AIR QUALITY PERMIT

Permit No. **Effective Date**
4911-061-0001-P-01-0

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

Facility Name: **Yellow Pine Energy Company, LLC**

Mailing Address: 99 Summit Avenue, Suite 2C
Summit, New Jersey 07901

is issued a Permit for the following:

To construct and operate a 110-megawatt (MW) biomass-fired power plant. The proposed project will include: a fluidized bed boiler with a heat input capacity of 1,529 million British Thermal Units per hour (10^6 Btu/hr); a condensing steam turbine generator; an auxiliary boiler with a heat input capacity of 25 x 10^6 Btu/hr; multi-cell mechanical draft wet cooling tower; a water treatment plant; a wastewater treatment plant and outfall; back-up emergency diesel generator and diesel firewater pump; ash/inert landfill; aqueous ammonia storage tank; limestone storage bins; a No. 2 fuel oil storage tank; diesel fuel oil storage tanks; and supporting plant equipment. The plant will have the capability of firing 95% metal-free tire-derived fuel (TDF) in small quantities on a trial basis in addition to biomass fuel. Low sulfur No. 2 fuel oil or propane will be used for start-up of the fluidized bed boiler and will be the primary fuel of the auxiliary boiler.

Facility Location: Georgia Highway 39
Fort Gaines, Georgia 30851 (Clay County)

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

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 17700 dated September 27, 2007; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **31** pages.

Director
Environmental Protection Division

LIST OF EMISSION UNITS

Emission Units		Air Pollution Control Devices	
ID No.	**Description**	**ID No.**	**Description**
FB	Bubbling Fluidized Boiler with a total heat input capacity of 1,529 x 10^6 Btu/hr	BH1	Fabric Filter Baghouse
		SNCR1	Selective Non-Catalytic Reduction System
		DS1	Dry Scrubber System
AB	Auxiliary Boiler with a total heat input capacity of 25 x 10^6 Btu/hr	NA	None
EG	1,500 Emergency Generator	NA	None
FW	450 Hp Fire Water Pump	NA	None
AT1	25,000-gallon Ammonia (19% aqueous) Storage Tank	NA	None
CT	Cooling Tower	DE	Drift Eliminators
Fuel Storage Tanks (Emissions Group FST)			
DT1	100,000-gallon No. 2 Fuel Oil Storage Tank	NA	None
DT2	5,000-gallon Diesel Fuel Storage Tank	NA	None
DT3	500-gallon Diesel Fuel Storage Tank	NA	None
DT4	250-gallon Diesel Fuel Storage Tank	NA	None
GT1	250-gallon Diesel Fuel Storage Tank	NA	None
Non-Fugitive Materials Storage and Handling Equipment (Emissions Group NMH)			
FPB1	Fuel Process Building 1	BH2	Fabric Filter Baghouse
		EC1	Enclosure
FPB2	Fuel Process Building 2	BH3	Fabric Filter Baghouse
		EC2	Enclosure
SLO	Fuel Storage Silo	BH4	Fabric Filter Baghouse
		EC3	Enclosure
FAS	Fly Ash Silo	BH5	Fabric Filter Baghouse
		EC4	Enclosure
TDS 1	Tripper Deck Storage Silo 1	BH6	Fabric Filter Baghouse
		EC5	Enclosure
TDS 2	Tripper Deck Storage Silo 2	BH7	Fabric Filter Baghouse
		EC6	Enclosure
TDS 3	Tripper Deck Storage Silo 3	BH8	Fabric Filter Baghouse
		EC7	Enclosure
TDS 4	Tripper Deck Storage Silo 4	BH9	Fabric Filter Baghouse
		EC8	Enclosure
TDS 5	Tripper Deck Storage Silo 5	BH10	Fabric Filter Baghouse
		EC9	Enclosure

Emission Units		Air Pollution Control Devices	
ID No.	Description	ID No.	Description
Fugitive Materials Storage and Handling Equipment (Emissions Group FMH)			
BCU	Barge/Clamshell Unloading	NA	None
CTT1	Conveyor Transfer Tower 1	EC10	Enclosure
CTT2	Conveyor Transfer Tower 2	EC11	Enclosure
CTT3	Conveyor Transfer Tower 3	EC12	Enclosure
CTT5	Conveyor Transfer Tower 5	EC13	Enclosure
CTT6	Conveyor Transfer Tower 6	EC14	Enclosure
CTT7	Conveyor Transfer Tower 7	EC15	Enclosure
CTT8	Conveyor Transfer Tower 8	EC16	Enclosure
BSP	Biomass Storage Piles	NA	None
SSP	Sand Storage Piles	NA	None
LSP	Limestone Storage Piles	NA	None
LSPL	Limestone Storage Pile Load-Ins	LTC	Limestone Telescopic Chutes
SSPL	Sand Storage Pile Load-Ins	STC	Sand Telescopic Chutes
BSPL	Biomass Storage Pile Load-Ins	BTC	Biomass Telescopic Chutes
PR1	Paved Road 1	NA	None
PR2	Paved Road 2	NA	None
TL	Fly Ash Truck Loading	EC19	Enclosure

1. General Requirements

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

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

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

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

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

1.6 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Db - "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units," for operation of the Bubbling Fluidized Bed Boiler (Source Code: FB).
[40 CFR 60 Subparts A and Db]

1.7 The Permittee shall comply with all applicable provisions of the Acid Rain Program as found in 40 CFR Part 72 “Permit Regulations”, 40 CFR Part 73 “Sulfur Dioxide Allowance System”, 40 CFR Part 75 “Continuous Emissions Monitoring”, and 40 CFR Part 77 “Excess Emissions” for operation of the Bubbling Fluidized Bed Boiler (Source Code: FB).
[40 CFR Parts 72, 73, 75, and 77]

1.8 The Permittee shall comply with the 40 CFR 63, Subpart A "General Provisions" and 40 CFR 63 Subpart B "Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)" for operation of the Bubbling Fluidized Bed Boiler (Source Code: FB).
[40 CFR 63 Subparts A and B]

1.9 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 40 CFR 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the Auxiliary Boiler (Source Code: AB).
[40 CFR 60 Subparts A and Dc]

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

1.11 The Permittee shall comply with the 40 CFR 60, Subpart A "General Provisions" and 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" for operation of the Emergency Generator and/or the Fire Water Pump (Source Codes: EG and FW).
[40 CFR 60 Subparts A and IIII]

1.12 The Permittee shall comply with the 40 CFR 63, Subpart A "General Provisions" and 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [RICE]" for operation of the Emergency Generator and/or the Fire Water Pump (Source Codes: EG and FW).
[40 CFR 63 Subparts A and ZZZZ]

1.13 The Permittee shall comply with the 40 CFR 60, Subpart A "General Provisions" and 40 CFR 60 Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants" for operation of the Fuel Processing Building 1, Tripper Deck Day Silos 1-5, Fly Ash Silo, Fuel Storage Silo, Barge/Clamshell Unloading, and/or Conveyor Transfer Towers 1, 3, and 5 (Source Codes: FPB1, TDS 1-5, FAS, SLO, BCU and/or CTT 1, 3, and 5).
[40 CFR 60 Subparts A and OOO]

1.14 The Permittee shall comply with (40 CFR Part 68) "Chemical Accident Prevention Provisions" as adopted by Georgia Rule 391-3-1-.02(2)(10) "Emission Limitations and Standards Chemical Accident Prevention Procedures" for operation of each Ammonia Storage Tank (Source Code: AT).
[Georgia Rule 391-3-1-.02(2)(10)]

2. Allowable Emissions

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

2.1 The Permittee shall construct and operate the source or modification that is subject to Georgia Rule 391-3-1-.02(7) in accordance with the application submitted pursuant to that rule. If the Permittee constructs or operates a source or modification not in accordance with the application submitted pursuant to than rule or with the terms of any approval to construct, the Permittee shall be subject to appropriate enforcement action.
[40 CFR 52.21(r)(1)]

2.2 Approval to construction shall become invalid if construction is not comments within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Director may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between constructions of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
[40 CFR 52.21(r)(2)]

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

2.4 For purposes of this Permit: Fluidized Bed Boiler (Source Code: FB), Fabric Filter Baghouse 1 (Control Device ID No: FBH1), Selective Non-Catalytic Reduction System (Control Device ID No: SNCR1), and Dry Scrubber System (Control Device ID No: DS1) share a common stack, Stack No. FBS.
[40 CFR 52.21(j)]

2.5 For the purposes of this Permit: The following operating loads are defined for the Bubbling Fluidized Bed Boiler (Source Code: FB):
[40 CFR 52.21(j)]

a. Maximum Operational Load: Source FB operating at 110 mega watts (MW).

b. Minimum Operational Load: Source FB operating at 80 MW.

c. Startup and Shutdown Load: Source FB operating at 33 MW. Startup load shall last no longer than 14 hours from initial firing.

2.6 The Permittee shall not operate Source FB at a load no lower than the minimum operational load as defined in Permit Condition 2.5.
[40 CFR 52.21(j)]

2.7 For the purposes of this Permit: Biomass shall consist of wood wastes in chip or in shredded form from timber harvesting, pre-commercial thinning of forest plantation stands, harvesting non-commercial, dead or deformed species for fuel purposes and land clearing activities (limbs, tops, stumps and non-commercial trees), and may also include peanut hulls, pecan shells, cotton stalks, lumber and pallet wood wastes (unpainted/untreated only) and similar woody biomass.

Any wood wastes that have been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote are not considered biomass. Plywood, particle board, oriented strand board, and other types of wood wastes bound by glues and resins are also not considered biomass.
[40 CFR 52.21(j)]

2.8 The Permittee shall fire biomass as defined by Permit Condition 2.7 as the main fuel in Source FB at 100 percent and a minimum of 85 percent, on a million British Thermal Units per hour (10^6Btu/hr) heat input basis. The Permittee shall not fire biomass as defined by Permit Condition 2.7 at 100 percent on a 10^6 Btu/hr heat input basis during startup and shutdown load as defined in Permit Condition 2.5. During startup and shutdown load as defined in Permit Condition 2.5, the Permittee shall fire biomass as defined by Permit Condition 2.7 at a maximum of 85 percent on a 10^6Btu/hr heat input basis only.
[40 CFR 52.21(j)]

2.9 The Permittee shall fire the 95 Percent Metal Free Tire Derived Fuel (TDF) in Source FB as supplemental fuel at a maximum 15 percent on a 10^6 Btu/hr heat input basis during Source FB maximum or minimum operational loads as defined by Permit Condition 2.5 only. The Permittee shall fire TDF only in Source FB for a period of up thirty (30) days within the first twelve months of commencing operation of Source FB.
[40 CFR 52.21 and 40 CFR 60.50b(b)]

2.10 The Permittee shall fire the following fuels in Source FB as supplemental fuel at a maximum 15 percent on a 10^6Btu/hr heat input basis during Source FB startup and shutdown load as defined by Permit Condition 2.5 only:
[40 CFR 52.21; 40 CFR 60.42b subsumed]

a. Low sulfur distillate fuel, or

b. Propane

2.11 The Permittee shall not cause, let, suffer, permit or allow the emission of nitrogen oxides (NO_x) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.10 pounds per million Btu (lbs/10^6Btu), 30 day rolling average. The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 391-3-1-.02(2)(d) subsumed]

2.12 The Permittee shall not cause, let, suffer, permit or allow the emission of filterable particulate matter less than 10 micrometers in diameter (PM_{10}) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.010 pounds per million Btu (lbs/10^6Btu). The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.43b(h)(1), 391-3-1-.02(2)(d) subsumed]

2.13 The Permittee shall not cause, let, suffer, permit or allow the emission of total particulate matter less than 10 micrometers in diameter (PM_{10}) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.018 pounds per million Btu (lbs/10^6Btu). The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.43b(h)(1), 391-3-1-.02(2)(d) subsumed]

2.14 The Permittee shall not cause, let, suffer, permit or allow the emission of sulfur dioxide (SO_2) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.010 pounds per million Btu (lbs/10^6Btu), 30 day rolling average. The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.42b(k)(1), 391-3-1-.02(2)(g) subsumed]

2.15 The Permittee shall not cause, let, suffer, permit or allow the emission of carbon monoxide (CO) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.149 pounds per million Btu (lbs/10^6Btu), 30 day rolling average. The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

2.16 The Permittee shall not cause, let, suffer, permit or allow the emission of volatile organic compounds (VOCs) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.02 pounds per million Btu (lbs/10^6Btu). The emission limit this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

2.17 The Permittee shall not cause, let, suffer, permit or allow the emission of lead (Pb) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 3.00×10^{-5} pounds per million Btu (lbs/10^6Btu).
[Avoidance of 40 CFR 52.21]

2.18 The Permittee shall not cause, let, suffer, permit or allow the emission of mercury (Hg) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 2.5×10^{-5} pounds per trillion Btu (lbs/10^{12}Btu). The emission limit listed in this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21 and 40 CFR Part 63 Subpart B]

2.19 The Permittee shall not cause, let, suffer, permit or allow the emission of hydrogen chloride (HCl) from Stack FBS as defined in Permit Condition 2.4 in amounts equal to or exceeding 0.006 pounds per million Btu (lbs/10^{6}Btu). The emission limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21 and 40 CFR Part 63, Subpart B]

2.20 The Permittee shall utilize a sand/limestone bed in each of the fluidized bed boilers in Source FB regardless of the type of fuel being fired at all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21]

2.21 The Permittee shall not fire TDF made from scrap tires that have not been de-wired before processing in Source FB. The metal content of the TDF shall not be greater than five (5) percent by weight.
[40 CFR 52.21]

2.22 The Permittee shall only fire the following fuels in the auxiliary boiler (Source ID No. AB):
[40 CFR 52.21 and 391-3-1-.03(c); 40 CFR Part 60 Subpart Dc subsumed]

a. Low sulfur distillate fuel, or

b. Propane

2.23 The Permittee shall not operate the auxiliary boiler (Source ID No. AB) more than 250 hours per calendar year.
[40 CFR 52.21 and 40 CFR Part 63, Subpart B]

2.24 The Permittee shall not cause, let, suffer, permit or allow the emission of fly ash and/or other particulate matter from the auxiliary boiler (Source ID No. AB) in amounts equal to or exceeding the allowable rate calculated as follows:

$P = 0.5(10/R)^{0.5}$; for equipment with a rated capacity equal to or greater than 10 million BTU heat input per hour, or equal to or less than 250 million BTU heat input per hour
[391-3-1-.02(2)(d)2(ii)]

Where:

P = allowable weight of emissions of fly ash and/or other particulate matter in pounds per million BTU heat input

R = heat input of fuel-burning equipment in million BTU per hour

The Permittee shall not cause, let, suffer, permit or allow the emissions from the from the auxiliary boiler (Source ID No. AB, 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)3]

2.25 The Permittee shall not cause, let, suffer, permit or allow any visible emissions of which the opacity is equal to or greater than five (5) percent opacity for each of the materials storage and handling equipment in Emissions Group NMH.

The emission limits of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.250(c), 391-3-1-.02(2)(b), 391-3-1-.02(2)(e), 391-3-1.02(2)(n) subsumed]

2.26 The Permittee shall not cause, let, suffer, permit or allow any visible emissions of which the opacity is equal to or greater than five (5) percent opacity for each of the materials storage and handling equipment in Emissions Group FMH.

The emission limits of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.250(c), 40 CFR 60.672(a), (b), and (c), 391-3-1-.02(2)(b), 391-3-1-.02(2)(e), 391-3-1.02(2)(n) subsumed]

2.27 The Permittee shall not cause, let, suffer, permit or allow a mass flow rate on the cooling tower (Source ID No. CT) equal to or greater than as determined to allow drift eliminator effectiveness of 0.001% guaranteed.

The limit of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

2.28 The Permittee shall only fire low sulfur distillate fuel in the emergency generator or fire water pump (Source ID No. EG or FW).
[40 CFR Part 60, Subpart IIII, and 40 CFR Part 63, Subpart ZZZZ]

2.29 For the purposes of this permit, low sulfur distillate fuel oil referenced to in Permit Conditions 2.10, 2.22, and 2.28 is defined as distillate fuel oil that contains no greater than 0.05 percent sulfur, by weight until the year 2010 when the sulfur content by weight of distillate oil shall not be greater than 15 ppm.
[40 CFR 52.21; 391-3-1-.02(2)(g) subsumed]

2.30 The Permittee shall not shall not cause, let, suffer, permit or allow any visible emissions of which the opacity is equal to or greater than twenty (20) percent opacity (6-minute average) except for one 6-minute period per hour of not more than 27 percent opacity from Stack FBS as defined in Permit Condition 2.4.
[40 CFR 52.21; 40 CFR 60.43b(f) and 391-3-1-.2(2)(d) subsumed]

2.31 The Permittee shall not cause, let, suffer, permit or allow the emission of PM_{10} from each of the following equipment in amounts equal to or exceeding 0.05 grams per dry standard cubic meter (g/dscm (0.022 grains per dry standard cubic feet [gr/dscf])

a. Fuel Process Building 1 (Source ID No. FPB1)

b. Fuel Storage Silo (Source ID No. SLO)

c. Fly Ash Silo (Source ID No. FAS)

d. Tripper Deck Day Silos 1-5 (Source ID Nos. TDS1, TDS2, TDS3, TDS4, TDS5)

The emission limits listed in a., b., c., and d. of this permit condition apply during all times of operation, including startup, shutdown, and malfunction.
[40 CFR 52.21; 40 CFR 60.672(a), subsumed]

2.32 For the purpose of this Permit, a twelve consecutive month period is defined as the total for a month in the reporting period plus the totals for the previous eleven consecutive months.
[40 CFR Part 52.21(j)]

2.33 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.
[40 CFR Part 52.21(j)]

2.34 The Permittee shall not discharge or cause the discharge into the atmosphere from Stack FBS as defined in Permit Condition 2.4, any emissions, which contain silver in excess of 0.63 pounds per hour.
[Toxic Impact Assessment, 391-3-1-.02(2)(a)3(ii)]

2.35 The Permittee shall construct a physical barrier around the Yellow Pine Energy Company, LLC facility to prevent public access.
[40 CFR Part 52.21]

3. Fugitive Emissions

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

4. Process & Control Equipment

4.1 To comply with Permit Conditions 2.11 and 2.18, the Permittee must install a selective non-catalytic reduction system (Control Device ID No. SNCR1) at the Stack FBS as defined in Permit Condition 2.4 and low NO_x burners on the fluidized bed boiler in Source FB.

The Permittee shall operate Control Device SNCR1 at all times Source FB is operating, including startup, shutdown, and malfunction.
[40 CFR 52.21]

4.2 To comply with Permit Condition 2.12, 2.13, 2.17, and 2.18, the Permittee must install a fabric filter baghouse (Control Device ID No. BH1) at the Stack FBS as defined in Permit Condition 2.4.

The Permittee shall operate Control Device BH1 at all times Source FB is operating, including startup, shutdown, and malfunction.
[40 CFR 52.21]

4.3 To comply with Permit Condition 2.14, 2.18, and 2.19, the Permittee must install a dry scrubber system (Control Device ID No. DS1) at the Stack FBS as defined in Permit Condition 2.4.

The Permittee shall operate Control Device DS1 at all times Source FB is operating, including startup, shutdown, and malfunction.
[40 CFR 52.21]

4.4 The Permittee shall install low NO_x burners on the auxiliary boiler (Source ID No. AB).
[40 CFR 52.21(j)]

4.5 To comply with Permit Condition 2.25, The Permittee shall install the following:
[40 CFR 52.21(j)]

a. Fuel Process Building 1 (Source ID No. FPB1) – Fabric Filter (Control Device ID No. BH2), enclosures (Control Device ID No. EC1), and water sprays.

b. Fuel Process Building 2 (Source ID No. FPB1) – Fabric Filter (Control Device ID No. BH3), enclosures (Control Device ID No. EC2), and water sprays.

c. Fuel Storage Silo (Source ID No. SLO) – Fabric Filter (Control Device ID No. BH4), enclosures (Control Device ID No. EC3), and water sprays.

d. Fly Ash Silo (Source ID No. FAS) – Fabric Filter (Control Device ID No. BH5), enclosures (Control Device ID No. EC4), water sprays, and a closed vent system to the fly ash silo.

e. Tripper Deck Day Silos 1-5 (Source ID Nos. TDS1 – TDS5) – Fabric Filter (Control Device ID Nos. BH6 – BH10), enclosures (Control Device ID Nos. EC5 – EC9), and water sprays.

The Permittee shall operate control equipment listed in a. through e. of this permit condition at all times the applicable equipment listed in a. through e. of this permit condition is operating, including startup, shutdown, and malfunction.

4.6 To comply with Permit Condition 2.26, The Permittee must install the following: [40 CFR 52.21(j)]

a. Barge/Clamshell Unloading (Source ID No. BCU) – water sprays

b. Conveyor Transfer Towers 1-3 and 5-8 (Source ID Nos. CTT1-CTT3 and CTT5-CTT8) – enclosures (Control Device ID Nos. EC10 – EC16) and water sprays

c. Biomass Storage Piles (Source ID No. BSP) – water sprays

d. Biomass Storage Pile Load-Ins (Source ID No. SSPL) – telescopic chutes (Control Device ID No. BTC) and water sprays

e. Limestone Storage Pile (Source ID No. BSP) – water sprays

f. Limestone Storage Pile Load-Ins (Source ID No. LSPL) – telescopic chute (Control Device ID No. LTC) and water sprays

g. Sand Storage Pile (Source ID No. SSP) – water sprays

h. Sand Storage Pile Load-Ins (Source ID No. SSPL) – telescopic chute (Control Device ID No. STC) and water sprays

i. Fly Ash Trucks (Source ID No. TL) – enclosures (Control Device ID No. EC19) and water sprays; use of a vacuum ring on loading/unloading trucks

j. Paved Roads 1 and 3 (Source ID Nos. PR1 and PR2) – water sprays

The Permittee shall operate control equipment listed in a. through j. of this permit condition at all times the applicable equipment listed in a. through j. of this permit condition is operating, including startup, shutdown, and malfunction.

4.7 To comply with Permit Condition 2.27, The Permittee shall install drift eliminators (Control Device ID No. DE) on the cooling tower (Source ID No. CT).

The Permittee shall operate Control Device DE at all times Source CT is operating, including startup, shutdown, and malfunction.
[40 CFR 52.21(j)]

4.8 The Permittee shall install conservation vents and submerged fuel fill pipes on each fuel storage tank (Emissions Group FST) to reduce potential VOCs emissions.
[40 CFR 52.21]

5. Monitoring

5.1 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 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, 40 CFR 60.47b, 40 CFR 75.10, 40 CFR 75.13, 40 CFR 75.16, 40 CFR 75.17, 40 CFR 75.18, 40 CFR 75.20(c), 40 CFR 75.21, 40 CFR Part 75 Appendix A, B, F, and K, 40 CFR 52.21]

a. NO_x from Source FB; CEMS must be installed, maintained and operated to insure compliance with 40 CFR Part 75. The CEMS must be installed in the stack FBS as defined by Permit Condition 2.4.

b. Opacity from Source FB; CEMS must be installed, maintained and operated to insure compliance with 40 CFR Part 60, Subpart Db and 40 CFR Part 75. The CEMS must be installed in the stack FBS as defined by Permit Condition 2.4.

c. SO_2 from Source FB; CEMS must be installed, maintained and operated to insure compliance with 40 CFR Part 60, Subpart Db and 40 CFR Part 75. The CEMS must be installed in the stack FBS as defined by Permit Condition 2.4.

d. CO_2 and O_2 from Source FB; CEMS must be installed, maintained and operated to insure compliance with 40 CFR Part 60, Subpart Db and 40 CFR Part 75. The CEMS must be installed in the stack FBS as defined by Permit Condition 2.4.

e. CO from Source FB; CEMS must be installed, maintained and operated to insure compliance with Performance Specification 4 of 40 CFR Part 60, Appendix B. The CEMS must be installed in the stack FBS as defined by Permit Condition 2.4.

5.3 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.
[391-3-1-.02(6)(b)1 and 40 CFR 52.21(j)]

a. Temperature indicator to continuously measure temperature in stack FBS as defined in Permit Condition 2.4 at the point where the exhausts from the fluidized bed boiler enter the stack FBS as defined by Permit Condition 2.4.

b. Non-resettable operating hours meter to continuously measure the operating hours of the Auxiliary Boiler AB.

c. Monitor to continuously determine the operating load of Source FB.

d. Monitor to continuously determine the lime injection flow rate into the dry scrubber system (Control Device ID No. DS1) at the Stack FBS as defined in Permit Condition 2.4.

5.4 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1, 40 CFR 60.50b(b), and 40 CFR 52.21(j)]

a. The Permittee shall monitor and record the amount and type of fuel combusted in the Fluidized Boiler FB. The Permittee must submit for the Division’s review and approval the procedure proposed to monitor fuel usage within 60 days of the issuance of this permit. The Permittee shall monitor and record the amount of fuel including fuel type combusted daily.

5.5 The Permittee shall employ combustion controls for each of the fluidized bed boiler including but not limited to:
[40 CFR 52.21(j)]

a. Good Combustion Technique: Operator Practices – Maintenance of a written site specific operating procedures manual for the boiler in which operating procedures, including startup, shutdown, and malfunction are well documented in accordance with the manufacturer's specifications. The operating procedures must be updated as applicable with any equipment or operating practice changes. The procedures shall contain operating logs documenting such changes and any deviations from the operating procedures. The operating procedures manual shall be maintained in an area allowing easy access to the boiler's operator and made available for Division review and inspection upon request.

b. Good Combustion Technique: Maintenance Knowledge – The boiler must be maintained in accordance with manufacturer's specifications by personnel with training specific to the boiler and operating procedures.

c. Good Combustion Technique: Maintenance Practices – Maintenance of a written site specific procedures manual for best/optimum maintenance practices in accordance to the manufacturer's specifications for the boiler. Periodic evaluations, inspections, and overhauls as appropriate of the boiler must be conducted in accordance with manufacturer's specifications. The maintenance practices must be updated as applicable with any equipment or operating practice changes. The modification of these practice changes, scheduled periodic evaluation inspections and overhaul, as appropriate, and any deviations from the prescribed maintenance practices shall be well documented in maintenance logs. The maintenance practices manual(s) shall be maintained in an area allowing easy access to the boiler's operator and made available for Division review and inspection upon request.

d. Good Combustion Technique: Stoichiometic (fuel/air) Ratio – The Permittee must continuously monitor and adjust, as applicable, the fuel/air combustion ratio of the fluidized bed boiler per the manufacturer's specifications. The Permittee must, at a minimum, install a stack gas oxygen analyzer to continuously monitor excess air and adjust the boiler fuel-to-air ratio for optimum efficiency. In addition, a carbon monoxide trim loop, used in conjunction with the oxygen analyzer is required to assure that incomplete combustion cannot occur due to a deficient air supply. The Permittee will be required to operating a CO CEMs, with no exception, at the stack of the fluidized bed boiler. The Permittee must submit a request for the Division's review and approval to install continuous fuel/air ratio monitor(s) different than the ones described here. The request must be submitted 30 days prior to proposed installation of the proposed monitor(s).

e. Good Combustion Technique: Fuel Quality Analysis – The Permittee shall monitor the fuel quality of each of the fuels combusted in the fluidized boiler. The Permittee shall obtain fuel quality certification from fuel oil, TDF, biomass, and propane suppliers to ensure that the fuel is of an acceptable standard to reduce emissions. These certifications should certify sulfur content, ash content, heating value, 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. Such periodic fuel sampling shall be conducted as fired or weekly at a minimum. Such sampling shall include, but is not limited to moisture analysis, ash content, heating value, fuel ash content, and fuel sulfur content. The Permittee shall develop and maintain fuel-handling practices as specified by the boiler manufacturer to ensure optimum quality necessary to ensure complete combustion, and make them available for review at the Division's request.

f. Good Combustion Technique: Fuel Sizing – The Permittee shall develop fuel sizing specifications for applicable fuels (i.e. TDF and biomass) in accordance with manufacturer's specifications to ensure proper combustion efficiency of the fluidized boiler. The Permittee shall conduct periodic checks of the fuel sizing in accordance with the boiler manufacturer, or weekly at a minimum. The Permittee shall maintain logs of these checks and make them available for review at the Division's request.

g. Good Combustion Technique: Combustion Air Distribution – The Permittee shall monitor and adjust, when applicable, the air distribution system in accordance with the boiler manufacturer's specifications. The Permittee shall maintain logs of such combustion air distribution monitoring and adjusting, and make them available for review at the Division's request.

h. Good Combustion Technique: Fuel Dispersion – The Permittee shall monitor and adjust, when applicable, the fuel dispersion in accordance with the boiler manufacturer's specifications. The Permittee shall maintain logs of such fuel dispersion monitoring and adjusting, and make them available for review at the Division's request.

5.6 Monitoring will consist of records demonstrating that water sprays are applied "as warranted" for adequate dust control. "As warranted" is defined in the permit as dust control sufficient to keep visible emissions below the limit specified in Permit Conditions 2.25 and 2.26. Weekly observations for any visible emissions are required using EPA Method 22 of 40 CFR Part 60 Appendix A. If visible emissions are noted, a Method 9 observation shall be conducted within 24 hours of the visible emissions observance. A deviation of the required monitoring shall be reported as part of the required quarterly report.
[40 CFR 52.21(j)]

5.7 The Permittee shall conduct any monitoring for the emergency generator and fire water pump as specified in 40 CFR Part 60 Subpart IIII.

6. Performance Testing

6.1 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 Section 2.0 are as follows:

a. Method 1 in Appendix A of 40 CFR Part 60 shall be used for the determination of sample point locations.

b. Method 3A or 3B in Appendix A of 40 CFR Part 60 may be used as specified in 40 CFR 60.49Da(J)(3)for the determination of CO_2 and O_2 concentrations from Source FB.

c. Methods 3A in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for O_2 and CO_2 Concentrations from Source FB.

d. Method 6C in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for SO_2 concentrations from Source FB.

e. Method 7E in Appendix A of 40 CFR Part 60 shall be used as a backup monitoring system to provide quality-assured monitor data for NO_x concentrations from Source FB.

f. CEMs shall be used to determine SO_2 concentrations from Source FB to meet the requirements of §60.47b(a) and (d) and §75.20(c)(1).

g. CEMs shall be used to determine NO_x and CO_2, or O_2 concentrations from Source FB to meet the requirements of §75.20(c)(1).

h. Methods 7, 7A, 7C, 7D, or 7E in Appendix A to part 60 must be used to measure total NO_x emissions, both NO and NO_2. The sections shall not be used, exceptions, and options of Method 7E in appendix A to part 60 as specified in 75.22(a)(5).

i. Performance Specification 4 of Appendix B of 40 CFR Part 60 shall be used to determine CO CEMS performance for Source FB

j. Section 2.1.1 in Appendix A to 40 CFR Part 75, as specified in 40 CFR 60.47(b), shall be used to determine SO_2 span values under paragraph 40 CFR 60.49Da(i)(3)(ii) for Source FB.

k. Section 2.1.2 in appendix A to 40 CFR Part 75 shall be used the NO_X span values.

l. Performance Specification 2 of Appendix B of 40 CFR Part 60 shall be used to determine SO_2, NO_x Calibration Gas Mixtures for Source FB.

m. Performance Specification 1 in 40 CFR Part 60, appendix B shall be used to determine COMs performance for Source FB.

n. Methods 3Aand 6C in Appendix A of 40 CFR Part 60 shall be used to determine calibration gases as specified in section 5 of appendix A to Part 75 for Source FB

o. Method 5 and Method 202 of Appendix A in 40 CFR Part 60 shall be used to determine PM Concentration for Source FB.

p. Methods 2 of Appendix A in 40 CFR Part 60 or its allowable alternatives, as provided in Appendix A of 40 CFR Part 60, except for Methods 2B and 2E in Appendix A of Part 60 shall be used to determine velocity and volumetric flow for Source FB.

q. Method 4 of Appendix A in 40 CFR Part 60 (either the standard procedure described in section 8.1 of the method or the moisture approximation procedure described in section 8.2 of the method) shall be used to correct pollutant concentrations from a dry basis to a wet basis (or from a wet basis to a dry basis) and shall be used when relative accuracy test audits of continuous moisture monitoring systems are conducted. For the purpose of determining the stack gas molecular weight, however, the alternative wet bulb-dry bulb technique for approximating the stack gas moisture content described in section 2.2 of Method 4 may be used in lieu of the procedures in sections 8.1 and 8.2 of the method in Appendix A of Part 60 for Source FB.

r. Method 29 of Appendix A in 40 CFR Part 60 shall be used for the determination of Hg and silver (Ag) concentrations from Source FB.

s. Method 9 of Appendix A in 40 CFR Part 60 shall be used to determine opacity from the auxiliary boiler.

t. ASTM E871-82 (2006), or approved equivalent shall be used to determine biomass moisture content.

u. ASTM D6700-01(2006), or approved equivalent shall be used to determine TDF moisture content.

v. ASTM E711-8, or approved equivalent shall be used to determine the heat content of biomass.

w. ASTM E775-87(2004), or approved equivalent shall be used to determine biomass sulfur content.

x. Method 25 of 40 CFR Part 60 Appendix A shall be used to determine volatile organic compounds concentrations.

y. Method 26 or Method 26A of 40 CFR Part 60 Appendix A shall be used to determine hydrogen chloride concentrations.

z. Method 29 of 40 CFR Part 60 Appendix A shall be used to determine lead concentrations.

aa. Method 19 in Appendix A of 40 CFR Part 60 shall be used for the determination of particulate matter (PM), carbon monoxide, nitrogen oxides, hydrogen chloride, mercury, lead, silver,VOC, and sulfur dioxide emission rates.

bb. Method 5 or 17 with Method 202 of Appendix A Part 60 shall be used to determine PM concentrations for the auxiliary boiler.

cc. Method 9 of Appendix A Part 60 and §60.11 shall be used to determine opacity for the Emission Group NMH.

dd. Method 5 or 17 of Appendix A Part 60 and 40 CFR 60.765 shall be used to determine PM concentrations for the fly ash silo, the fuel storage silo, fuel process building 1 and tripper deck silos 1-5.

ee. Method 22 shall be used to determine visible emissions from Emission Group FMH.

ff. Method 9 of Appendix A Part 60, 40 CFR 60.675(c), and §60.11 shall be used to determine opacity for Emission Group NMH.

6.2 The Permittee shall use CEMs as the compliance determination method for Boiler FB as follows:
[40 CFR Part 52.21]

a The Permittee shall determine compliance with the sulfur dioxide emission limitation in Condition Permit Condition 2.14 using emissions data as measured and recorded in accordance with Permit Condition 5.2c on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all the hourly sulfur dioxide emissions data for the preceding 30 steam generating unit operating days.

b The Permittee shall determine compliance with the nitrogen oxides emission limitation specified in Permit Condition 2.11 using emissions data as measured and recorded in accordance with Permit Condition 5.2a on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all the hourly nitrogen oxides emissions data for the preceding 30 steam generating unit operating days.

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c The Permittee shall determine compliance with the carbon monoxide emission limitation specified in Permit Condition 2.15 using emissions data as measured and recorded in accordance with Condition No. 5.2e on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all the hourly carbon monoxide emissions data for the preceding 30 steam generating unit operating days.

d. The Permittee shall determine compliance with the opacity limitation specified in Permit Condition 2.30 using emissions data as measured and recorded in accordance with Condition No. 5.2b on a continuous basis through the use of a 6-minute average opacity.

6.3 The Permittee shall conduct continuous opacity monitoring, using the device(s) required by Condition 5.2b, during each test run of the particulate matter, lead, mercury, and silver performance tests required in Permit Condition 6.4. The Permittee shall calculate the 6-minute opacity averages from 24 or more data points equally spaced over each 6-minute period during the test runs. The Permittee shall then determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of average opacity values. Within 60 days of the completion of testing, the Permittee shall submit a report to the Division containing the emissions test results, 6-minute opacity averages, and the opacity value corresponding to the 99 percent upper confidence level of a normal distribution.
[40 CFR 52.21]

6.4 To demonstrate compliance with PM_{10} limits, the Permittee shall conduct performance testing using the testing methods in Permit Condition 6.1 for Source FB operating at maximum load as defined by Permit Condition 2.5.

The performance testing shall be done initially as within the earliest timeframe specified by 40 CFR Part 60, Subpart Db and 40 CFR Part 75. Performance testing shall be conducted as frequently as the most frequent testing required by these regulations, or every twelve (12) months, at a minimum.

6.5 To demonstrate compliance with Pb, HCl, VOC, and Hg limits, the Permittee shall conduct performance testing using the testing methods in Permit Condition 6.1 for Source FB operating at maximum load as defined by Permit Condition 2.5.

Initial performance testing for these pollutants must be conducted within 60 days after achieving the maximum production rate at which the boiler will be operated, but not later than 180 days after the initial startup of the boiler. Performance tests are required once every twelve (12) months thereafter.

The Permittee shall conduct continuous lime injection flow rate monitoring, using the device(s) required by Condition 5.3d, during each test run of the hydrogen chloride performance tests required in this permit condition. The Permittee shall establish the lime injection flow rate in terms of pounds of lime per million Btu heat input (lbs lime/10^6 Btu) at which compliance with Permit Condition 2.19 can be demonstrated during the test runs. Within 60 days of the completion of testing, the Permittee shall submit a report to the Division containing the emissions test results and the lime injection flow rates corresponding to the compliant hydrogen chloride emissions.
[40 CFR 52.21]

6.6 Within 60 days after first firing 95 percent metal free TDF in Source FB, the Permittee shall conduct performance testing at the stack FBS as defined by Permit Condition 2.4. Tests shall be conducted for Source FB operating at maximum load as defined by Permit Condition 2.5. Performance testing shall be conducted for volatile and semi-volatile organics, polychlorinated dibenzodioxins/polychlorinated dibenzofurans (PCDD/PCDF), and metal aerosols emissions. The Permittee shall conduct performance testing using the appropriate EPA approved testing methods for Source FB operating at maximum load as defined by Permit Condition 2.5.

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

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

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

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

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

6.8 To demonstrate compliance with Ag limits, the Permittee shall conduct performance testing using the testing methods in Permit Condition 6.1 for Source FB operating at maximum load as defined by Permit Condition 2.5.

Initial performance testing for this pollutant must be conducted within 60 days after achieving the maximum production rate at which the boiler will be operated, but not later than 180 days after the initial startup of the boiler.

7. Notification, Reporting and Record Keeping Requirements

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

7.2 The Permittee shall use the hour meter required by Condition No. 5.3b to determine and record the operating hours for the auxiliary boiler during every calendar month. The Permittee shall use these records to determine the total calendar year operating hours for the auxiliary boiler. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

The quantity of monthly operating hours shall be reported in the quarterly report required by Permit Condition 7.7.

The Permittee shall notify the Division in writing if the total calendar year operating hours of the auxiliary boiler exceeds 250 hours. This notification shall be postmarked by the fifteenth day of January and shall include an explanation of how the Permittee intends to attain compliance with the operating hours limit in Condition No. 2.23.
[391-3-1-.02(6)(b)1 and 40 CFR 52.21]

7.3 Within 180 days of the issuance of this permit, the Permittee must prepare a control operation plan for review and approval by the Division detailing the required timeframe needed to bring control devices online after startup and/or shutdown load as defined in Permit Condition 2.5 for Source FB and how the process will be conducted.
[40 CFR 52.21]

7.4 The Permittee must submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e)
[40 CFR 60.767(f)]

7.5 The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under 40 CFR Part 60 Subpart OOO but as specified in 40 CFR 60.767(h).

7.6 The Permittee must also develop and implement a written startup, shutdown, and malfunction plan (SSMP) for the auxiliary boiler and the fluidized bed boiler in accordance with 40 CFR 63.6(e)(3) that will be available for the Division's review upon request.
[40 CFR 52.21 and 40 CFR 63, Subpart B]

7.7 To demonstrate compliance with reporting requirements, Permittee must submit a quarterly compliance report which contains the following information:
[40 CFR 52.21, 40 CFR 60.50b(b) and 40 CFR 63, Subpart B]

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 fluidized bed boiler, 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 low sulfur distillate fuel oil or propane in the auxiliary boiler.

g. A signed statement indicating that Permittee burned only low sulfur distillate fuel in the emergency generator and fire water pump.

h. A signed statement indicating that Permittee burned only the permitted fuels at the permitted operating scenarios for each of the fluidized bed boilers in Source FB.

i. The hours of operation for the auxiliary boiler for each calendar month within the quarterly reporting period.

k. If a startup, shutdown, or malfunction occurred during the reporting period for any of the boilers and the actions taken consistent with the Permittee's SSMP, the compliance report must include the information in §63.10(d)(5)(i).

l. If there are no deviations from any emission limits that apply, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

m. A signed statement indicating that Source FB operated at permitted operational loads.

The first quarterly report must cover the period beginning on the compliance date and ending on March 31, June 30, September 30, or December 31, whichever date is the first date that occurs at the end of the quarter in which initial startup is completed. The quarterly report must be post marked or delivered no later by the 30th day following the end of each reporting period, April 30, July 30, October 30, and January 30, respectively. Each subsequent report must cover the reporting period from January 1 through March 31, April 1 through June 30, July 1 through September 30, or October 1 through December 31 and must be post marked or delivered no later than April 30, July 30, October 30, and January 30, respectively, whichever date is the first date following the end of the quarterly reporting period.

An immediate startup, shutdown, and malfunction report is required if there was a startup, shutdown, or malfunction for any of the boilers during the reporting period that is not consistent with the startup, shutdown, and malfunction plan, and any applicable emission limit in the relevant emission standard is exceeded. The actions taken for the event must be reported by fax, email, or telephone within two (2) working days after starting actions inconsistent with the plan. The information in 40 CFR 63.10(d)(5)(ii) must be reported by letter within seven (7) working dates after the end of the event unless an alternative arrangement has been made with the Division.

7.8 To demonstrate compliance with Permit Condition 2.27, the Permittee shall maintain records documenting that the drift eliminator on the cooling tower CT has been designed to meet the applicable limit. Such records shall be submitted for review during the first quarterly report required by Permit Condition 7.7.
[40 CFR 52.21]

7.9 Monitoring, record keeping, and reporting as described by 40 CFR Part 60 Subpart Db and 40 CFR Part 75 for applicable pollutants shall be applied as specified, ensuring that monitoring, record keeping, and reporting for both these regulations are satisfied. The Permittee is also required to monitor, create records, and submit reports for any emission limit and/or operating limit established under 40 CFR 52.21 and 40 CFR 63 Subpart B.

7.10 The Permittee shall record and maintain records of the amounts of each fuel, including fuel type, combusted during each day in Source FB as required by Permit Condition 5.4a. The Permittee shall use these records and the records obtained from monitoring as specified in 5.3c to demonstrate compliance with Permit Conditions 2.5, 2.6, 2.8, 2.9 and 2.10. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

The quantity of fuel usage for each type and associated operating loads shall be reported in the quarterly report required by Permit Condition 7.7. In the event that permitted fuel usage exceed does not meet permitted requirements, the Permittee must notify the Division in writing. This notification 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 fuel usage limits in Permit Conditions 2.5, 2.6, 2.8, 2.9, and 2.10.
[391-3-1-.02(6)(b)(1) and 40 CFR 60.50b(b) 40 CFR 52.21]

7.11 The Permittee shall notify EPA as required by 40 CFR Part 60, Subpart Eb and shall provide a copy of Permit Number 4911-061-001-P-01-0 which limits the firing of TDF to less than 30 percent or less of the weight of solid fuel on a calendar quarter basis.
[40 CFR 60.50b(j) and 40 CFR 52.21]

7.12 The Permittee shall maintain the following records as they relate to the startup and shutdown of each boiler in Source FB:
[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 Source FB were not in operation on any given day, the records shall so note.

b. Identify startup of the pollution control systems – SNCR1, BH1, and DS1.

7.13 The Permittee shall maintain files of all measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.02(6)(b)(1)]

7.14 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)]

7.15 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 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, April 30, July 30, October 30, and January 30, respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)(1)]

a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the 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.

7.16 The Permittee shall maintain the following records for each steam generating unit operating day for Boiler FB:
[40 CFR 60.49b(g)]

a. Calendar date.

b. The average hourly nitrogen oxides emission rate (in pounds per million BTU heat input) measured or predicted.

c. The 30-day average nitrogen oxides emission rates (in pounds per million BTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxides emission rates for the preceding 30 steam generating unit operating days.

d. The average hourly carbon monoxide emission rate (in pounds per million BTU heat input) measured or predicted.

e. The 30-day average carbon monoxide emission rates (in pounds per million BTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly carbon monoxide emission rates for the preceding 30 steam generating unit operating days.

f. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emission standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of the corrective actions taken.

g. 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.

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

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

j. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

k. Description of any modification to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

l. Results of daily CEMS drift checks and quarterly accuracy assessments as required under Appendix F, Procedure 1.

7.17 The Permittee shall maintain the following records for each steam generating unit operating day for Boiler FB:
[40 CFR 60.49b(k)]

a. Calendar dates covered in the reporting period.

b. Each 24-hour average sulfur dioxide emission rate (in pounds per million BTU heat input) measured during the reporting period, ending with the last 24-hour period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

c. Each 24-hour average sulfur dioxide input rate calculated during the reporting period, ending with the last 24-hour period.

d. Identification of the steam generating unit operating days that fuel oil was combusted and for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operation; justification for not obtaining sufficient data, and a description of the corrective actions taken.

e. Identification of the times when emission data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which oil was not combusted in the steam generating unit.

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

g. Identification of times when hourly averages have been obtained based on manual sampling methods.

h. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

i. Description of any modification to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

j. Results of daily CEMS drift checks and quarterly accuracy assessments as required under Appendix F, Procedure 1.

7.18 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 7.15, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)(1) and 40 CFR 52.21(j)]

a. Excess emissions: (means for the purpose of this Condition and Condition 7.15, 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. None required to be reported in accordance with Condition 7.15

b. Exceedances: (means for the purpose of this Condition and Condition 7.15, 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 Source FB operates at an operational load lower than specified in Permit Condition 2.6
ii. Any time biomass fired in Source FB that does not meet the definition in Permit Condition 2.7

iii. Any time fuel types fired in Source FB are in violation of Permit Conditions 2.8, 2.9, or 2.10

iv. Any time NO_x emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.11

v. Any time SO_2 emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.14

vi. Any time CO emissions from Stack FBS as defined in Permit Condition 2.4 exceed the emission limits specified in Permit Condition 2.15

vii. Any time TDF is fired in Source FB that violates the specifications in Permit Condition 2.21

viii. Any time fuel types fired in Source AB violate Permit Condition 2.22

ix. Any time Source AB's operating hours exceed those specified in Permit Condition 2.23

x. Any time the mass flow rate of CT exceeds that as specified in Permit Condition 2.27

xi. Any time fuel types fired in Source EG or Source FW that violates Permit Condition 2.28

xii. Any time the sulfur content of fuel violates the specifications in Permit Condition 2.29

xiii. Any time opacity from Source FB exceed the limits specified in Permit Condition 2.30

xiv. Any six-minute period during which the average opacity measured and recorded in accordance with Condition No. 5.2.b exceeds 20 percent, except one six-minute average per hour up to 27 percent, from Stack FBS as defined in Permit Condition 2.4

c. Excursions: (means for the purpose of this Condition and Condition 7.8, 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 time any control equipment required in Section 4.0 of the permit is not in operation or is bypassed while applicable equipment is operating.

ii. Any 3-hour block period during which the average opacity from Stack FBS as defined in Permit Condition 2.4, as measured by the COMS, exceeds the opacity value established in accordance with the requirements of Permit Condition 6.3.

iii. Any 3-hour block average of lime injection flow rate measured using the device(s) required by Condition 5.3.d that falls below 80 percent of the injection flow rate value established in accordance with the requirements of Permit Condition 6.5.

8. Special Conditions

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

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

8.3 Excess Emissions

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

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

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

iii. The duration of excess emissions is minimized.

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

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