Part 70 Operating Permit Amendment

Permit Amendment No.: **4911-095-0002-V-02-3** **Effective Date:**

Facility Name: **Mitchell Steam-Electric Generating Plant**
5200 Radium Springs Rd.
Albany, Georgia 31705 (Dougherty County)

Mailing Address: 241 Ralph McGill Blvd. NE, Bin 10221
Atlanta, GA 31705

Parent/Holding Company: Southern Company / Georgia Power

Facility AIRS Number: 04-13-095-00002

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 construction permit for:

> Conversion of a 155 MW coal-fired Steam Generating Unit (Source Code: SG03) to a 96 MW biomass-fired stoker Steam Generating Unit. New biomass fuel handling, processing, storage, and delivery systems will be constructed.

This Permit Amendment 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 Amendment and Permit No. 4911-095-0002-V-02-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 18663 dated December 18, 2008; any other applications upon which this Permit Amendment or Permit No. 4911-095-0002-V-02-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **19** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 4911-095-0002-V-02-0

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Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

The facility proposes to convert the coal-fired Steam Generating Unit (155 MW net power output capacity) to a biomass-fired stoker Steam Generating Unit. The facility will add new biomass fuel handling, processing, storage, and delivery systems. After conversion, the biomass-fired unit will be able to generate 96 MW net at full load.

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.

3.1.1 Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
SG03	Steam Generating Unit 3	391-3-21-.02(2)(d) 391-3-21-.02(2)(g) Acid Rain Regulations 40 CFR 60 Subpart A 40 CFR 60 Subpart Db 40 CFR 64 40 CFR 52.21	3.2.1, 3.2.2, 3.2.4, 3.2.5, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.8, 3.3.9, 3.3.10, 3.4.1, 3.4.2, 3.4.3, 3.4.6, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 5.2.12, 5.2.13, 5.2.15, 5.2.16, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.16, 6.2.17, 7.9, 7.14.1, 7.14.2, 7.15	EP03 MC03	ESP, Multiclone
WC03	1050 HP Potential Onsite Wood Chipper with 4-Stage Compression Ignition, Reciprocating Internal Combustion Engine(RICE)	391-3-21-.02(2)(g) 391-3-21-.02(2)(n) 40 CFR 63 Subpart A 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII	3.3.1, 3.3.7, 3.3.12, 3.3.13, 3.4.9, 3.4.10, 3.4.7, 3.4.8, 5.2.14, 6.2.8, 6.2.9, 6.2.11, 6.2.14, 6.2.15, 6.2.18, 6.2.19	None	NA
BHS	Biomass Handling System	391-3-21-.02(2)(n)	3.3.11, 3.4.8, 3.4.9, 3.4.10, 6.2.18	None	NA

* Generally applicable requirements contained in this permit may also apply to emission units listed above.

3.2 Equipment Emission Caps and Operating Limits

NEW CONDITIONS

3.2.4 Upon completion of this modification project, the Permittee shall not fire any fuel other than the following five categories of biomass fuel, including clean wood chips (e.g. pine chips, hardwood chips, pallets and reels), whole tree chips (e.g. trees, shrubs, unmerchantable fuel wood, and thinnings), forest residues (e.g. tops, limbs and bark), manufacturer's residues (e.g. sawdust and sanders dust), and hulls (e.g. peanut and pecan hulls) in Steam Generating Unit (Source Code: SG03) with the exception of the following:
[391-3-1-.03(2)(c)]

a. Ultra low sulfur (i.e. < 0.0015%) No. 2 fuel oil, or biodiesel or blend of previous two fuels may be burned for start-up and shutdown, and to assist in achieving peak load and flame stabilization.

b. Forestry residue is defined as treetops, branches and slash, including limbs and prunings, produced from legal clearing, thinning or logging operations on private or public forestlands.

c. Manufacturer residue is defined as untreated bark, sawdust, and small woody debris produced in the manufacture of wood logs into lumber, flooring, paper, plywood or oriented strand board.

d. Other untreated biomass for which analysis has been presented to the Division and for which written approval for use has been obtained.

The wood biomass used as fuel for this plant shall be free of foreign material, including, but not limited to metal, glass, rubber, plastics, pressure treated or lead based painted wood, chemicals, pesticides, herbicides or any hazardous or toxic substances as defined under law, or any resins, glues or binders used in the manufacture of plywood or oriented strand board (OSB) including but not limited to zinc borate, chromate copper arsenate, and any formaldehyde based compounds.

3.2.5 Upon completion of this modification project, in order to comply with Condition No. 3.3.3, at all times, including startup, shutdown and malfunction, the Permittee shall to the extent practicable, maintain and operate the Steam Generating Unit (Source Code: SG03) including the associated Dry Electrostatic Precipitator (APCD ID No. EP03) and the Multiclone (APCD ID No. MC03) in a manner consistent with good air pollution control practice for minimizing emissions.
[391-3-1-.03(2)(c)]

3.3 Equipment Federal Rule Standards

NEW CONDITIONS

3.3.1 The Permittee shall comply with 40 CFR 60, Subpart A-"General Provisions" and Subpart IIII-"Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" for the operation of the engine powering the wood chipping unit (Source Code: WC03).
[40 CFR 60, Subparts A and IIII]

3.3.2 Upon completion of this modification project, the Permittee shall comply with all applicable provisions of the "New Source Performance Standards" 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 Steam Generating Unit (Source Code: SG03).
[40 CFR 60, Subparts A and Db]

3.3.3 Upon completion of this modification project, the Permittee shall not discharge or cause the discharge into the atmosphere from Steam Generating Unit (Source Code: SG03) emissions that:
[40 CFR 60.43b(f), 60.43b(h)(4), and 391-3-1-.02(2)(d) subsumed]

a. Contain particulate matter in excess of 0.085 pounds per million BTU heat input. This particulate matter standard shall apply at all times except during periods of startup, shutdown, and malfunction.
[Subsumed by BACT Condition 3.3.10]

b. Exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This opacity standard shall apply at all times except during periods of startup, shutdown, and malfunction.

3.3.4 The Permittee shall commence construction within 18 months of the date of issuance of this Permit. In the event that construction of the Steam Generating Unit (Source Code: SG03) has not commenced in the time frame specified, and absent approval by the Division for an extension of the commencement date, this permit shall become null and void with respect to that unit and all units yet to be constructed. For purposes of this Permit, the definition of "commence" is given in 40 CFR 52.21(b)(9).
[40 CFR 52.21(r)]

3.3.5 For the purposes of this Permit: The following operating loads are defined for the Steam Generating Unit (Source Code: SG03):
[40 CFR 52.21(j)]

a. Minimum Operational Load: Source SG03 operating at 65 megawatts (MW) gross (56 MW net).

b. Startup and Shutdown Load: Source SG03 operating at 32 megawatts (MW) gross (29 MW net). Startup load shall last no longer than 17 hours from initial firing, with a once a year exception of startup load lasting no longer than 24 hours during boiler up operational load.

3.3.6 Upon completion of this modification project, the Permittee shall not operate the Steam Generating Unit (Source Code: SG03) at a load lower than the minimum operational load as defined in Permit Condition 3.3.5.
[40 CFR 52.21(j)]

3.3.7 Upon completion of this modification project, for unpaved roadway sources associated with wood chipping operations, the Permittee shall not exceed a work day of more than 12 hours per day.
[40 CFR 52.21(j)]

3.3.8 Upon completion of this modification project, the Permittee shall not cause, let, suffer, permit or allow the emission of volatile organic compounds (VOCs) from the Steam Generating Unit (Source Code: SG03) in amounts equal to or exceeding 0.05 pounds per million Btu (lbs/10^6 Btu) for a three hour average. The emission limit in this permit condition shall apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

3.3.9 Upon completion of this modification project, the Permittee shall not cause, let, suffer, permit or allow the emission of carbon monoxide (CO) from the Steam Generating Unit (Source Code: SG03) in amounts equal to or exceeding 0.45 pounds per million Btu (lbs/10^6 Btu), for a 30 day rolling average. The emission limit of this permit condition shall apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

3.3.10 Upon completion of this modification project, the Permittee shall not cause, let, suffer, permit or allow the emission of particulate matter less than 10 micrometers in diameter (PM_{10}) from the Steam Generating Unit (Source Code: SG03) in amounts equal to or exceeding 0.04 pounds per million Btu (lbs/10^6Btu) for a three hour average.
[40 CFR 52.21; 40 CFR 60.43b(h)(1) subsumed, 391-3-1-.02(2)(d) subsumed]

3.3.11 To comply with Permit Condition 3.4.10, the Permittee must install the following for the Biomass Handling System (Source Code: BHS):
[40 CFR 52.21(j)]

a. Biomass Delivery – New Paved Roadways - water flushing

b. Conveyors and Transfer Points **–** Partial enclosures (three-quarter hoop covers)

c. Unpaved/New Paved Roadways – Lower vehicle travel speeds

d. Potential Chipper Operation – Unpaved Roadways – water sprays

The Permittee shall operate control equipment listed in a. through d. of this permit condition as needed when the applicable equipment listed in a. through d. of this permit condition is operating.

3.3.12 The Permittee shall not fire any other fuel other than ultra low sulfur diesel in the Wood Chipper (Source Code: WC03). The diesel fuel must meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
[40 CFR 52.21(j) and 40 CFR 60.4207(b)]

3.3.13 The Permittee shall not operate the wood chipping unit (Source Code: WC03) more than 3000 hours during any 12 consecutive month period.
[40 CFR 52.21(j)]

3.4 Equipment SIP Rule Standards

NEW CONDITIONS

3.4.6 Upon completion of this modification project, the Permittee shall not cause, let, suffer, permit or allow emissions of nitrogen oxides (NOx) from the steam generating unit (Source Code: SG03) in amounts equal to or exceeding 0.3 pounds of nitrogen oxides per million BTU of heat input derived from liquid fossil fuel.
[391-3-1-.02(2)(d)4(ii)]

3.4.7 The Permittee shall not fire any fuel in the wood chipping unit (Source Code: WC03) that contains greater than 2.5% sulfur, by weight.
[391-3-1-.02(2)(g)2]

3.4.8 [reserved]

3.4.9 The Permittee shall take all reasonable precautions with the biomass handling system (Source Code: BHS), the ash handling system (Source Code: AHS), and the wood chipping unit (Source Code: WC03) to prevent fugitive dust from these operations from becoming airborne.
[391-3-1-.02(2)(n)1]

3.4.10 The percent opacity from the biomass handling system (Source Code: BHS), the ash handling system (Source Code: AHS), and the wood chipping unit (Source Code: WC03) shall not equal or exceed 20%.
[391-3-1-.02(2)(n)2]

PART 4.0 REQUIREMENTS FOR TESTING

MODIFIED CONDITION

4.1 General Testing Requirements

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 which pertain to the emission units listed in Section 3.1 are as follows:

a. Method 1 for 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 emission rate correction factor or excess air.

e. Method 4 for the determination of stack gas moisture.

f. Method 5 for the purposes of determining Particulate Matter emissions and for the purposes of determining compliance with Condition 3.3.3.a.

g. Method 6 or 6C for the determination of Sulfur Dioxide emissions.

h. Method 7 or 7E for the determination of Nitrogen Oxides emissions.

i. Method 9 shall be used for the determination of Opacity. Data from the COMS required by Condition 5.2.1 may be used in lieu of Method 9 if the performance evaluation of the COMS has been completed and the results approved by the Division.

j. Method 10 for the determination of Carbon Monoxide emissions.

k. Method 18 for the determination of benzene, acrolein, and styrene emissions by gas chromatography.

l. Method 19 when applicable, to convert 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)

m. Method 25A for the determination of concentrations of volatile organic compounds. The concentration of formaldehyde measured using Method 320 shall be added to the VOC concentration. The Permittee may use Method 18 for determining methane and ethane concentrations to subtract from the results of Method 25A.

n. Method 26A shall be used for the determination of hydrochloric acid (HCl) emission rates; the sampling time for each run shall be one hour.

o. Test Method 320 of 40 CFR 63, Appendix A, shall be used for the determination of formaldehyde concentrations for Source SG03.

p. Method 5 in conjunction with Method 202 for the determination of Total Particulate Matter.

q. Method 201A in conjunction with Method 202 for the determination of PM_{10} for purposes of determining compliance with Condition 3.3.10.

r. Compliance with the CO limit in Condition 3.3.9 shall be determined using the CEMS required by Condition 5.2.1.b.

s. Compliance with the NOx limit in Condition 3.4.6 shall be determined using the CEMS required by Condition 5.2.1.c.

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)]

NEW CONDITION

4.1.5 All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

MODIFIED CONDITION

4.2.1 The Permittee shall conduct the following performance tests on the following emissions unit at the frequency specified:

a. Within 60 days after achieving maximum operating rate, but no more than 180 days after initial startup, the Permittee shall conduct performance tests for particulate matter less than 10 micrometers in diameter (PM_{10}) on Steam Generating Unit 3 (Source Code: SG03). The test shall be conducted annually at approximately twelve-month intervals not to exceed thirteen months between tests. The Permittee may, if test results from the previous annual tests are fifty percent or less of the limitation in Condition 3.3.10, request that testing be deferred for a period no greater than twelve months from the required annual test date. Such request shall be in written form at least thirty days prior to the scheduled test.
[391-3-1-.02(3) and 391-3-1-.02(2)(c)]

b. Within 60 days after achieving maximum operating rate, but no more than 180 days after initial startup, the Permittee shall conduct initial performance tests for particulate matter and opacity as required by 40 CFR 60.46b(d) to show compliance with Condition 3.3.3. The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 60 dry standard cubic feed (dscf). The temperature of the sample gas in the probe and filter holder shall be monitored and maintained at 320 ± 25 ^{o}F.
[40 CFR 60.46b(d)]

NEW CONDITIONS

4.2.2 The Permittee shall collect data on the monitoring parameters required by Condition 5.2.10 at least every 15 minutes during the entire performance tests required by Condition 4.2.1 to establish representative secondary voltage and secondary amperage values that demonstrate a reasonable assurance of compliance with Condition No. 3.3.3 and Condition No. 3.3.10.
[391-3-1-.02(3) and 391-3-1-.02(2)(c)]

4.2.3 Within 60 days after achieving maximum steam generation rate at which the facility will be operated, but not later than 180 days after initial startup of the facility, the Permittee shall conduct a performance evaluation using the continuous emissions monitoring system (CEMS) for monitoring CO required by Condition 5.2.1.b. For the initial compliance evaluation, CO from the steam generating unit is monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the CO emission limit in Condition 3.3.9.
[391-3-1-.02(3) and 391-3-1-.02(2)(c)]

4.2.4 Within 60 days after achieving maximum operating rate, but no more than 180 days after initial startup, the Permittee shall conduct performance tests for hydrogen chloride, benzene, formaldehyde, acrolein and styrene from the Steam Generating Unit (Source Code SG03). [391-3-1-.02(3) and 391-3-1-.02(2)(c)]

4.2.5 Within 60 days after achieving maximum operating rate, but no more than 180 days after initial startup, the Permittee shall conduct performance tests for volatile organic compounds (VOC) on Steam Generating Unit 3 (Source Code: SG03). The test shall be conducted annually at approximately twelve month intervals not to exceed thirteen months between tests. The Permittee may, if test results from the previous annual tests are fifty percent or less of the limitation in Condition 3.3.8, request that testing be deferred for a period no greater than twelve months from the required annual test date. Such request shall be in written form at least thirty days prior to the scheduled test.
[391-3-1-.02(3) and 391-3-1-.02(2)(c)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

MODIFIED CONDITION

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), for the measurement of opacity on Steam Generating Unit 3 (Source Code: SG03).

b. A Continuous Emissions Monitoring System (CEMS) for the measurement of carbon monoxide (CO) emissions from the Steam Generating Unit (Source Code: SG03). The CO emission rate shall be recorded in pounds per million Btu heat input.

c. A Continuous Emissions Monitoring System (CEMS) for the measurement of nitrogen oxide (NOx) emissions from the Steam Generating Unit (Source Code: SG03). The NOx emission rate shall be recorded in pounds per million Btu heat input.

NEW CONDITIONS

5.2.10 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. Data shall be recorded at the indicated frequencies below.
[391-3-1-.02(6)(2)b1]

a. secondary voltage from the Dry Electrostatic Precipitator (APCD ID No. EP03). Data should be recorded hourly.

b. secondary amperage from the Dry Electrostatic Precipitator (APCD ID No. EP03). Data should be recorded hourly.

c. gross electrical output in MW for the Steam Generating Unit (Source Code: SG03). Data shall be recorded on a continuous basis.

5.2.11 The Permittee shall, using the procedures of Appendix F, Procedure 1 (*Quality Assurance Requirements for Gas Continuous Emissions Monitoring Systems Used for Compliance Determination*) contained in the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*, assess the quality and accuracy of the data acquired by the carbon monoxide CEMS required by Condition 5.2.1.b. The following exceptions to Appendix F, Procedure 1 are allowed:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. The cylinder gas audit (CGA) is only required to be conducted in a calendar quarter if the unit is operated during the quarter.

b. A Relative Accuracy Test Audit (RATA) shall be conducted annually or every four operating quarters (not to exceed eight calendar quarters) which ever is greater. For the purpose of this condition an operating quarter is defined as any calendar quarter during which the unit is operated.

5.2.12 The Permittee shall obtain CO emissions data for at least 75 percent of the operating hours for each turbine during each calendar month that the Steam Generating Unit 3 (Source Code: SG03) is operated. If this minimum data requirement is not met using the CO CEMS required by Condition 5.2.1.b, the Permittee may supplement the emissions data with data obtained by conducting sampling using the methods prescribed in Condition 4.1.3.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

5.2.13 The Permittee shall prepare and submit a 40 CFR Part 64 "Compliance Assurance Monitoring" plan for the operation of the Steam Generating Unit 3 (Source Code: SG03) not later than 180 days after initial startup of the facility.
[40 CFR Part 64 and 391-3-1-.02(6)(b)1]

5.2.14 The Permittee shall install, calibrate, maintain, and operate a non-resettable continuous monitoring system (or device) for the Wood Chipping Unit 3 (Source Code: WC03) to track the hours of operation. The Permittee shall maintain documentation that demonstrates the reason the engine was in operation (normal operation, maintenance, or testing). The system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)11(i)]

5.2.15 The Permittee shall measure and record the amount and type of the wood biomass fuel burned in Steam Generating Unit (Source Code: SG03) on a monthly basis, as well as calculate the total amount of fuel burned on a monthly basis.
[40 CFR 60.49b(d)]

5.2.16 The Permittee shall monitor the fuel quality of each of the fuels combusted in the wood-fired Steam Generating Unit (Source Code: SG03) by the following methods:
[391-3-1-.02(6)(b)1]

a. The Permittee shall obtain fuel quality certification for ultra low sulfur fuel oil, ultra low sulfur fuel oil/biodiesel blend, and biomass suppliers to include sulfur content, ash content, heat content, and moisture content, as applicable. If such certification cannot be obtained, the Permittee shall conduct initial and periodic fuel sampling and analysis of the uncertified fuel. The samples shall be acquired and analyzed using the procedures of Section 12.5.2 in Method 19 of the Division's *Procedures for Testing and Monitoring Sources of Air Pollutants*. The Permittee may use Test Method ASTM D5142 for determining moisture content of the biomass sample in lieu of the methods specified in Method 19. Such periodic fuel sampling shall be conducted as fired or weekly at a

minimum. Sampling shall be analyzed for moisture content, ash content, fuel heat content, and fuel sulfur content.

b. The Permittee shall develop and maintain fuel-handling practices as specified by the Steam Generating Unit (Source Code: SG03) manufacturer to encourage complete combustion, and make them available for review at the Division's request.

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

MODIFIED CONDITION

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. Any six-minute period during which the average opacity, as measured by the COMS for Steam Generating Unit 3 (Source Code: SG03) equals or exceeds twenty (20) percent.

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 time that the Permittee fires fuel in the steam generating unit (Source Code: SG03) or in any combustion turbine (Source Codes: CT3, CT4, CT5, CT6, CT7, and CT8) that contains greater than 3.0 percent sulfur, by weight.

ii. Any time that the Permittee fires biomass fuel in the steam generating unit (Source Code: SG03) that does not meet the specifications contained in Condition No. 3.2.4.

iii. Any time the 30-day rolling average for CO, exceeds 0.45 lb/mmBtu.

iv. Any 3-hour averaging period that the NOx limit, exceeds 0.3 lb/mmBtu of heat input derived from liquid fossil fuel.

v. Any 12-consecutive month period when the operating hours for the wood chipping unit (Source Code:WC03) exceeds 3,000 hours.

vi. Any workday when the operating hours for non-paved roadways associated with the wood chipping unit (Source Code: WC03) exceeds 12 hours.

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. Any 3-hour period during which the average total secondary power (arithmetic average of three consecutive 1-hour periods), to the electrostatic precipitator (Source Code EP03), as determined according to Condition 6.2.10, is less than 70% of the value determined and reported in accordance with Condition 4.2.2.

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

i. Calculated monthly and consecutive 12-month rolling totals for biomass, ultra low sulfur fuel oil and biodiesel fuel fired for each month of the reporting period.

6.2 Specific Record Keeping and Reporting Requirements

NEW CONDITIONS

6.2.8 The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of steam generating unit (Source code: SG03) and the wood chipping unit (Source Code: WC03), any malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative. Said records shall be retained by the Permittee for at least five years after the date of any such startup, malfunction, or measurement.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

6.2.9 The Permittee shall submit a report of the following information for each quarterly period ending March 31, June 30, September 30 and December 31 of each year. The reports shall be postmarked by the 30th day following the end of the semiannual period.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Company name and address

b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

c. Date of report and beginning and ending dates of the reporting period.

d. The total fuel use by the steam generating unit (Source Code: SG03), for each calendar month within the reporting period, including, but not limited to, a description of each fuel and the total fuel usage amount with units of measure.

e. A summary of the results of the performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

f. A signed statement indicating that Permittee burned only ultra low sulfur distillate fuel oil or biodiesel blend or biomass as defined in Condition 3.2.4 in the steam generating unit (Source Code: SG03).

g. A signed statement indicating that Permittee burned only ultra low sulfur distillate fuel oil in the wood chipping unit (Source Code: WC03).

h. Results of any failed daily CO CEMS drift tests, subsequent passed drift tests and quarterly accuracy assessments under Appendix F, Procedure 1 during the reporting period.

i. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

j. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

k. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

l. Data shall also be maintained as required by Subpart Db as applicable for the steam generating unit (Source Code: SG03).

6.2.10 The Permittee, using the hourly records of total secondary voltage and secondary current for each field of the electrostatic precipitator (APCD ID No. EP03) that are obtained in accordance with Condition 5.2.10, shall determine and record total secondary power for each field of the electrostatic precipitator (APCD ID No. EP03) in accordance with the following equations:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

PT = V1 * I1 + V2 * I2

Where:

PT = Total secondary power to the electrostatic precipitator (APCD ID No. EP03), in Watts

V1 = Total secondary voltage of the first field of the electrostatic precipitator (APCD ID No. EP03), in kilovolts

V2 = Total secondary voltage of the secondary field of the electrostatic precipitator (APCD ID No. EP03), in kilovolts

I1 = Total secondary current of the first field of the electrostatic precipitator (APCD ID No EP03), in milliamps

I2 = Total secondary current of the secondary field of the electrostatic precipitator (APCD ID No. EP03), in milliamps

6.2.11 The Permittee shall provide all notifications as required per 40 CFR 60.7 and 40 CFR 63.9 by the dates specified. Specifically, the Permittee shall provide notifications of the actual date of initial startup of Steam Generating Unit (Source Code: SG03) and wood chipping unit (Source Code: WC03) postmarked within 15 day after such date.
[391-3-1-.02(6)(b)(1)]

6.2.12 The Permittee shall maintain the following records as they relate to the startup and shutdown of the steam generating unit (Source code: SG03):
[391-3-1-.02(6)(b)(1) and 40 CFR 52.21]

a. The type of startup initiated, per day; the hours attributed to the startup, and the hours attributed to shutdown. If the steam generating unit (Source code: SG03) was not in operation on any given day, the records shall so note.

b. Identify startup of the pollution control systems – Electrostatic Precipitator (APCD ID No. EP03).

6.2.13 The Permittee shall determine compliance with the CO emissions limitations in Condition No. 3.3.9 using emissions data acquired by the CO CEMS. The 1-hour average and 30-day rolling average shall be determined as follows:
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

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

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

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

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

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

6.2.14 The Permittee shall maintain monthly records of the operation of the wood chipping unit (Source code: WC03) that are recorded through the non-resettable hour meter required in Condition No. 5.2.14. The Permittee shall record the time of operation of the unit and the reason the unit was in operation during that time. Records shall be maintained for a period of five (5) years in a format suitable for inspection by or submission to the Division.
[391-3-1-.02(6)(b)(1)]

6.2.15 The Permittee shall use the records required in Condition 6.2.14 to determine the total monthly operating hours and the twelve consecutive month total operating hours from the wood chipping unit (Source code: WC03). The Permittee shall notify the Division in writing if the operating hours from the unit exceeds 3000 hours during any 12-consecutive months. The Permittee shall also notify the Division in writing if the workday for unpaved roadways associated with the wood chipping unit (Source code: WC03) exceeds twelve hours per day. These notifications shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the limits in Conditions 3.3.7 and 3.3.13.
[391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c)]

6.2.16 The Permittee shall retain monthly records of all fuel burned in steam generating unit (Source Code: SG03). 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 biomass burned.

b. Quantity (gallons) of fuel oil burned.

c. Quantity (gallons) of biodiesel burned.

6.2.17 The Permittee shall maintain records of vendor certifications or analysis of representative samples of the biomass burned in the steam generating unit (Source Code: SG03) for five years after the date and year of record. 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 biomass.

b. Heat content (Btu per pound) of biomass.

6.2.18 The Permittee shall maintain a record of all actions taken in accordance with Condition 3.4.9 to suppress fugitive dust from the biomass handling system (Source Code: BHS), the ash handling system (Source Code: AHS) and the wood chipping unit (Source Code: WC03). 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)]

6.2.19 The Permittee shall demonstrate compliance with the applicable NSPS emission limits for the wood chipping unit (Source Code: WC03) engine by purchasing a certified engine. The engine shall be installed and configured according to manufacturer's specifications. Records shall be maintained for a period of five (5) years in a format suitable for inspection by or submission to the Division.
[391-3-1-.02(6)(b)1(i)]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.14 Specific Conditions Associated with this Amendment

NEW CONDITION

7.14.1 This permit amendment shall become null and void if the construction of the wood-fired steam generating unit (Source Code: SG03) is not commenced with eighteen months of the effective date of this amendment.
[40 CFR 52.21]

7.14.2 Upon completion of this modification project, existing conditions 3.2.1, 3.2.2, 3.4.1, 3.4.4, 3.4.5, 5.2.2, 5.2.3, 6.2.1, 6.2.2, 6.2.5 and 6.2.6 will no longer be applicable.
[391-3-1-.03(2)(c)]