00008); SG01, SG02 at Plant Wansley (AFS No. 149-00001); and SG01, SG02, SG03, SG04, SG05, SG06, SG07 at Plant Yates (AFS No. 077-00001)) in excess of 32,335.8 tons during the ozone season. For purposes of this permit, the ozone season shall be defined as May 1 through September 30.
[391-3-1-.03(8)(c)1 and 391-3-1-.03(8)(c)15]

3.3 Equipment Federal Rule Standards

3.3.1 The Permittee shall comply with the provisions of 40 CFR 60 Subpart OOO, "Standards of Performance of Nonmetallic Mineral Processing Plants" for the affected portion of the materials handling system (Emission Unit ID MHS). The affected portion shall include any grinding mill, screening operation, belt conveyor, and storage bin associated with the limestone handling process. In particular, the Permittee shall not discharge, or cause the discharge, into the atmosphere from each affected facility/source constructed, modified or reconstructed after August 31, 1983 but before April 22, 2008,
[40 CFR 60 Subpart OOO]

- a. From any crusher, at which a capture system is not used, any fugitive emissions, which exhibit greater than 15 percent opacity.
- b. From any stack, emissions that contain particulate matter in excess of 0.05 g/dscm (0.022 grains/dscf) or exhibit greater than 7 percent opacity.
- c. From any screening operation, belt conveyor transfer point, bagging operation, storage bin, enclosed truck or railcar loading station, or from any other affected equipment any fugitive emissions, which exhibit greater than 10 percent opacity.
- d. Any visible emissions from;
 - i. Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin and,
 - ii. Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.

For processing equipment subject to Subpart OOO located inside a building, the Permittee shall comply with the above process limits (a, b, c, and d), or shall not discharge or cause the discharge into the atmosphere, any

- e. Visible fugitive emissions from the building openings may not exhibit greater than 7 percent opacity.
- f. Emissions from a powered building vent which contain particulate matter in excess of 0.05 g/dscm (0.022 grains/dscf) or exhibit greater than 7 percent opacity.

Note: Unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another, including but not limited to: trucks, front end loaders, skip hoists and railcars into any screening operation, feed hopper, or crusher is exempt from the requirements of this condition.

[40 CFR 60.672(d)]

- 3.3.2 The Permittee shall comply with all applicable provisions of the “National Emission Standards for Hazardous Air Pollutants” as found in 40 CFR 63 Subpart A, “General Provisions” and 40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units, or Mercury and Air Toxics Standards (MATS), for operation of Steam Generating Units (Emission Unit IDs SG01, SG02, SG03 and SG04).
[40 CFR 63, Subparts A and UUUUU]
- 3.3.3 The Permittee shall comply with all applicable provisions of 40 CFR 63 Subpart A: General Provisions and 40 CFR 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters for the operation of the Startup Boiler 3 (Emission Unit ID SB03) and for Startup Boiler 4 (Emission Unit ID SB04).
[40 CFR 63 Subpart A and DDDDD]
- 3.3.4 The Permittee shall operate the startup boilers (Emission Unit ID SB03 and SB04) each as a limited-use boiler by limiting the annual heat input to the startup boiler to no more than 267,180 MMBtu and 425,736 MMBtu respectfully during any calendar year, equivalent to an annual capacity factor of no more than 10% in accordance with 40 CFR 63, Subpart DDDDD. The Permittee shall use a standard heat content value of 140,000 Btu/gallon for No. 2 fuel oil and 91,000 Btu/gallon for propane to calculate compliance with this limit.
[40 CFR 63 Subpart DDDDD – 63.7499 and 40 CFR 63.7575]
- 3.3.5 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60, Subpart A – “General Provisions” and Subpart Db – “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units,” for the operation of Start-up Boiler Unit 4 (Emission Unit ID SB04).
[40 CFR 60.40b]
- 3.3.6 The sulfur content of the distillate fuel oil fired in Start-up Boiler Unit 4 (Emission Unit ID SB04) shall not exceed 0.3 percent sulfur, by weight, and shall meet the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing Materials (ASTM) in ASTM D396, “Standard Specification for Fuel Oils.”
[40 CFR 60.42b(j) and 391-3-1-.02(2)(g). (subsumed)]
- 3.3.7 The Permittee shall not cause, let, suffer, permit or allow the emissions from Start-up Boiler Unit 4 (Emission Unit ID SB04), the opacity of which is equal to or greater than twenty (20) percent, except for one six-minute period per hour of not more than twenty-seven (27) percent opacity.
[40 CFR 60.43b(f) and 391-3-1-.02(2)(d)3 (subsumed)]

3.3.8 The Permittee shall not discharge or cause the discharge into the atmosphere from any steam generating unit (Emission IDs SG01, SG02, SG03, and SG04), any gases which contain mercury, particulate matter or hydrogen chloride above the following limits specified by 40 CFR 63 Subpart UUUUU. The emission limits apply at all times except during periods of startup and shutdown as defined in 40 CFR 63.10042 when work practice standards are applicable as required by Permit Condition 6.2.23.
[40 CFR 63.9991(a)(1)]

- a. Mercury in excess of 1.2 lb/TBtu heat input or 0.013 lb/GWh gross output based on a 30-operating day rolling average for each steam generating unit.
- b. Particulate matter in excess of 0.030 lb/MMBtu heat input or 0.30 lb/MWh gross output.
- c. Hydrogen chloride in excess of 0.0020 lb/MMBtu heat input or 0.020 lb/MWh gross output.
- d. As an alternative to the hydrogen chloride emission limit in Condition 3.3.8(c), sulfur dioxide in excess of 0.20 lb/MMBtu heat input or 1.5 lb/MWh gross output based on a 30-operating day rolling average for each steam generating unit.

3.3.9 The Permittee may comply with MATS using emissions averaging according to the requirements of 40 CFR 63.10009 in lieu of the requirements in Permit Condition 3.3.8.
[40 CFR 63.10009]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not discharge or cause the discharge into the atmosphere from any steam generating unit (Emission Unit IDs SG01, SG02, SG03, or SG04), any gases which contain particulate matter in excess of 0.24 lb/mmBtu heat input.
[391-3-1-.02(2)(d)1(iii)]

3.4.2 The Permittee shall not discharge or cause the discharge into the atmosphere from any steam generating unit, combustion turbine, or start-up boiler (Emission Unit IDs SG01, SG02, SG03, SG04, SB03 and SB04) any gases which exhibit opacity equal to or greater than 40 percent.
[391-3-1-.02(2)(b)]

3.4.3 The Permittee shall not fire any fuel in any steam generating unit or start-up boiler (Emission Unit IDs SG01, SG02, SG03, SG04, SB03 or SB04) that contains greater than 3.0 percent sulfur, by weight.
[391-3-1-.02(2)(g)2]

- 3.4.4 The Permittee shall not discharge or cause the discharge into the atmosphere from any start-up boiler (Emission Unit IDs SB03 and SB04) any gases which contain particulate matter in excess of the rate derived from $E = 0.7 \times (10/R)^{0.202}$ where E equals the allowable particulate emission rate in pounds per million Btu heat input and R equals the heat input in million Btu per hour.
[391-3-1-.02(2)(d)1(ii)]

Coal and Ash Handling Requirements

- 3.4.5 The Permittee shall take all reasonable precautions with the coal handling system (Emission Unit ID CHS), the ash handling system (Emission Unit ID AHS), and the materials handling system (Emission Unit ID MHS) to prevent fugitive dust from these operations from becoming airborne.
[391-3-1-.02(2)(n)1]
- 3.4.6 The percent opacity from the coal handling system (Emission Unit ID CHS), the ash handling system (Emission Unit ID AHS), and those portions of the materials handling system (Emission Unit ID MHS) not covered by Condition 3.3.1 shall not equal or exceed 20 percent.
[391-3-1-.02(2)(n)2]

NOx Emission Limits per Georgia Rule (jjj)

- 3.4.7 Except as indicated in Condition Nos. 3.4.11 and 3.4.12, the Permittee shall not discharge, or cause the discharge, into the atmosphere from steam generating unit with emission unit ID SG01 at Plant Bowen (AFS No. 015-00011) NOx emissions in excess of 0.07 lb/MMBtu heat input on a 30 day rolling average period. This condition shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)3(i)]
- 3.4.8 Except as indicated in Condition Nos. 3.4.11 and 3.4.12, the Permittee shall not discharge, or cause the discharge, into the atmosphere from steam generating unit with emission unit ID SG02 at Plant Bowen (AFS No. 015-00011) NOx emissions in excess of 0.07 lb/MMBtu heat input on a 30-day rolling average period. This condition shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)3(i)]
- 3.4.9 Except as indicated in Condition Nos. 3.4.11 and 3.4.12, the Permittee shall not discharge, or cause the discharge, into the atmosphere from steam generating unit with emission unit ID SG03 at Plant Bowen (AFS No. 015-00011) NOx emissions in excess of 0.07 lb/MMBtu heat input on a 30-day rolling average period. This condition shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)3(i)]

Title V Permit

- 3.4.10 Except as indicated in Condition Nos. 3.4.11 and 3.4.12, the Permittee shall not discharge, or cause the discharge, into the atmosphere from steam generating unit with emission unit ID SG04 at Plant Bowen (AFS No. 015-00011) NO_x emissions in excess of 0.07 lb/MMBtu heat input on a 30-day rolling average period. This condition shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)3(i)]
- 3.4.11 If the Permittee does not comply with Condition Nos. 3.4.7, 3.4.8, 3.4.9, or 3.4.10, the Permittee shall demonstrate that NO_x emissions, averaged over all affected units (emission units IDs SG01, SG02, SG03, SG04 at Plant Bowen (AFS No. 015-00011); SG01, SG02, SG03, SG04 at Plant Hammond (AFS No. 115-00003); SGM1, SGM2 at Plant McDonough (AFS No. 067-00003); SG01, SG02 at Plant Wansley (AFS No. 149-00001); and SG01, SG02, SG03, SG04, SG05, SG06, SG07 at Plant Yates (AFS No. 077-00001)), do not exceed 0.13 lb/MMBtu heat input on a 30-day rolling averaging period. This shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)3(ii)]
- 3.4.12 If the Permittee does not comply with Condition Nos. 3.4.7, 3.4.8, 3.4.9, or 3.4.10, the Permittee shall demonstrate that NO_x emissions, averaged over all affected units (emission units IDs SG01, SG02, SG03, SG04 at Plant Bowen (AFS No. 015-00011); SG01, SG02, SG03, SG04 at Plant Branch (AFS No. 237-00008); SG01, SG02, SG03, SG04 at Plant Hammond (AFS No. 115-00003); SGM1, SGM2 at Plant McDonough (AFS No. 067-00003); SG01, SG02, SG03, SG04 at Plant Scherer (AFS No. 207-00008); SG01, SG02 at Plant Wansley (AFS No. 149-00001); and SG01, SG02, SG03, SG04, SG05, SG06, SG07 at Plant Yates (AFS No. 077-00001)), do not exceed 0.18 lb/MMBtu heat input on a 30-day rolling averaging period. This shall apply during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(jjj)5(ii)]
- 3.4.13 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the Material Handling System (Emission Unit ID. No. MHS) any gases which contain particulate matter in excess of the rate derived from the equation noted below:
[391-3-1-.02(2)(e)1]
- a. For process input weight rate up to and including 30 tons per hour:
- $$E = 4.1P^{0.67}; \text{ or}$$
- b. For process input weight rate above 30 tons per hour:
- $$E = 55P^{0.11} - 40$$

Where E equals the allowable PM emission rate in pounds per hour and P equals the total dry process input weight rate in tons per hour.

SO₂ Emission Limits Per Georgia Rule (uuu)

- 3.4.14 With the exception of periods indicated in Condition No. 3.4.15, the Permittee shall not discharge, or cause the discharge, into the atmosphere from each Steam Generating Unit (Emission Unit IDs SG01, SG02, SG03 and SG04) at Plant Bowen (AFS No. 015-00011), any gases which contain SO₂ emissions in excess of 5 percent (0.05) of the potential combustion concentration on a 30-day rolling average basis.
[391-3-1-.02(2)(uuu)2]
- 3.4.15 For purposes of this permit, emissions in excess of limits outlined in Condition 3.4.14 are permitted during the following periods.
[391-3-1-.02(2)(uuu)4]
- a. During the restart of Electric Utility Steam Generating Units SG01, SG02, SG03 and SG04, when all Electric Utility Steam Generating Units at the facility are down and off-site power is not available (also known as a “Black Start”)
 - b. Periods of startup of an Electric Utility Steam Generating Unit provided that such periods are consistent with the requirements outlined in the Georgia Rules for Air Quality Control 391-3-1-.02(2)(a)7.
 - c. Periods of shutdown of an Electric Utility Steam Generating Unit provided that such periods are consistent with the requirements outlined in the Georgia Rules for Air Quality Control 391-3-1-.02(2)(a)7.
 - d. Periods of scheduled and/or preventative maintenance of control technology equipment if such maintenance cannot reasonably be performed during a scheduled outage of the respective Electric Utility Steam Generating Unit.
 - e. Periods of malfunction of an Electric Utility Steam Generating Unit and/or control technology equipment provided that such periods are consistent with the requirements outlined in the Georgia Rules for Air Quality Control 391-3-1-.02(2)(a)7.
 - f. Periods when the Permittee is required to conduct the Relative Accuracy Test Audit (RATA) and any other necessary periodic quality assurance procedures on the Continuous Emissions Monitoring System (CEMS) located on the bypass stack pursuant to 40 CFR Part 75 of the Procedures for Testing and Monitoring Sources of Air Pollutants.
 - g. Periods when the Permittee is required to conduct any performance testing on the bypass stack as required by State or Federal air quality rules, air quality operating permits or at the request of the Division.

- h. Division-approved periods of research and development of emission control technologies provided that the unit does not exceed other applicable emission limits. For purposes of this subparagraph, the owner/operator shall submit a request for approval under this subparagraph at least 120 days prior to such date as well as including the following items: (1) length of time of research and development (R&D) period; (2) identification of steps to take to minimize emissions in accordance with best operational practices during R&D period; (3) for periods of R&D lasting more than 48 hours during any 5-day period, a demonstration that any increase in emissions resulting from the R&D project that are above that which is allowed by this subparagraph (uuu) will not cause or significantly contribute to an violation of any national ambient air quality standard or prevent compliance with any other applicable provisions.
- i. Any other occasion not covered by a. through h., as approved by the Division.

State Only Enforceable Condition

- 3.4.16 The Permittee shall not operate each steam generating unit (Emission Unit IDs SG01, SG02, SG03 and SG04) unless such source is equipped and operated with selective catalytic reduction and flue gas desulfurization, except when the Permittee is not required to operate the required control technology under the following conditions:
[391-3-1-.02(2)(sss)]
- a. Restarting an EGU when SG01, SG02, SG03, and SG04 at the facility are down and off-site power is not available (also known as a “Black Start”).
 - b. Periods of startup of an EGU provided that such periods are consistent with the requirements of Paragraph 391-3-1-.02(2)(a)7.
 - c. Periods of shutdown of an EGU provided that such periods are consistent with the requirements of Paragraph 391-3-1-.02(2)(a)7.
 - d. Periods of scheduled and/or preventative maintenance of control technology equipment if such maintenance cannot reasonably be performed during a scheduled outage of the respective EGU.
 - e. Periods of malfunction of EGU and/or control technology equipment provided that such periods are consistent with the requirements of Paragraph 391-3-1-.02(2)(a)7.
 - f. Periods when the owner/operator is required to conduct the Relative Accuracy Test Audit and any other necessary periodic quality assurance procedures on the Continuous Emissions Monitoring System located on the bypass stack pursuant to 40 CFR Part 75 or the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants.
 - g. Periods when the owner/operator is required to conduct any performance tests on the bypass stack as required by state or federal air quality rules, air quality operating permits, or as ordered by the Division.

- h. Division approved periods of research and development of emission control technologies, provided that the unit does not exceed other applicable emission limits. For purposes of this subparagraph, the owner/operator shall submit a request for approval under this subparagraph at least 120 days prior to such date as well as including the following items: (1) length of time of research and development (R&D) period; (2) identification of steps to take to minimize emissions in accordance with best operational practices during R&D period; (3) for periods of R&D lasting more than 48 hours during any 5-day period, a demonstration that any increase in emissions resulting from the R&D project that are above that which is allowed by this subparagraph (sss) will not cause or significantly contribute to a violation of any national ambient air quality standard or prevent compliance with any other applicable provisions.
- i. Any other occasions not covered by a. through h., as approved by the Division.

- 3.4.17 The Permittee shall not discharge or cause the discharge into the atmosphere from Start-up Boiler Unit 4 (Emission Unit ID SB04) emissions of nitrogen oxides (NO_x) in an amount in excess of 0.3 pounds NO_x per MMBtu heat input during any thirty consecutive day period.
[391-3-1-.02(2)(d)(4)(ii)]
- 3.4.18 The Permittee shall not cause, let, suffer, permit or allow the emission of fly ash and/or other particulate matter from Start-up Boiler Unit 4 (Emission Unit ID SB04) in amounts equal to or exceeding 0.10 pounds per million BTU heat input.
[391-3-1-.02(2)(d)(2)(iii)]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None Applicable.

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**

- 4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]
- 4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63 unless otherwise listed in an applicable NESHAP) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]
- 4.1.3 Performance and compliance 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. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
- a. Method 1 for the determination of sample point locations,
 - b. Method 2 for the determination of stack gas flow rate,
 - c. Method 3 or 3A for the determination of stack gas molecular weight,
 - d. Method 3A or 3B for the determination of the emissions rate correction factor or excess air,
 - e. Method 4 for the determination of stack gas moisture,
 - f. Method 5 for the determination of Particulate Matter concentration. The probe and filter holder front half heating systems in the sampling train shall maintain a gas temperature of $160 \pm 14^{\circ}\text{C}$ ($320 \pm 25^{\circ}\text{F}$) for verifying compliance with Georgia Rule 391-3-1-.02(2)(d) and 40 CFR 63 Subpart UUUUU.
 - g. Method 6 or 6C for the determination of Sulfur Dioxide concentration,
 - h. Method 7E for the determination of Nitrogen Oxides concentration for purposes other than verifying compliance with Georgia Rule 391-3-1-.02(2)(jjj),
 - i. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity,

- j. Method 19 when applicable, to convert mercury, hydrogen chloride, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen oxides concentrations (i.e. grains/dscf for PM, ppm for gaseous pollutants), as determined using other methods specified in this section, to emission rates (i.e. lb/MMBtu),
- k. The procedures contained in Section 2.116.2 of the above-referenced document shall be used for the determination of nitrogen oxides concentration from the steam generating units with emission units ID Nos. SG01, SG02, SG03, and SG04 for purposes of verifying compliance with Georgia Rule 391-3-1-.02(2)(jjj).
- l. The procedures contained in Section 2.125.4 of the above-referenced document shall be used for the determination of sulfur dioxide emission rates from Steam Generating Units SG01, SG02, SG03, and SG04 for purposes of verifying compliance with Georgia Rule 391-3-1-.02(2)(uuu).
- m. Method 26 or 26A, where applicable, for the determination of hydrogen chloride concentration.
- n. Method 30B for the determination of mercury concentration
- o. The procedures contained in 40 CFR 63.10007(e)(3) and 40 CFR 63 Subpart UUUUU, Appendix A, when applicable, shall be used to convert mercury, hydrogen chloride, particulate matter, and sulfur dioxide concentrations, as determined using other methods specified in this section to a gross output-based emission rate (i.e. lb/MWh)

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

State Only Enforceable Condition

- 4.1.4 The Permittee shall provide, with the notification required under Condition 4.1.2, a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

- 4.2.1 The Permittee shall conduct the following performance tests on the following emissions units at the frequency specified:
[40 CFR 63.10006]
- a. For particulate matter on each steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04). The test shall be conducted on a quarterly basis as specified in 40 CFR 63.10006, as applicable. This test is not required if a PM CEMS is used to demonstrate compliance with the limit in Permit Condition 3.3.8(b).
 - i. A quarterly stack test is required if the steam generating unit operates for 168 boiler operating hours or more during a quarter, and the test must be separated by at least 45 calendar days, measured from the test's end date, from the performance test conducted in the previous quarter.
 - ii. A performance test shall be conducted in the 4th quarter of the calendar year if the Permittee has not conducted a performance test on that steam generating unit in the first 3 quarters of the calendar year.
 - iii. If the steam generating unit qualifies as a LEE as defined in 40 CFR 63.10005(h), an alternative testing schedule of once every 3 years will replace the above testing schedule. The test must be separated by at least 1,050 calendar days, measured from the test's end date, from the performance test conducted in the previous 3-year period.
 - b. For hydrogen chloride on each steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04). The test shall be conducted on a quarterly basis as specified in 40 CFR 63.10006, as applicable. This test is not required if the alternative SO₂ limit is used for hydrogen chloride compliance under 40 CFR 63 Subpart UUUUU.
 - i. A quarterly stack test is required if the steam generating unit operates for 168 boiler operating hours or more during a quarter, and the test must be separated by at least 45 calendar days, measured from the test's end date, from the performance test conducted in the previous quarter.
 - ii. A performance test must be conducted in the 4th quarter of the calendar year if the Permittee has not conducted a performance test on that steam generating unit in the first 3 quarters of the calendar year.
 - iii. If the steam generating unit qualifies as a LEE as defined in 40 CFR 63.10005(h), an alternative testing schedule of once every 3 years will replace the above testing schedule. The test must be separated by at least 1,050 calendar days, measured from the test's end date, from the performance test conducted in the previous 3-year period.

Title V Permit

- 4.2.2 The Permittee shall conduct the following performance test(s) on the following emissions units at the frequency specified:
- a. Sulfur dioxide performance tests on Steam Generating Units SG01, SG02, SG03, and SG04 at the end of each boiler operating day for each steam generating unit, and a new 30-day percent reduction for Sulfur Dioxide (SO₂) is calculated to show compliance with the standard. The 30-day rolling average shall be defined as the average percent reduction of SO₂ for all of the operating hours for the preceding 30 boiler operating days. The operating hours specified in Condition 3.4.15 shall not be included in the 30-day rolling average.
[391-3-1-.02(6)(b)1(i) and PTM Section 2.125]
- 4.2.3 For the performance tests in Condition 4.2.1(a) and (b), if a steam generating unit misses a performance test deadline that would otherwise be required by these conditions due to being inoperative, and if 168 or more boiler operating hours occur in the next test period, the Permittee must complete an additional performance test with at least 15 calendar days separating two performance tests conducted in the same quarter and at least 350 calendar days separating two performance tests conducted in the same 3 year period.
[40 CFR 63.10006(f)(3)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.1 General Monitoring Requirements**

- 5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. 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 Specific Monitoring Requirements

- 5.2.1 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.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. A continuous opacity monitoring system (COMS) on Steam Generating Units 1, 2, 3, and 4 (Emissions Unit IDs SG01, SG02, SG03, and SG04) located in each liner of the scrubber bypass stacks (ST01, ST02, ST03 and ST04).
 - b. A continuous emissions monitoring system (CEMS), for the measurement of nitrogen oxides concentration (ppm) and diluent concentrations (either Oxygen or Carbon Dioxide, percent), on each steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04) located in each liner of the scrubber bypass stacks (ST01, ST02, ST03 and ST04) and in each liner of the scrubber stacks (ST05, ST06, ST07, and ST08). The output of the CEMS shall be expressed in terms of pounds per million British thermal units (lb/MMBtu).
 - c. A continuous monitoring system (CMS) for the measurement of the sparger tube liquid submergence level in the scrubber vessel (Control Device ID FGD1) for Unit 1 (Emission Unit ID SG01), the scrubber vessel (Control Device ID FGD2) for Unit 2 (Emission Unit ID SG02), the scrubber vessel (Control Device ID FGD3) for Unit 3 (Emission Unit ID SG03), and the scrubber vessel (Control Device ID FGD4) for Unit 4 (Emission Unit ID SG04).
 - d. A continuous emissions monitoring system (CEMS), for the measurement of sulfur dioxide concentration (ppm) and diluent concentrations (either Oxygen or Carbon Dioxide, percent), is required to be installed on each steam generating unit (Emission Unit ID SG02, SG03, and SG04). Sulfur dioxide emissions are monitored at both the inlet and outlet of the SO₂ control devices (Control Device IDs FGD2, FGD3, and FGD4). The output of the CEMS shall be expressed in terms of pounds per million British thermal units (lb/MMBtu) or pounds per megawatt hour (lb/MWh).

- e. A continuous emissions monitoring system (CEMS) for the measurement of sulfur dioxide concentration (ppm) and diluent concentrations (either Oxygen or Carbon Dioxide, percent), is required to be installed on Steam Generating Unit 1 (Emission Unit ID SG01). Sulfur dioxide emissions are monitored at both the inlet and outlet of the SO₂ control device (Control Device ID FGD1). The output of the CEMS shall be expressed in terms of pounds per million British thermal units (lb/MMBtu) or pounds per megawatt hour (lb/MWh).
- f. A continuous monitoring system (CEMS) for the measurement of mercury concentrations ($\mu\text{g}/\text{m}^3$) on Steam Generating Units 1, 2, 3, and 4 (Emissions Unit IDs: SG01, SG02, SG03 and SG04) in each liner of the scrubber stacks (ST05, ST06, ST07, and ST08). The output of the CEMS shall be expressed in terms of pounds per trillion British thermal units (lb/TBtu) or pounds per gigawatt hour (lb/GWh).

State Only Enforceable Condition

- 5.2.2 The Permittee shall, upon written request by the Division, analyze any used oil to be burned in Steam Generating Units 1, 2, 3, and 4. The sample(s) shall be obtained and analyzed using the following methods;
[391-3-1-.02(6)(b)1(i)]
- a. The procedures described in U.S. Environmental Protection Agency document EPA-600/2-80-018 (Samplers and Sampling Procedures for Hazardous Waste Streams) shall be used to obtain the sample.
 - b. Method 6010B, contained in the SW-846 methods manual of U.S. Environmental Protection Agency's Office of Solid Waste, shall be used to determine concentrations of arsenic, cadmium, chromium, and lead.
 - c. SW-846 Method 9077C shall be used to determine total halogens.
 - d. ASTM D93 shall be used to determine flash point.
 - e. Polychlorinated Biphenyls (PCB) shall be determined using the test method described in U.S. Environmental Protection Agency Document EPA-600/4-81-045 (The Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oil).

Title V Permit

- 5.2.3 The following pollutant specific emission unit(s) (PSEU) is/are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Pollutant
SG01	PM
SG02	PM
SG03	PM
SG04	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9.
[40 CFR 64]

- 5.2.4 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from steam generating unit SG01.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Opacity from SG01 exhaust scrubber bypass stack liner (ST01)	Indicator No. 2 Jet Bubbling Reactor (JBR) Sparger Tube Liquid Submergence Level in FGD1 for SG01
a. Data Representativeness [64.3(b)(1)]	The continuous emissions monitoring system (COMS) is located in SG01 scrubber bypass stack liner (ST01). The COMS was installed at a representative location in the stack per 40 CFR 60, Appendix B, PS-1.	The sparger tube liquid submergence level is measured as an indicator of equipment performance by three calibrated level indicators.
b. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Proper operation of the submergence level indicators is verified during initial startup. Alarms are installed to verify continuous proper operation.
c. QA/QC Practices and Criteria [64.3(b)(3)]	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and quarterly filter audit is performed.	The level indicators are calibrated per manufacturer's recommendations.
d. Monitoring Frequency [64.3(b)(4)]	The opacity is monitored continuously.	The sparger tube liquid submergence level is monitored continuously by the JBR control system.
e. Data Collection Procedures [64.3(b)(4)]	The data acquisition system (DAS) retains all 6-minute opacity data.	The DAS retains all 3-hour sparger tube liquid submergence level data.
f. Averaging Period [64.3(b)(4)]	The 6-minute opacity data is used to calculate 3-hour block averages.	The 1-minute data is used to calculate 3-hour block averages.

Title V Permit

- 5.2.5 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from steam generating unit SG02.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Opacity from SG02 exhaust scrubber bypass stack liner (ST02)	Indicator No. 2 Jet Bubbling Reactor (JBR) Sparger Tube Liquid Submergence Level in FGD2 for SG02
a. Data Representativeness [64.3(b)(1)]	The continuous emissions monitoring system (COMS) is located in SG02 scrubber bypass stack liner (ST02). The COMS was installed at a representative location in the stack per 40 CFR 60, Appendix B, PS-1.	The sparger tube liquid submergence level is measured as an indicator of equipment performance by three calibrated level indicators.
b. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Proper operation of the submergence level indicators is verified during initial startup. Alarms are installed to verify continuous proper operation.
c. QA/QC Practices and Criteria [64.3(b)(3)]	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and quarterly filter audit is performed.	The level indicators are calibrated per manufacturer's recommendations.
d. Monitoring Frequency [64.3(b)(4)]	The opacity is monitored continuously.	The sparger tube liquid submergence level is monitored continuously by the JBR control system.
e. Data Collection Procedures [64.3(b)(4)]	The data acquisition system (DAS) retains all 6-minute opacity data.	The DAS retains all 3-hour sparger tube liquid submergence level data.
f. Averaging Period [64.3(b)(4)]	The 6-minute opacity data is used to calculate 3-hour block averages.	The 1-minute data is used to calculate 3-hour block averages.

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

- 5.2.6 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from steam generating unit SG03.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Opacity from SG03 exhaust scrubber bypass stack liner (ST03)	Indicator No. 2 Jet Bubbling Reactor (JBR) Sparger Tube Liquid Submergence Level in FGD3 for SG03
a. Data Representativeness [64.3(b)(1)]	The continuous emissions monitoring system (COMS) is located in SG03 scrubber bypass stack liner (ST03). The COMS was installed at a representative location in the stack per 40 CFR 60, Appendix B, PS-1.	The sparger tube liquid submergence level is measured as an indicator of equipment performance by three calibrated level indicators.
b. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Proper operation of the submergence level indicators is verified during initial startup. Alarms are installed to verify continuous proper operation.
c. QA/QC Practices and Criteria [64.3(b)(3)]	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and quarterly filter audit is performed.	The level indicators are calibrated per manufacturer's recommendations.
d. Monitoring Frequency [64.3(b)(4)]	The opacity is monitored continuously.	The sparger tube liquid submergence level is monitored continuously by the JBR control system.
e. Data Collection Procedures [64.3(b)(4)]	The data acquisition system (DAS) retains all 6-minute opacity data.	The DAS retains all 3-hour sparger tube liquid submergence level data.
f. Averaging Period [64.3(b)(4)]	The 6-minute opacity data is used to calculate 3-hour block averages.	The 1-minute data is used to calculate 3-hour block averages.

Title V Permit

- 5.2.7 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from steam generating unit SG04.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Opacity from SG04 exhaust scrubber bypass stack liner (ST04)	Indicator No. 2 Jet Bubbling Reactor (JBR) Sparger Tube Liquid Submergence Level in FGD4 for SG04
a. Data Representativeness [64.3(b)(1)]	The continuous emissions monitoring system (COMS) is located in SG04 scrubber bypass stack liner (ST04). The COMS was installed at a representative location in the stack per 40 CFR 60, Appendix B, PS-1.	The sparger tube liquid submergence level is measured as an indicator of equipment performance by three calibrated level indicators.
b. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable.	Proper operation of the submergence level indicators is verified during initial startup. Alarms are installed to verify continuous proper operation.
c. QA/QC Practices and Criteria [64.3(b)(3)]	The COMS was initially installed and evaluated per PS-1. Zero and span drift are checked daily and quarterly filter audit is performed.	The level indicators are calibrated per manufacturer's recommendations.
d. Monitoring Frequency [64.3(b)(4)]	The opacity is monitored continuously.	The sparger tube liquid submergence level is monitored continuously by the JBR control system.
e. Data Collection Procedures [64.3(b)(4)]	The data acquisition system (DAS) retains all 6-minute opacity data.	The DAS retains all 3-hour sparger tube liquid submergence level data.
f. Averaging Period [64.3(b)(4)]	The 6-minute opacity data is used to calculate 3-hour block averages.	The 1-minute data is used to calculate 3-hour block averages.

- 5.2.8 The Permittee shall, at all times, maintain the monitoring required by Conditions 5.2.4, 5.2.5, 5.2.6 and 5.2.7 including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR 64.7(b)]

- 5.2.9 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 pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM, 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 poor maintenance or careless operation are not malfunctions.
[40 CFR 64.7(c)]

- 5.2.10 Upon detecting an excursion or exceedance as defined in Condition 6.1.7b. and 6.1.7c., the Permittee shall restore operation of the pollutant-specific emissions unit (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 or 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 range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the Permittee has used acceptable procedures 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.
[40 CFR 64.7(d)(1) and (2)]

- 5.2.11 If the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring in Conditions 5.2.4, 5.2.5, 5.2.6, and 5.2.7 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 permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 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.
[40 CFR 64.7(e)]

5.2.12 Once each day or portion of each day of operation, the Permittee shall inspect all affected emission points as identified in Condition 3.3.1 from the materials handling system (Emission Unit ID MHS). The inspection shall be conducted by performing a walk through of the facility and noting the occurrence of the following in a daily (VE) log:

- a. Any visible emissions. The visible emission check may be performed on the building containing the emission unit or directly on the emission unit.
- b. Any mechanical failure or malfunction that results in increased air emissions.

For each emission point noted with visible emissions, mechanical problems or malfunctions, the Permittee shall take corrective action in the most expedient manner possible and re- inspect the unit within 24 hours to verify that no visible emissions exist.

Failure to eliminate the visible emissions or to correct the mechanical failure or malfunction specified in paragraph a and paragraph b within 24 hours shall constitute an excursion.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.13 The CEMS required by Conditions 5.2.1d. and 5.2.1e. shall be operated and data recorded during all periods of operation of the affected Steam Generating Units (Emission Unit IDs SG01, SG02, SG03, and SG04) including periods of startup, shutdown, malfunction or emergency conditions, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments and any period allowed under Condition 3.4.17.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.14 The Permittee shall obtain SO₂ emission data for at least 75 percent of all operating hours for each 30 successive boiler operating days. The 1-hour averages required under Section 1.4(h) of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants** are expressed in ng/J (lb/MMBTU) heat input and used to calculate the average emission rates under Georgia Rule 391-3-1-.02(2)(uuu). The 1-hour averages are calculated using the data points required under Section 1.4(h)(2) of this text. If the minimum data requirement of Condition 5.2.16 is not met, the Permittee may use the procedures of Section 2.125.3(f) of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants** to supplement the data collected.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- 5.2.15 Except for periods of startup, shutdown, or malfunction, for each day or portion of a day that coal is burned in Steam Generating Units 1, 2, 3, and 4, the Permittee shall determine the daily average sulfur content (%S) of coal burned. A daily average shall be defined as an average of the hourly data for each unit for the day or portion of the day that coal is burned. For purposes of this Permit, the Permittee shall use the following equation to compute the hourly sulfur content (%S).

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

$$\%S = \left(\frac{E_{SO_2} * 0.5}{CoalFlow * 0.95 * (1 - R)} \right) * 100$$

$$E_{SO_2} = SO_2 (lb / MMBtu) * HeatInput (MMbtu / hr)$$

$$HeatInput (MMbtu / hr) = Q * \left(\frac{1}{Fc} \right) * \left(\frac{\%CO_2}{100} \right) \text{ (Eq. F-15 from 40 CFR 75)}$$

Where:

- %S = coal sulfur content, percent by weight;
- E_{SO_2} = hourly SO_2 emissions at the FGD inlet (or in the bypass stack, if FGD is not in operation), lb/hr;
- Q = Hourly average volumetric flow rate during unit operation, wet basis, scfh;
- F_c = Carbon-based F-factor, listed in 40 CFR 75, App. F, Section 3.3.5 for each fuel, scf/MMBtu;
- % CO_2 = Hourly concentration of CO_2 during unit operation, percent CO_2 wet basis;
- 0.5 = Ratio of sulfur and sulfur dioxide molecular weights, dimensionless;
- Coal flow = Hourly coal flow rate, lb/hr;
- 0.95 = Factor to account for sulfur to SO_2 conversion, dimensionless (from Table 1.1-3 in AP-42);
- R = 0.00925, Correction factor for conversion of SO_2 to SO_3 in SCR, dimensionless; and

As an alternative to this equation, for each day or portion of a day that coal is burned in Steam Generating Units 1, 2, 3, or 4, the Permittee may obtain a sample of as-bunkered coal for analysis for sulfur content (%S). The sample shall be acquired and analyzed using the procedures of Section 12.5.2.1 in Method 19 of the **Division's Procedures for Testing and Monitoring Sources of Air Pollutants**, or acquired using ASTM Method D2234 or D7430, prepared using ASTM Method D2013, and analyzed using ASTM Method D4239.

- 5.2.16 The SO₂, CO₂, and O₂ CEMS required by Condition 5.2.1 shall be installed, certified, and operated in accordance with the applicable procedures in Performance Specification 2 or 3 in Appendix B of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants** or in according to the procedures in Appendices A and B to 40 CFR Part 75. Daily calibration drift assessments and quarterly accuracy determinations shall be done in accordance with Procedure 1 in Appendix F of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants**. A data assessment report (DAR) shall be prepared according to Section 7 of Procedure 1 in Appendix F and shall be maintained on site and available for inspection or submittal to the Director. The Permittee may elect to implement alternative data accuracy procedures in Section 2.125.3(j) of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants**.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

State-Only Enforceable Condition

- 5.2.17 Except from May 1 through September 30, the Permittee shall monitor and record the flue gas flow through SCR1, SCR2, SCR3, and SCR4 while each SCR is in operation. Flue gas flow through the SCR is defined as periods when the damper position is at least 90% open for more than 30 minutes per operating hour, excluding periods described in Georgia Rules for Air Quality Control 391-3-1-.02(2)(sss)17. From May 1 through September 30, the Permittee shall demonstrate compliance with the requirement in Georgia Rule 391-3-1.02(2)(sss) to operate steam generating units SG01, SG02, SG03, and SG04 only when equipped with selective catalytic reduction through compliance with Georgia Rule 391-3-1-.02(2)(jjj), except during the periods that the Permittee is not required to operate selective catalytic reduction, as described in Georgia Rules for Air Quality Control 391-3-1.02(2)(sss)17.
[391-3-1-.02(6)(b)1]

State-Only Enforceable Condition

- 5.2.18 The Permittee shall demonstrate compliance with the requirement in Georgia Rule 391-3-1.02(2)(sss) to operate steam generating units SG01, SG02, SG03, and SG04 only when equipped with flue gas desulfurization through compliance with Georgia Rule 391-3-1-.02(2)(uuu), except during the periods that the Permittee is not required to operate flue gas desulfurization, as described in Georgia Rules for Air Quality Control 391-3-1.02(2)(sss)17.
[391-3-1-.02(6)(b)1]

State-Only Enforceable Condition

- 5.2.19 The Permittee shall calculate the annual emissions of CO and VOC from Unit 1 (SG01). Emissions from CO and VOC shall be calculated using one of the following methods:
[391-3-1-.02(7)(b)(15)]
- The total annual heat input from the unit as calculated by the Data Acquisition and Handling System of the Continuous Emissions Monitoring System (CEMS) required by Condition 5.2.1 , AP-42 or other Division-approved emission factors for CO and VOC, and the heat content of the coal
 - The total fuel burned from the unit and AP-42 or other Division-approved emission factors for CO and VOC.
 - Other Division-approved method.

State-Only Enforceable Condition

- 5.2.20 The Permittee shall monitor and record the quantity of No. 2 fuel oil, in gallons, burned in the startup boiler with emission unit ID SB03 and SB04. The Permittee shall also monitor and record the quantity of propane, in gallons, burned in the startup boiler with emission ID SB04. Data shall be recorded monthly.
[391-3-1-.02(6)(b)1 and 40 CFR 63.7525(k)]
- 5.2.21 Startup Boiler 3 and 4 (Emission Unit ID SB03 and SB04) must conduct a tune-up every 5 years to demonstrate compliance with the following paragraphs (a)-(g) below. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.
[40 CFR 63.7500(c) and 40 CFR 63.7540(a)(10), (a)(12), and (a)(13)]
- As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown, but the Permittee must inspect each burner at least once every 72 months. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.
 - Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The inspection may be delayed until the next scheduled unit shutdown.
 - Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

Title V Permit

- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- f. Maintain on-site and submit, if requested by the Division, a report containing the following:
 - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - ii. A description of any corrective actions taken as a part of the tune-up of the boiler.
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

5.2.22 The Permittee shall monitor visible emissions from Start-up Boiler SB04 using Method 9 according to the following schedule, as determined by the results from the most recent Method 9 performance test. The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
[40 CFR 60.48b(a)]

- a. If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
- b. If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

- c. If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or
- d. If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

State-Only Enforceable Condition

- 5.2.23 As an alternative to the monitoring devices required in Permit Condition 5.2.1 the Permittee may comply through the mercury monitors required by Permit Condition 5.2.1(e).
[391-3-1-.02(6)(b)1]
- 5.2.24 The CEMS required by Condition 5.2.1.e. shall be operated and data recorded during all periods of operation of the affected Steam Generating Units (Emission Unit IDs SG01, SG02, SG03, and SG04) including periods of startup, shutdown, malfunction or emergency conditions, except for periods of monitoring system malfunctions or out-of-control periods and associated repairs and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments.
[40 CFR 63.10020(b)]
- 5.2.25 The Permittee must conduct a tune-up on each steam generating unit (Emission IDs SG01, SG02, SG03, and SG04) every 36 months from the completion of the previous tune-up according to 40 CFR 63.10021(e). If a neural network is employed, a tune-up must be completed every 48 months. If the steam generating unit is offline when a deadline to perform the tune-up passes, the Permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the unit.
[40 CFR 63.10021(e)]

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**

- 6.1.1 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(i) and 40 CFR 70.6(a)(3)]

- 6.1.2 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 emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that 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), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.

[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.4 The Permittee shall submit a written report containing any 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. All reports shall be postmarked by May 30, August 29, November 29, and February 28, respectively following each reporting period. 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 and 40 CFR 70.6(a)(3)(iii)(A)]

- a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.
- b. Total process 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. Include 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 by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

- a. The date, place, and time of sampling or measurement;
- 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; and
- f. The operating conditions as existing at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and 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(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

- 6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
 - i. Excess emissions of nitrogen oxides as described in Condition 6.2.11.
 - ii. Any 30 operating day period in which the mercury emissions rate from a steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04) exceeds the applicable emissions limit in Condition 3.3.8(a).
 - iii. If the alternative SO₂ limit is used for hydrogen chloride compliance under 40 CFR 63 Subpart UUUUU, any 30 operating day period in which the SO₂ emissions rate from a steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04) exceeds the applicable emissions limit in Condition 3.3.8(d).
 - b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, 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 six-minute period during which the average opacity, as measured by a continuous opacity monitoring system for any steam generating unit (Emission unit IDs SG01, SG02, SG03 or SG04), exceeds 40 percent.
 - ii. An ozone season (defined as May 1 through September 30) total NO_x emission rate which exceeds 32,335.8 tons from the applicable equipment specified in Condition 3.2.5.
 - iii. Any time fuel fired in any steam generating unit, combustion turbine, or start-up boiler (emission unit IDs SG01, SG02, SG03, SG04, SB03 and SB04) has a sulfur content which exceeds 3.0 percent sulfur, by weight.
 - iv. Any 30 day rolling average SO₂ percent reduction that is calculated in accordance with the procedures of Condition 6.2.14 that is less than 95% for each steam generating unit (Emission Unit IDs SG01, SG02, SG03 and SG04).
 - v. Any time the annual heat input for Start-up Boiler SB03 exceeds 267,180 MMBtu during any calendar year, which is equivalent to an annual capacity factor of no more than 10% in accordance with 40 CFR 63, Subpart DDDDD

Title V Permit

- vi. Any time the annual heat input for Start-up Boiler SB04 exceeds 425,736 MMBtu during any calendar year, which is equivalent to an annual capacity factor of no more than 10% in accordance with 40 CFR 63, Subpart DDDDD.
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, 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. For Unit 1 (Emission Unit ID SG01), any three-hour block average during which the arithmetic average opacity, as measured by the COMS, exceeds 40 percent. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
 - ii. For Unit 2 (Emission Unit ID SG02), any three-hour block average during which the arithmetic average opacity, as measured by the COMS, exceeds 40 percent. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
 - iii. For Unit 3 (Emission Unit ID SG03), any three-hour block average during which the arithmetic average opacity, as measured by the COMS, exceeds 40 percent. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
 - iv. For Unit 4 (Emission Unit ID SG04), any three-hour block average during which the arithmetic average opacity, as measured by the COMS, exceeds 40 percent. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
 - v. Any time coal derived synthetic fuel fired in any steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04) does not meet the specifications of Condition 3.2.1e.
 - vi. Any visible emissions or mechanical failure or malfunction discovered by the walk through described in Condition 5.2.12 that are not eliminated or corrected within 24 hours of first discovery of the visible emissions or mechanical failure or malfunction.

- vii. For control device ID FGD1, any three-hour block average when the sparger tube liquid submergence level in the scrubber vessel is less than 5.0 inches, as measured by the CMS. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
- viii. For control device ID FGD2, any three-hour block average when the sparger tube liquid submergence level in the scrubber vessel is less than 5.0 inches, as measured by the CMS. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
- ix. For control device ID FGD3, any three-hour block average when the sparger tube liquid submergence level in the scrubber vessel is less than 5.0 inches, as measured by the CMS. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.
- x. For control device ID FGD4, any three-hour block average when the sparger tube liquid submergence level in the scrubber vessel is less than 5.0 inches, as measured by the CMS. A three-hour block average shall be defined as any one of the eight consecutive three-hour time periods between 12:00 midnight and the following midnight.

State-Only Enforceable Condition

- xi. If excess emissions detailed in Permit Condition 3.3.8(a) are reported in accordance with Permit Condition 6.1.7(a)ii, the Permittee may submit an additional report to demonstrate compliance with Georgia Rules for Air Quality Control 391-3-1-.02(2)(sss)20. The report shall detail any 30 consecutive operating day period in which the flue gas did not go through the SCR (Emission Unit IDs SCR1, SCR2, SCR3 and SCR4) for at least 90% of the operating hours during that period, excluding periods described in Georgia Rules for Air Quality Control 391-3-1-.02(2)(sss)20. This condition shall not apply from May 1 through September 30.

- 6.1.8 The Permittee shall provide the Division with a statement, in such form as the Director may prescribe, showing the actual emissions of nitrogen oxides and volatile organic compounds from the entire facility. These statements shall be submitted every year by the date specified in 391-3-1-.02(6)(a)4 and shall show the actual emissions of the previous calendar year.
[391-3-1-.02(6)(b)1(i)]

6.2 Specific Record Keeping and Reporting Requirements

State Only Enforceable Condition

6.2.1 The Permittee shall retain monthly records of all fuel burned (except c. and d. below which shall be monitored on an as received basis), in the steam generating units with emission unit IDs SG01, SG02, SG03, and SG04. The records shall be available for inspection or submittal to the Division, upon request, and contain the following:
[391-3-1-.02(6)(b)1(i)]

- a. Quantity (tons) of coal burned.
- b. Aggregate quantity (gallons) of biodiesel, biodiesel blends, distillate oil, No. 2 fuel oil, or very low sulfur oil burned.
- c. Quantity (tons) of sawdust received.
- d. Quantity (tons) of biomass received.
- e. Quantity (gallons) of used oil burned.
- f. Quantity (tons) of coal-derived synthetic fuel received.

State Only Enforceable Condition

6.2.2 The Permittee shall maintain records of representative samples of the coal and sawdust burned in the steam generating units with emission unit IDs SG01, SG02, SG03, and SG04. The records shall be available for inspection or submittal to the Division, upon request, and contain the following:
[391-3-1-.02(6)(b)1(i)]

- a. Percent ash content of coal.
- b. Heat content (Btu per pound) of sawdust

State Only Enforceable Condition

6.2.3 For each shipment of fuel oil received, the Permittee shall obtain from the supplier of the fuel oil, a statement certifying that the oil complies with the specifications of fuel oil contained in ASTM D396, ASTM D975 or ASTM D6751. As an alternative to the procedure described above, the Permittee may, for each shipment of 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, D1552 or by some other test method approved by the US EPA and acceptable to the Division.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

- 6.2.4 The Permittee shall maintain a record of all actions taken in accordance with Condition 3.4.5 to suppress fugitive dust from the coal handling system (Emission Unit ID CHS) and the ash handling system (Emission Unit ID AHS). Such records shall include the date and time of occurrence and a description of the actions taken.
[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]
- 6.2.5 The Permittee shall obtain from the supplier a statement certifying that each shipment of coal derived synthetic fuel to be received complies with the specification as described in Condition 3.2.1e.
[391-3-1-.02(6)(b)1(i)]

Record Keeping Requirements for the Ozone Season NO_x Emission Caps

- 6.2.6 The Permittee shall use the data obtained from the NO_x CEMS to compute the monthly mass emission rate, in tons per calendar month, of NO_x from the following coal-fired steam generating units on a combined basis: emission unit IDs SG01, SG02, SG03, and SG04 at Plant Bowen (AFS No. 015-00011); emission unit IDs SG01, SG02, SG03, and SG04 at Plant Branch (AFS No. 237-00008); emission unit IDs SG01, SG02, SG03, and SG04 at Plant Hammond (AFS No. 115-00003); emission unit IDs SGM1 and SGM2 at Plant McDonough (AFS No. 067-00003); emission unit IDs SG01, SG02, SG03, SG04 at Plant Scherer (AFS No. 207-00008); emission unit IDs SG01 and SG02 at Plant Wansley (AFS No. 149-00001); emission unit IDs SG01, SG02, SG03, SG04, SG05, SG06, and SG07 at Plant Yates (AFS No. 077-00001). This emission rate must include emissions from startup, shutdown, and malfunction. This condition only applies during the ozone season (May 1 to September 30).
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.7 The Permittee shall use the records required by Condition 6.2.6 to determine the ozone season total emission rate, in tons, of NO_x from the following coal-fired steam generating units on a combined basis: emission unit IDs SG01, SG02, SG03, and SG04 at Plant Bowen (AFS No. 015-00011); emission unit IDs SG01, SG02, SG03, and SG04 at Plant Branch (AFS No. 237-00008); emission unit IDs SG01, SG02, SG03, and SG04 at Plant Hammond (AFS No. 115-00003); emission unit IDs SGM1 and SGM2 at Plant McDonough (AFS No. 067-00003); emission unit IDs SG01, SG02, SG03, SG04 at Plant Scherer (AFS No. 207-00008); emission unit IDs SG01 and SG02 at Plant Wansley (AFS No. 149-00001); emission unit IDs SG01, SG02, SG03, SG04, SG05, SG06, and SG07 at Plant Yates (AFS No. 077-00001). This emission rate must include emissions from startup, shutdown, and malfunction. This condition only applies during the ozone season (May 1 to September 30).
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

Record Keeping for the Verification of Georgia Rule (jjj) NO_x Emission Limits

- 6.2.8 The Permittee shall determine compliance with the NO_x emissions limitations in Condition Nos. 3.4.7 through 3.4.12 using emissions data acquired by the NO_x CEMS. The 30-day rolling average shall be determined as follows: [391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]
- a. The first 30-day averaging period shall begin on the first operating day of the ozone season.

- b. The 30-day average shall be the average of all valid hours of NO_x emissions data for any 30 successive operating days during the period of the ozone season.
- c. The last 30-day averaging period shall end on the last operating day of the ozone season.
- d. After the first 30-day average, a new 30-day rolling average shall be calculated after each operating day.
- e. 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.

Reporting Requirements

- 6.2.9 The Permittee shall determine compliance with the limitation using the procedures of Section 2.116.2 of the **Division's Procedures for Testing and Monitoring Sources of Air Pollutants**. The Permittee shall maintain the records specified in Section 2.116.4 of the aforementioned procedures document and use these records to prepare a quarterly report. Reportable emissions are any calculated 30-day rolling average NO_x emissions rate which exceeds the limit established in Condition Nos. 3.4.7 through 3.4.10, whichever is applicable. Excess emissions are those that exceed an area-wide average limit in Condition Nos. 3.4.11 and 3.4.12 as well as the source's respective Alternative Emission Limitation as specified in Condition Nos. 3.4.7 through 3.4.10, whichever is applicable.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.10 The Permittee shall submit written reports to the Division of reportable emissions under Condition 6.2.9 (excess emissions would be reported per Condition 6.1.7) for each calendar quarter ending June 30 (April excluded) and September 30. All reports shall be postmarked by the August 29th and November 29th, respectively following each reporting period. In the event that there have not been any reportable emissions during a reporting period, the report should state as such.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.11 The Permittee may submit, via electronic media, any report required by Part 6.0 of this permit provided such format has been approved by the Division.
[391-3-1-.02(6)(b)1]

Record Keeping for the Verification of Georgia Rule (uuu) SO₂ Emission Limits

6.2.12 The Permittee shall determine compliance with the SO₂ emissions limitations in Condition No. 3.4.14 based on the average emission rate for 30 successive boiler operating days. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. The percent of potential SO₂ emissions (%P_s) to the atmosphere shall be computed using the following equation:

$$\%P_s = \frac{(100 - \%R_f)(100 - \%R_g)}{100}$$

Where:

%P_s = Percent of potential SO₂ emissions, percent;

%R_f = Percent reduction from fuel pretreatment, percent; and

%R_g = Percent reduction by SO₂ control system, percent.

- b. The procedures of Method 19 may be used to determine percent reduction (%R_f) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and fly ash interactions. This determination is optional.
- c. The procedures in Method 19 shall be used to determine the percent SO₂ reduction (%R_g) of any SO₂ control system. Alternatively, a combination of an “as fired” fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the “as fired” fuel analysis for 30 successive boiler operating days.

6.2.13 The Permittee shall determine compliance with the limitation using the procedures of Section 2.125.4 of the **Division’s Procedures for Testing and Monitoring Sources of Air Pollutants**. The Permittee shall maintain the records specified in Section 2.125.5 of the aforementioned procedures document and the records are used to prepare a quarterly report. Reportable emissions are any calculated 30-day rolling average SO₂ emissions reduction, which exceeds the limit, established in Condition Nos. 3.4.14 and 3.4.15, whichever is applicable. The following information shall be maintained for each 24-hour reporting period:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Calendar date.
- b. Percent reduction of the potential combustion concentration of SO₂ for each 30 successive boiler operating days; reasons for non-compliance with the emissions standards; and description of corrective actions taken.

- c. 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 taken.
- d. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, or other reasons, and justification for excluding data for reasons other than startup or shutdown conditions.
- e. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted.
- f. Identification of times when hourly averages have been obtained based on manual sampling methods.
- g. Identification of the times when the pollutant concentration exceeded full span of the CEMS.
- h. Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
- i. Results of any daily calibration error tests or quarterly accuracy assessment as required under Section 2.125.3(j) of the aforementioned document that does not meet the applicable accuracy specification and the subsequent acceptable daily calibration error test or quarterly accuracy assessment.

6.2.14 The Permittee shall submit written reports to the Division of reportable emissions under Condition 6.2.13 (excess emissions would be reported per Condition 6.1.7) for each calendar quarter. All reports shall be postmarked by May 30th, August 29th, November 29th, and February 28th, respectively following the end of each reporting period. In the event that there have not been any reportable emissions during a reporting period, the report should state as such. The Permittee shall determine compliance with the limitation using the procedures of Section 2.125.4 of the Division’s **Procedures for Testing and Monitoring Sources of Air Pollutants**. The Permittee shall maintain the records specified in Section 2.125.5 of the aforementioned procedures document and use these records to prepare a quarterly report. Reportable emissions are any calculated 30-day rolling average SO₂ emissions rate which exceeds the limit established in Condition No. 3.4.14, whichever is applicable.

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- 6.2.15 In the event the minimum quantity of emissions data as required by Section 2.125.4 of the Division's **Procedures for Testing and Monitoring Sources of Air Pollutants** is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of Section 2.125.2(d) of the aforementioned document is reported to the Division for that 30-day period.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i), as applicable.
 - The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i), as applicable.
 - The lower confidence limit for the mean outlet emission rate (E_o^*) and the upper confidence limit for the mean inlet emission rate (E_i^*), as applicable.
 - The applicable potential combustion concentration.
 - The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}), as applicable.
- 6.2.16 For any periods for which SO₂ emissions data are not available, the Permittee shall submit a signed statement to the Division 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 affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. Within the signed statement, the Permittee must include:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- Verification of whether the required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
 - The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this text and is representative of plant performance.
 - The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - Compliance with the standards has or has not been achieved during the reporting period.
- 6.2.17 The Permittee shall submit results of each RATA required under Section 2.125.3(j) of the Division's **Procedures of Monitoring and Testing of Air Pollutants** within 60 days of the completion of RATA.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- 6.2.18 The Permittee shall monitor VOC and CO emissions from Unit 1 (SG01) for a period of ten years following resumption of regular operations after the Unit 1 steam turbine upgrade project which occurred in 2010. The Permittee shall calculate and maintain a record of the annual emissions of such pollutants in tons per year on a calendar year basis. These records shall be retained for a period of five years past the end of each calendar year.

If the Permittee is required to or elects to exclude emissions associated with startups, shutdowns, and/or malfunctions from estimations of projected actual emissions for PSD applicability purposes as allowed by Georgia Rule 391-3-1-.02(7)(a)2.(ii)(II)II, the Permittee may exclude such emissions from the calculation of annual emissions.

The Permittee shall calculate the actual increase in emissions of CO and VOC due to demand growth, in tons per year on a calendar year basis, for a period 10 years following resumption of regular operations after the change. These records shall be retained for a period of five years past the end of each calendar year.

[391-3-1-.02(7)(b)(15)]

- 6.2.19 The Permittee shall submit a report to the Division within 60 days after the end of each calendar year during which records must be generated under Condition 6.2.18 detailing the annual emissions of CO and VOC from Unit 1 (SG01) and Unit 1's actual increase in emissions due to demand growth during the calendar year that preceded submission of the report.

[391-3-1-.02(7)(b)(15)]

- 6.2.20 Every 5 years, the Permittee shall prepare and submit to the Division by January 31, a compliance report covering the 5-year period, from January 1 through December 31, since the previous reporting period, containing the information specified below for SB03 and SB04. The first reporting period for SB03 shall cover from January 31, 2016 to December 31, 2020 and shall be submitted by January 31, 2021. The first reporting period for SB04 shall cover from the date of startup of SB04 to December 31, 2020 and shall be submitted by January 31, 2021.

[40 CFR 63.7550(b) and (c)(1)]

- a. Company and Facility name and address.
- b. Process unit information
- c. Date of report and beginning and end dates of the reporting period
- d. The total operating time during the reporting period.
- e. The date of the most recent tune-up for each unit, including the date of the most recent burner inspection if delayed from the 5-year schedule.
- f. A statement by a responsible official with official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

- 6.2.21 The Permittee shall maintain the following records for Startup Boiler 3 and Startup Boiler 4 (Emission Unit IDs SB03 and SB04):
[40 CFR 63. 7525(k), 7555(a), and 7555(d)(3)]
- a. A copy of each notification and report that the Permittee submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification, Notification of Compliance Status, or 5-year compliance report that was submitted.
 - b. The boiler tune-up report required by 5.2.22(f).
 - c. A copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.
 - d. Monthly records of fuel use for the days the boiler is operating.
- 6.2.22 The Permittee must maintain the records required in Conditions 6.2.21 and 6.2.24 in a form suitable and readily available for expeditious review. The facility must keep each record for 5 years following the date of each recorded action. The facility must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The facility may keep the record off site for the remaining 3 years.
[40 CFR 63.7560 and 63.10033]
- 6.2.23 The Permittee must comply with applicable work practice standards required by 40 CFR 63.10021 and Table 3 to 40 CFR 63 Subpart UUUUU for the steam generating units (Emission Unit IDs SG01, SG02, SG03, and SG04) during periods of startup and shutdown as defined in 40 CFR 63.10042.
[40 CFR 63.10021 and Table 3 to 40 CFR 63 Subpart UUUUU]
- 6.2.24 The Permittee must maintain the following records for any steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04):
[40 CFR 63.10032]
- a. A copy of each notification and report that the Permittee submitted to comply with 40 CFR 63 Subpart UUUUU, including all documentation supporting any Initial Notification, Notification of Compliance Status, or semiannual compliance report.
 - b. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations.
 - c. For each CEMS, the Permittee must keep the following records:
 - i. Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods).

Title V Permit

- ii. All required measurements needed to demonstrate compliance with the relevant standard
 - iii. Previous versions of the performance evaluation plan.
 - iv. Any requests for alternatives to relative accuracy test for CEMS as required in 63.8(f)(6)(i).
 - v. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- d. Monthly records of fuel use by each steam generating unit, including the types of fuel and amount(s) used.
 - e. The occurrence and duration of each malfunction of an operation (i.e. process equipment) or the air pollution control and monitoring equipment and the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
 - f. The occurrence and duration of each startup and/or shutdown and the type(s) and amount(s) of fuel used during each startup or shutdown.
- 6.2.25 The Permittee shall prepare and submit MATS compliance reports on the schedule specified by and containing the applicable information required by 40 CFR 63.10031 for each steam generating unit (Emission Unit IDs SG01, SG02, SG03, and SG04). The MATS compliance reports shall include any failed stack test required by Conditions 4.2.1 (a) and (b) per the applicable methods in Condition 4.1.3. All reports shall be submitted electronically no later than 60 days following the end of the reporting period.
[40 CFR 63.10031]

PART 7.0 OTHER SPECIFIC REQUIREMENTS**7.1 Operational Flexibility**

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

- a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.
- b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

- a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.
- b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the Permit shield in Condition 8.16.1.
- d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act.
[Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements

[White Paper #2]

Not Applicable.

7.4 Insignificant Activities

(See Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

7.5 Temporary Sources

[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable.

7.6 Short-term Activities

(see Form D5 “Short Term Activities” of the Permit application and White Paper #1)

7.6.1 The Permittee shall maintain records of the duration and frequency of the following Short-term Activities:

- a. Sand blasting for maintenance purposes.
- b. Asbestos removal in accordance with Georgia Rule 391-3-1-.02(9)(b)7.
[391-3-1-.02(2)(a)1]

7.7 Compliance Schedule/Progress Reports

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None applicable.

7.8 Emissions Trading

[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable.

7.9 Acid Rain Requirements

Facility ORIS code: 0703

Effective: January 1, 2017 through December 31, 2021

- 7.9.1 Emissions which exceed any allowances that the Permittee lawfully holds under Title IV of the 1990 CAAA, or the regulations promulgated thereunder, are expressly prohibited.
[40 CFR 70.6(a)(4)]
- 7.9.2 Permit revisions are not required for increases in emissions that are authorized by allowances acquired pursuant to the State's Acid Rain Program, provided that such increases do not require a permit revision under any other applicable requirement.
[40 CFR 70.6(a)(4)(i)]
- 7.9.3 This permit does not place limits on the number of allowances the Permittee may hold. However, the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
[40 CFR 70.6(a)(4)(ii)]
- 7.9.4 Any allowances held by the Permittee shall be accounted for according to the procedures established in regulations promulgated under Title IV of the 1990 CAAA.
[40 CFR 70.6(a)(4)(iii)]
- 7.9.5 Each affected unit, with the exceptions specified in 40 CFR 72.9(g)(6), operated in accordance with the Acid Rain portion of this permit shall be deemed to be operating in compliance with the Acid Rain Program.
[40 CFR 70.6(f)(3)(iii)]
- 7.9.6 Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the 1990 CAAA, both provisions shall be incorporated into the permit and shall be enforceable.
[40 CFR 70.6(a)(1)(ii)]

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

- 7.9.7 The Permittee shall comply with all applicable provisions of 40 CFR 70.6(a)(4): Emissions which exceed any allowances that the Permittee lawfully holds under Title IV of the 1990 CAAA, or the regulations promulgated thereunder, are expressly prohibited for the operation of the Steam Generating Units 1-4 (Emission Unit IDs SG01-SG04).
[40 CFR 70.6(a)(4)]

			2017	2018	2019	2020	2021
EMISSION UNIT ID	EPA ID	SO ₂ Allowances	23656	23656	23656	23656	23656
SG01	1BLR	NO _x Limit	The standard annual average NO _x limit for a Phase I tangentially fired boiler is 0.45 lb/mmBtu. In lieu of this limit, the Permittee may comply with 40 CFR Part 76 by complying with an approved Phase II NO _x averaging plan as described below.				

Pursuant to 40 CFR 76.11, Georgia EPD approves the approves five NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2017, 2018, 2019, 2020, and 2021.

Under each plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.42 lb/mmBtu**. In addition, this unit shall not have an annual heat input less than **37,184,471 mmBtu**.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Mississippi Department of Environmental Quality, the Alabama Department of Environmental Management, the Florida Department of Environmental Protection, and the Jefferson County Department of Health (Alabama) have also approved this averaging plan.

In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

EMISSION UNIT ID	EPA ID	SO ₂ Allowances	2017	2018	2019	2020	2021
		NO _x Limit					
SG02	2BLR		24329	24329	24329	24329	24329
			The standard annual average NO _x limit for a Phase I tangentially fired boiler is 0.45 lb/mmBtu. In lieu of this limit, the Permittee may comply with 40 CFR Part 76 by complying with an approved Phase II NO _x averaging plan as described below.				

Pursuant to 40 CFR 76.11, Georgia EPD approves the approves five NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2017, 2018, 2019, 2020, and 2021.

Under each plan, this unit’s NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.43 lb/mmBtu**. In addition, this unit shall not have an annual heat input less than **33,735,559 mmBtu**.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Mississippi Department of Environmental Quality, the Alabama Department of Environmental Management, the Florida Department of Environmental Protection, and the Jefferson County Department of Health (Alabama) have also approved this averaging plan.

In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

EMISSION UNIT ID	EPA ID	SO ₂ Allowances	2017	2018	2019	2020	2021
			30994	30994	30994	30994	30994
SG03	3BLR	NO _x Limit	The standard annual average NO _x limit for a Phase I tangentially fired boiler is 0.45 lb/mmBtu. In lieu of this limit, the Permittee may comply with 40 CFR Part 76 by complying with an approved Phase II NO _x averaging plan as described below.				

Pursuant to 40 CFR 76.11, Georgia EPD approves the approves five NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2017, 2018, 2019, 2020, and 2021.

Under each plan, this unit's NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.43 lb/mmBtu**. In addition, this unit shall not have an annual heat input less than **39,424,486 mmBtu**.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Mississippi Department of Environmental Quality, the Alabama Department of Environmental Management, the Florida Department of Environmental Protection, and the Jefferson County Department of Health (Alabama) have also approved this averaging plan.

In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

EMISSION UNIT ID	EPA ID	SO ₂ Allowances	2017	2018	2019	2020	2021
			30987	30987	30987	30987	30987
SG04	4BLR	NO _x Limit	The standard annual average NO _x limit for a Phase I tangentially fired boiler is 0.45 lb/mmBtu. In lieu of this limit, the Permittee may comply with 40 CFR Part 76 by complying with an approved Phase II NO _x averaging plan as described below.				

Pursuant to 40 CFR 76.11, Georgia EPD approves the approves five NO_x emissions averaging plans for this unit. Each plan is effective for one calendar year for the years 2017, 2018, 2019, 2020, and 2021.

Under each plan, this unit’s NO_x emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.43 lb/mmBtu**. In addition, this unit shall not have an annual heat input less than **55,660,598 mmBtu**.

Under the plan, the actual Btu-weighted annual average NO_x emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Mississippi Department of Environmental Quality, the Alabama Department of Environmental Management, the Florida Department of Environmental Protection, and the Jefferson County Department of Health (Alabama) have also approved this averaging plan.

In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.

Note: The number of allowances allocated to Phase II affected units by U.S. EPA may change as a result of revisions to 40 CFR Part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See CFR 72.84).

- 7.9.8 Permit Application: The Phase II Acid Rain Permit Application, Compliance Plan, and NO_x Averaging Plan submitted for this source, as corrected by the State of Georgia, is attached as part of this Permit. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.
[40 CFR 72.50(a)(1)]

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)

[391-3-1-.02(10)]

- 7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.
- a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.
 - b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:
 - i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
 - ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
 - iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
 - iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)
 - c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170

- d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175
- e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*Submit (information for establishing an account can be found at www.epa.gov/rmp/rmpsubmit). Electronic Signature Agreements should be mailed to:

MAIL

**Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038**

COURIER & FEDEX

**Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033**

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

- 7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

Title V Permit

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: "MVAC-like appliance" is defined in 40 CFR 82.152.]
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
4911-015-0011-V-03-0	6/1/2012
4911-015-0011-V-03-1	3/1/2013
4911-015-0011-V-03-2	3/4/2014
4911-015-0011-V-03-3	3/12/2014
4911-015-0011-V-03-4	4/16/2015
4911-015-0011-V-03-5	5/11/2015
4911-015-0011-V-03-6	9/2/2015
4911-015-0011-V-03-7	11/12/2015
4911-015-0011-V-03-8	4/20/2016
4911-015-0011-V-03-9	1/4/2017
4911-015-0011-V-03-A	7/6/2016
4911-015-0011-V-03-B	6/13/2017
4911-015-0011-V-03-C	1/4/2018

7.13 Pollution Prevention

None applicable.

7.14 Specific Conditions

None applicable.

7.15 Cross State Air Pollution Rule (CSAPR) Allowance Trading Program Requirements
[40 CFR 97]**7.15.1 CSAPR units and applicable CSAPR programs.**

Unit ID#	NO _x Annual	SO ₂	NO _x Ozone Season
SG01	X	X	X
SG02	X	X	X
SG03	X	X	X
SG04	X	X	X

7.15.2 Annual NO_x, SO₂ and Ozone Season NO_x emissions requirements.

The owners and operators and the CSAPR designated representative of each CSAPR Annual NO_x source, CSAPR SO₂ source and CSAPR Ozone Season NO_x source and each CSAPR Annual NO_x unit, CSAPR SO₂ unit, and CSAPR Ozone Season NO_x unit at the source shall comply with the applicable requirements of the Annual NO_x, SO₂, and Ozone Season NO_x Allowance Trading Programs as set forth in 40 CFR Part 97.

7.15.3 Monitoring, reporting, and recordkeeping requirements.

The owners and operators and the CSAPR designated representative of each CSAPR Annual NO_x source, CSAPR SO₂ source and CSAPR Ozone Season NO_x source and each CSAPR Annual NO_x unit, CSAPR SO₂ unit, and CSAPR Ozone Season NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430-97.435 (Annual NO_x), 40 CFR 97.530-97.535 (Ozone Season NO_x) and 40 CFR 97.730-97.735 (Annual SO₂).

PART 8.0 GENERAL PROVISIONS**8.1 Terms and References**

- 8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.
- 8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence.
[391-3-1-.02(2)(a)2]

8.2 EPA Authorities

- 8.2.1 Except as identified as “State-only enforceable” requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]
- 8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, “Inspections, Monitoring, and Entry.”
[40 CFR 70.6(f)(3)(iv)]
- 8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, “Emergency Powers.”
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

- 8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]
- 8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]
- 8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

- 8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

- 8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the “Procedures for Calculating Air Permit Fees.”
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

- 8.5.1 This Permit shall remain in effect for five (5) years from the issuance date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]
- 8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]
- 8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

- 8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

- 8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

- 8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

**Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908**

- 8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

**Air and EPCRA Enforcement Branch – U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104**

- 8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

- 8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

- 8.9.1 The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the Permit application, shall promptly submit such supplementary facts or corrected information to the Division.

[391-3-1-.03(10)(c)5]

- 8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request 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 Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality.

[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

- 8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The 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. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

- 8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]
- a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be 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 under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]
 - b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)
 - c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]
 - d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]

- 8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]
- 8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]
- 8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]
- 8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.
- 8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

- 8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

- 8.13.1 An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

- a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
- b. The Permitted facility was at the time of the emergency being properly operated;
- c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and
- d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

- a. The identification of each term or condition of the Permit that is the basis of the certification;

- b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;
- c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and
- e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

- a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]
 - i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
 - iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.
- b. No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for Permit revocation and assessment of civil penalties.
[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

- a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

- b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]
- c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

- a. Excess emissions resulting from startup, shutdown, or 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 Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[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)]

8.15 Circumvention

State Only Enforceable Condition.

- 8.15.1 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 which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.16 Permit Shield

- 8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]
- 8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

- 8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the 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 any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition.

- 8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia’s Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

- 8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

- 8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]
- 8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]
- 8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

- 8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

- 8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.

[391-3-1-.02(2)(e)]

- a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$E = 4.1P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

$E = 55P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

- b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$$E = 4.1P^{0.67}$$

In the above equations, E = emission rate in pounds per hour, and

P = process input weight rate in tons per hour.

8.22 Fugitive Dust

[391-3-1-.02(2)(n)]

- 8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne 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 that can give rise to airborne dusts;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;
- d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and

- e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied:
[391-3-1-.02(2)(ff)1]

- a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,
- b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,
- c. If the solvent volatility is 0.60 psi or greater measured at 100 °F, or if the solvent is heated above 120 °F, then one of the following control devices must be used:
 - i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or
 - ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or
 - iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.
- d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and
- e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]

- a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.
 - b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.
- 8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators", visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
- 8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" which are individually large enough to be visible to the unaided eye.
- 8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) "Incinerators" unless:
- a. It is a multiple chamber incinerator;
 - b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800°F; and
 - c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500°F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

- 8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) "Volatile Organic Liquid Handling and Storage" is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

- 8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

- 8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart IIII - "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines." Such requirements include but are not limited to:
[40 CFR 60.4200]
- a. Equip all emergency engines with non-resettable hour meters in accordance with Subpart IIII.
 - b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart IIII.
 - c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart IIII.
 - d. Limit maintenance checks and readiness testing operation of each engine to 100 hours per year in accordance with 40 CFR 60.4211(f)(2). 50 hours of the 100 total hours allowed for maintenance checks and readiness testing operation per year may be used for non-emergency operation as allowed by 40 CFR 60.4211(f)(3) .
 - e. Maintain any records in accordance with Subpart IIII
 - f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture.[391-3-1-.02(6)(b)]
- 8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart JJJJ - "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230]

- 8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart ZZZZ - "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

For diesel-fired emergency engines defined as "existing" in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for ≤ 500 hp engines at major sources, and constructed prior to December 19, 2002 for > 500 hp engines at major sources of HAP), such requirements (if applicable) include but are not limited to:

[40 CFR 63.6580]

- a. Equip all emergency engines with non-resettable hour meters in accordance with Subpart ZZZZ.
- b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.
- c. For engines less than or equal to 500 hp, conduct the following in accordance with Subpart ZZZZ.
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first
 - ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.
- d. Limit maintenance checks and readiness testing operation of each engine to 100 hours per year in accordance with 40 CFR 63.6640(f)(2). 50 hours of the 100 total hours allowed for maintenance checks and readiness testing operation per year may be used for non-emergency operation as allowed by 40 CFR 63.6640(f)(3).
- e. Maintain any records in accordance with Subpart ZZZZ
- f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

- 8.27.4 For stationary gas turbines, stationary gas engines used to generate electricity whose nameplate capacity is greater than or equal to 100 kilowatt (KWe) and is less than or equal to 25 megawatts (MWe), the Permittee shall not discharge, cause the discharge, into the atmosphere Nitrogen Oxides (NOx) from the following engines during each ozone season (May 1 through September 30):
- For stationary engines in operation before April 1, 2000: 160 ppm @ 15% O₂, dry basis;
 - For stationary engines installed or modified on or after April 1, 2000: 80 ppm @ 15% O₂, dry basis;
 - For stationary gas turbines in operation on or after January 1, 1999 and before October 1999: 42 ppm @ 15% O₂, dry basis;
 - For stationary gas turbines installed or modified on or after October 1, 1999: 30 ppm @ 15% O₂, dry basis
 - Emergency standby stationary gas turbines and stationary engines are not subject to the emission limitations in a through d. Non-emergency operation is allowed for these engines as prescribed in 40 CFR 60 Subpart IIII, 40 CFR 60 Subpart JJJJ, and 40 CFR 63 Subpart ZZZZ.
 - The requirements shall apply to all applicable sources located in the counties of Banks, Barrow, Bartow, Butts, Carroll, Chattooga, Cherokee, Clarke, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Floyd, Forsyth, Fulton, Gordon, Gwinnett, Hall, Haralson, Heard, Henry, Jackson, Jasper, Jones, Lamar, Lumpkin, Madison, Meriwether, Monroe, Morgan, Newton, Oconee, Paulding, Pickens, Pike, Polk, Putnam, Rockdale, Spalding, Troup, Upson, and Walton.

8.28 Boilers and Process Heaters

- 8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart JJJJJ - "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers." [40 CFR 63.11193]
- 8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart DDDDD - "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." [40 CFR 63.7480]

Attachments

- A. List of Standard Abbreviations and List of Permit Specific Abbreviations
- B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
- C. List of References
- D. U.S. EPA Acid Rain Program Phase II Permit Application
- E. U.S. EPA Acid Rain NOx Averaging Plan

List Of Standard Abbreviations

[illegible]

SCR	Selective Catalytic Reduction
ACI	Activated Carbon Injection
ALK	Alkali Sorbent Injection

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	X
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	X
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a "designated facility" as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:	
	i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	X
	4. Stationary engines burning:	
	i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	4
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	2
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	X
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	X
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	13
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	X
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	4
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	2
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour:	
	i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that:	X
	i) Activity is performed indoors; &	
	ii) No significant fugitive particulate emissions enter the environment; &	
	iii) No visible emissions enter the outdoor atmosphere.	
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	5
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	8
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	38
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	2
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	1
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	149
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	28

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
n/a	n/a

Title V Permit

Bowen Steam-Electric Generating Plant

Permit No.: 4911-015-0011-V-04-0

ATTACHMENT B (continued)

GENERIC EMISSION GROUPS

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
N/A	N/A	N/A	N/A	N/A

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d). Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	0
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	0
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	0

ATTACHMENT C**LIST OF REFERENCES**

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.
2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.
3. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.*
4. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees.*
5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/ap42/index.html.
6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/software/tanks/index.html.
7. The Clean Air Act (42 U.S.C. 7401 et seq).
8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).
9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).

ATTACHMENT D

U.S. EPA PHASE II ACID RAIN PERMIT APPLICATION

ATTACHMENT E

U.S. EPA PHASE II NO_x AVERAGING PLAN