# Part 70 Operating Permit Amendment

**Permit Amendment No.: 2631-193-0013-V-01-3 Effective Date: September 13, 2005**

**Facility Name:** **Weyerhaeuser – Flint River Operations**
Old Stagecoach Road
Oglethorpe, Georgia 31068, Macon County

**Mailing Address:** P.O. Box 238
Oglethorpe, Georgia 31068

**Parent/Holding Company:** Weyerhaeuser Company

**Facility AIRS Number:** 04-13-193-00013

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:

> A mill production expansion project that includes modifications to the recovery boiler, chip bin, and digester wash circulation piping and the installation of a digester extraction liquor heat exchanger (Phase I). The amendment is also for replacement of the current cylinder mould decker drum filter and associated filtrate tank and vacuum pump with a wash press and filtrate tank, upgrades to the B-concentrator, upgrades to the dryer winder system, modification of the recovery boiler solids firing rate, and improvements to the finished pulp roll handling system (Phase II).

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. 2631-193-0013-V-01-0. 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. 15956 dated January 13, 2005; any other applications upon which this Permit Amendment or Permit No. 2631-193-0013-V-01-0 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 **22** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 2631-193-0013-V-01-0.

Director
Environmental Protection Division

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# PART 1.0 FACILITY DESCRIPTION

## 1.3 Process Description of Modification

On January 14, 2005, Weyerhaeuser – Flint River Operations submitted an application for an air quality permit to construct and modify equipment at their Oglethorpe, Georgia, Kraft pulp mill. The proposed project will include modifications in two phases. Phase I will include modifications to the existing recovery boiler, chip bin, and digester. Optional Phase II will include additional modifications of the recovery boiler and also replacement of the uncontrolled cylinder mould decker and associated vacuum pump and filtrate tank with a new controlled wash press and filtrate tank. Phase II also includes upgrades to the B-concentrator, upgrades to the dryer winder system, and improvements to the finished pulp roll handling system.

# PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

## 2.2 Facility Wide Federal Rule Standards

*Streamlined Construction / Operating Permits*

2.2.3 In the event that the Permittee seeks to have any emission cap described in Condition 2.2.1 modified to increase allowable emissions of any regulated air pollutant or removed from the Title V permit, the Permittee shall conduct modeling to analyze impacts to Air Quality Related Values (AQRV's), including visibility, at Class I areas. These analyses shall be conducted in accordance with the guidance issued by the Federal Land Managers. The results of the Class I area analysis shall be submitted to the Georgia EPD and the Federal Land Managers with the permit application requesting removal or modification of the emission cap(s).
[40 CFR 52.21]

## 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.

### 3.1.3 Emission Units+

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|---|---|---|---|---|---|
| **ID No.** | **Description** | **Applicable Requirements/Standards** | **Corresponding Permit Conditions** | **ID No.** | **Description** |
| U400 | Power Boiler | 40 CFR 63 Subpart DDDDD<br>40 CFR 60 Subpart BB<br>40 CFR 60 Subpart D<br>40 CFR 63 Subpart S<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(d)<br>391-3-1-.02(2)(g) | 2.2.1, 3.3.1, 3.3.5 through 3.3.9, 3.3.22, 3.3.23, 3.3.25, 3.3.27, 3.4.1, 4.2.1, 5.2.1 through 5.2.4, 5.2.6, 5.3.1, 6.1.7, 6.2.1 through 6.2.4, 6.2.7, 6.2.8, 6.2.11 through 6.2.13, and 6.2.23* | CDU2<br>CDU3 | Multiclone<br>Venturi Scrubber |
| U500 | Recovery Boiler | 40 CFR 52.21<br>40 CFR 60 Subpart Db<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S<br>40 CFR 63 Subpart MM<br>40 CFR 64<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>391-3-1-.02(2)(g) | 2.2.1, 3.3.2, 3.3.5 through 3.3.9, 3.3.22, 3.3.23, 3.3.24, 3.3.29, 3.3.30, 3.4.2, 3.4.3, 4.2.1, 4.2.7, 4.2.8, 5.2.1 through 5.2.3, 5.2.6, 5.2.12, 5.2.13, 5.3.1, 5.3.2, 6.1.7, 6.2.1 through 6.2.3, 6.2.5, 6.2.8, 6.2.11 through 6.2.13, and 6.2.24 through 6.2.33* | CDU1 | Dry Plate Electrostatic Precipitator |
| U800 | Lime Kiln | 40 CFR 52.21<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S<br>40 CFR 63 Subpart MM<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e)<br>391-3-1-.02(2)(g) | 2.2.1, 3.3.3, 3.3.5 through 3.3.8, 3.3.22, 3.3.23 through 3.3.26, 3.4.4 through 3.4.6, 4.2.1, 4.2.4, 4.2.5, 5.2.1, 5.2.3, 5.2.6, 5.3.1, 6.1.7, 6.2.1 through 6.2.3, 6.2.6, 6.2.7, 6.2.11 through 6.2.13, 6.2.17, 6.2.20 through 6.2.22, and 6.2.24 through 6.2.29* | CDU7 | Dry Plate Electrostatic Precipitator |
| U508 | Smelt Dissolving Tank | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart MM<br>391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e) | 2.2.1, 3.3.4, 3.3.22, 3.3.23, 3.4.7, 3.4.8, 4.2.1, 4.2.9, 5.2.2, 5.3.1, 6.1.7, 6.2.24 through 6.2.29* | CDU5 | Venturi Scrubber |
| P814 | Methanol Storage Tank | 40 CFR 60 Subpart Kb | 3.3.20, 3.3.22, and 6.2.15* | None | None |
| **OG03** | **STRONG NCG SYSTEM (LVHC)** | | | | |
| **OG01** | **Digester System** | | | | |
| P300<br><br><br><br>P310<br>P311<br>P315 | Vapor Phase Continuous Digester steaming vessel and impregnation vessel<br>No. 1A Flash Tank<br>No. 1B Flash Tank<br>No. 2 Flash Tank | 40 CFR 52.21<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.10, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.2, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, 6.2.11 through 6.2.14, and 6.2.33* | CDU8<br>U800<br>U400<br>W100 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler<br>Biological Treatment |

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|---|---|---|---|---|---|
| **ID No.** | **Description** | **Applicable Requirements/Standards** | **Corresponding Permit Conditions** | **ID No.** | **Description** |
| **OG02** | **Multiple Effect Evaporator / Condensate Stripper System** | | | | |
| U600 | BL Evaporator System (5 effects, 3 flashes, 2 concentrators) | 40 CFR 52.21<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400<br>W100 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler<br>Biological Treatment |
| U601<br>U612<br><br>U615 | BL Effects Hotwell<br>No. 1 Surface Condenser<br>No. 2 Surface Condenser | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, 6.2.11 through 6.2.13, and 6.2.33* | CDU8<br>U800<br>U400<br>W100 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler<br>Biological Treatment |
| U613<br>U619 | Stripper Condenser<br>Spiral Heat Exchanger | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler |
| U617 | Stripper Feed Tank | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler |
| U618 | Stripper Column | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler |
| **Other** | **Turpentine Recovery System** | | | | |
| P312<br>P320<br><br>P321 | Turpentine Decanter<br>No. 1 Turpentine Condenser<br>No. 2 Turpentine Condenser | 40 CFR 63 Subpart S | 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400<br>W100 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler<br>Biological Treatment |
| **Other** | **Foul Oil Recovery System** | | | | |
| U608<br>U614 | Foul Oil Storage Tank<br>Foul Oil Decanter | 40 CFR 63 Subpart S | 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.7, and 6.2.11 through 6.2.13* | CDU8<br>U800<br>U400<br>W100 | White Liquor Scrubber<br>Lime Kiln<br>Power Boiler<br>Biological Treatment |
| **OG04** | **WEAK NCG SYSTEM (HVLC)** | | | | |
| **OG01** | **Digester System (with pulp washing units)** | | | | |
| P300<br><br><br><br>P302<br>P304 | Vapor Phase Continuous Digester pressure diffusion washer with filtrate tank<br>No. 1 Surge Tank<br>No. 2 Surge Tank | 40 CFR 52.21<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, 6.2.11 through 6.2.13, and 6.2.33* | U500<br>U400<br>W100 | Recovery Boiler, Power Boiler,<br>Biological Treatment |
| P301 | Digesting Chip Bin (pre-digester chip steamer) | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, 6.2.11 through 6.2.13, and 6.2.33* | U500<br>U400<br>W100 | Recovery Boiler, Power Boiler,<br>Biological Treatment |

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|---|---|---|---|---|---|
| **ID No.** | **Description** | **Applicable Requirements/Standards** | **Corresponding Permit Conditions** | **ID No.** | **Description** |
| **OG02** | **Multiple Effect Evaporator / Condensate Stripper System** | | | | |
| U609 | Process Condensate Tank | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, an d 6.2.11 through 6.2.13* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| U616 | Condensate Collection Tank | 40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7, 3.3.8, 3.3.12, 3.3.15 through 3.3.19, 3.3.23, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, and 6.2.11 through 6.2.13* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| **Other** | **Pulp Washing System** | | | | |
| P418<br>P420 | BS Diffusion Washer First Stage BSW Filtrate Tank | 40 CFR 63 Subpart S (no control required under Project XL MACT Agreement) | None* | None | None |
| P421 | Second Stage BSW Filtrate Tank | 40 CFR 63 Subpart S | 3.3.7, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, and 6.2.11 through 6.2.13* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| P450<br>P451 | Wash Press<br>Wash Press Filtrate Tank | 40 CFR 52.21<br>40 CFR 60 Subpart BB<br>40 CFR 63 Subpart S | 3.3.5, 3.3.7 through 3.3.9, 3.3.12, 3.3.15 through 3.3.19, 3.3.22, 3.3.23, 5.2.7 through 5.2.9, 6.1.7, 6.2.11 through 6.2.14, and 6.2.33* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| **Other** | **Weyerhaeuser Site-Specific MACT I Sources** | | | | |
| U501<br>U502<br><br>U503<br>U504<br><br>U506<br><br>U507 | 67% BL Tank – North<br>67% BL Storage Tank – South<br>Salt Cake Mix Tank<br>Precipitator Make Down Tank #1<br>Precipitator Make Down Tank #2<br>Precipitator Make Down Tank #3 | 40 CFR 63 Subpart S | 3.3.7, 3.3.9, 3.3.12, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, and 6.2.11 through 6.2.13* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| U605<br>U606<br><br>U610<br>U611 | 50% BL Storage Tank<br>Evaporator Boilout Tank<br>Weak BL Tank<br>Utility Liquor Tank | 40 CFR 63 Subpart S | 3.3.7, 3.3.9, 3.3.12, 3.3.15 through 3.3.19, 5.2.7 through 5.2.9, 5.3.1, 6.1.7, 6.2.8, and 6.2.11 through 6.2.13* | U500<br>U400<br>W100 | Recovery Boiler,<br>Power Boiler,<br>Biological Treatment |
| **OG05** | **PULP PRODUCTION AREA** | | | | |
| P000<br>P001<br>P003<br><br>P004<br>P006<br><br>P010<br>P405<br>P419 | $O_2$ Reactor<br>$O_2$ Reactor Blow Tank<br>Pre-Bleach Surge Tank #1<br>POW Filtrate Tank<br>Pre-Bleach Surge Tank #2<br>POW (diffusion)<br>Refined Rejects Tank<br>BS High Density Storage Tank | 40 CFR 63 Subpart S for codes P001, P004, and P010 (no control required under Project XL MACT Agreement) | None* | None | None |

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|---|---|---|---|---|---|
| **ID No.** | **Description** | **Applicable Requirements/Standards** | **Corresponding Permit Conditions** | **ID No.** | **Description** |
| **OG06** | **BLEACH PLANT PROCESS AREA** | | | | |
| P501<br>P502<br>P503<br>P504<br>P506<br>P510 | D1 Tower / Diffusion Washer<br>Extraction Stage Washer<br>D2 Tower / Diffusion Washer<br>No. 1 Bleached High Density Storage Tank<br>D2 Stage Filtrate Tank<br>No. 2 Bleached High Density Storage Tank | 40 CFR 63 Subpart S | 3.3.7, 3.3.13, 3.3.14, and 6.1.7* | None | (Facility meets emission limit without use of a control device) |
| P505<br>P512 | Extraction Stage Filtrate Tank<br>D1 Tower Standpipe | None | None* | None | None |
| **OG07** | **CHLORINE DIOXIDE GENERATION PROCESS AREA** | | | | |
| P800<br>P803<br>P806<br>P807 | $ClO_2$ R-8 Generator<br>Salt Cake Filter<br>No. 1 $ClO_2$ Storage Tank<br>No. 2 $ClO_2$ Storage Tank | None | 5.2.2, 5.3.1, and 6.1.7* | CDP3 | R-8 Generator Vent Gas Packed Tower Scrubber |
| **OG08** | **CHEMICAL RECOVERY AREA** | | | | |
| U701<br>U705<br>U706 | Green Liquor Clarifier<br>White Liquor Clarifier<br>Swing White Liquor Clarifier | None | None* | None | None |
| U703 | Slaker | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e) | 3.4.9 and 3.4.10* | None | None |
| **OG09** | **PULP FINISHING AREA** | | | | |
| F701<br>F702<br>F721<br>F722<br>F700<br>F710 | Blend Chest<br>Machine Chest<br>Wet End Vacuum Sump Pit<br>Fourdrinier Wire Pit<br>Pulp Dryer<br>Dry End Repulper | None | 6.2.33* | None | None |
| **PG01** | **WOOD CHIP PROCESSING AND HANDLING AREA** | | | | |
| W212<br>W217<br>W220<br>W221 | Fines Screen Cyclone Separator<br>Chip Processing / Handling Area<br>Fines Screen Cyclone Separator<br>Air Density Cyclone Separator | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e) | 3.4.9, 3.4.10, 5.2.5, 5.3.1, and 6.1.7* | None | None |
| **PG02** | **LIME STORAGE BIN AREA** | | | | |
| U716<br>U718 | Reburned Lime Recharge Bin<br>Purchased Lime Bin | 391-3-1-.02(2)(b)<br>391-3-1-.02(2)(e) | 3.4.9, 3.4.10, 5.2.3, and 6.1.7* | CDU6 | Lime Bins Fabric Filter |
| **W100** | **WASTEWATER TREATMENT SYSTEM** | 40 CFR 63 Subpart S | 3.3.7, 3.3.15 through 3.3.19, 4.2.2, 4.2.3, 5.2.7 through 5.2.11, 5.3.1, 6.1.7, and 6.2.11 through 6.2.13* | None | None |

| Emission Units | | Specific Limitations/Requirements | | Air Pollution Control Devices | |
|---|---|---|---|---|---|
| **ID No.** | **Description** | **Applicable Requirements/Standards** | **Corresponding Permit Conditions** | **ID No.** | **Description** |
| **N/A** | **FUGITIVES** | | | | |
| W219 | Chip Processing / Handling Area | 391-3-1-.02(2)(n) | 3.4.11, 3.4.12, and 6.2.10* | None | None |
| OE08 | Road Fugitives | | | | |
| P404 | Rejects Refiner | | | | |
| P407 | Secondary Knotters Centrifuge | | | | |

* Generally applicable requirements contained in this permit may also apply to emission units listed above.
+ This equipment list replaces and subsumes the equipment list found in Air Quality Permit No. 2631-193-0013-V-01-0 and Air Quality Permit Amendment Nos. 2631-193-0013-V-01-1 and 2631-193-0013-V-01-2.

## 3.3 Equipment Federal Rule Standards

Recovery Boiler U500

3.3.2 The Permittee shall not discharge or cause the discharge into the atmosphere from Recovery Boiler U500 any gases which:

a. Contain total reduced sulfur in excess of 5 ppm on a dry basis, corrected to 8 percent oxygen.
[40 CFR 52.21; 40 CFR 60 Subpart BB]

b. Contain particulate matter in excess of 0.021 grains per dscf, corrected to 8 percent oxygen.
[40 CFR 52.21; 40 CFR 63 Subpart MM and 40 CFR 60 Subpart BB Subsumed]

c. Exhibit 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, when burning fuel oil or greater than thirty-five (35) percent when not burning oil.
[40 CFR 60 Subpart Db and 40 CFR 60 Subpart BB; 391-3-1-.02(2)(b) Subsumed]

d. Contain sulfur dioxide in excess of the following:
[40 CFR 52.21; 40 CFR 60 Subpart Db Subsumed]

$E = (75 \text{ ppm} * H_b + 400 \text{ ppm} * H_{fo}) / (H_b + H_{fo})$

where: $E = SO_2$ emission limit in ppmdv @ 8% $O_2$
$H_b$ = heat input, in MMBtu, from black liquor solids firing
$H_{fo}$ = heat input, in MMBtu, from fuel oil firing

e. Contain sulfur dioxide in excess of 0.5 lb/MMBtu, on a 30-day rolling average when firing any fuel combination.
[40 CFR 60 Subpart Db]

f. Contain nitrogen oxides in excess of 100 ppm on a dry basis, corrected to 8 percent oxygen.
[40 CFR 52.21]

g. Contain carbon monoxide in excess of 300 ppm on a dry basis, corrected to 8 percent oxygen.
[40 CFR 52.21]

h. Contain volatile organic compounds as carbon in excess of 40 ppm on a dry basis, corrected to 8 percent oxygen.
[40 CFR 52.21]

i. Contain total particulate matter in excess of 0.0298 grains per dscf, corrected to 8 percent oxygen.
[40 CFR 52.21]

Lime Kiln U800

3.3.3 The Permittee shall not discharge into the atmosphere from Lime Kiln U800 any gases which:

g. Contain sulfur dioxide in excess of 260 ppm on a dry basis at 10 percent oxygen on a 24-hour basis.
[40 CFR 52.21]

TRS System

3.3.5 TRS gases from Equipment Group OG01 and Equipment Group OG02 shall be combusted in Lime Kiln U800 (backup for strong NCGs), Recovery Boiler U500 (primary for weak NCGs), and / or Power Boiler U400 (primary for strong NCG's/backup for weak NCGs). When TRS gases are combusted in Power Boiler U400, the gases shall be subjected to a minimum temperature of 1200 degrees Fahrenheit for at least 0.5 seconds.
[40 CFR 52.21; 40 CFR 60 Subpart BB]

Cluster Rule - Vents

3.3.8 The Permittee shall reduce total HAP emissions from each LVHC system, as defined in 40 CFR 63.441, using Power Boiler U400, Recovery Boiler U500, or Lime Kiln U800 by introducing the HAP emissions stream with the primary fuel or into the flame zone. The LVHC (Equipment Group OG01 and OG02 and Source Codes P312, P320, P321, U608 and U614) system is defined as the collection of equipment including the digester, turpentine recovery, evaporator, stream stripper systems, and any other equipment serving the same function as those previously listed.
[40 CFR 52.21; 40 CFR 63.440(d); 40 CFR 63.443(a)(1)(i); 40 CFR 63.443(d)(4)]

3.3.9 The Permittee shall reduce total HAP emissions from the following equipment using Recovery Boiler U500 or Power Boiler U400 (backup) by introducing the HAP emissions stream with the primary fuel or into the flame zone.
[40 CFR 52.21; 40 CFR 63.440(d); 40 CFR 63.443(a); 40 CFR 63.443(d)(4); 40 CFR 63.459(a); Project XL Final Agreement]

a. The weak liquor storage tank (Source Code U610);

b. The boilout tank (Source Code U606);

c. The utility tank (Source Code U610);

d. The 50% solids black liquor storage tank (Source Code U605);

e. The south 67% solids black liquor storage tank (Source Code U502)

f. The north 67% solids black liquor storage tank (Source Code U501);

g. The precipitator make down tanks 1, 2, and 3 (Source Codes U504, U506, and U507);

h. The salt cake mix tank (Source Code U503); and

i. Deleted.

j. The wash press and filtrate tank (Source Codes P400 and P408).

Tanks

3.3.20 The Permittee shall comply with all applicable requirements of 40 CFR 60 Subpart Kb "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984" for Methanol Storage Tank P814.
[40 CFR 60 Subpart Kb]

40 CFR 63 Subpart EEEE

3.3.28 Deleted.

Recovery Boiler U500

3.3.29 The Permittee shall comply with the applicable standards, provisions, and requirements of Title 40 of the Code of Federal Regulations Part 60 Subpart Db "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" for Recovery Boiler U500.
[40 CFR 60 Subpart Db]

3.3.30 The annual capacity factor for oil fired in Recovery Boiler U500 shall be 10 percent or less. The annual capacity is the ratio between the actual heat input to the boiler from oil during a calendar year and the potential heat input to the boiler had it been operated 8,760 hours during a calendar year at maximum steady state design heat input capacity.
[40 CFR 60 Subpart Db Avoidance for $NO_X$ Limits]

# PART 4.0 REQUIREMENTS FOR TESTING

## 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:

ff. Method 10 for the determination of carbon monoxide emissions; the minimum sampling time for each run shall be one hour.

gg. Method 202 for the determination of condensible particulate emissions.

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)]

## 4.2 Specific Testing Requirements

4.2.1 The Permittee shall perform all emission tests under the following conditions:
[Project XL; 40 CFR 52.21; and 391-3-1-.02(6)(b)1]

a. No performance testing shall be required on sources (noted below) where US EPA certified continuous emissions monitors are installed and are meeting QA/QC standards. Notwithstanding the preceding sentence, as allowed in the rules of the Georgia EPD and as provided in the facility's air operating permit, EPD reserves the right to require a stack test independent of the permit, especially in the event of a dispute concerning compliance with QA/QC standards.

Recovery Boiler U500: $SO_2$, $NO_X$, and TRS CEMs
Power Boiler U400: $NO_X$ and $SO_2$ CEMs
Lime Kiln U800: CO, $NO_X$, $SO_2$, and TRS CEMs

b. Particulate matter testing is required for Recovery Boiler U500, Smelt Dissolving Tank U508, Lime Kiln U800, and Power Boiler U400, VOC testing is required for Lime Kiln U800, and TRS testing is required for Smelt Dissolving Tank U508 according to the following schedule:

i. Where the most recent performance test has shown that control of a source's emissions are less than 25% of the allowable limit, performance testing shall be performed every four years;

ii. Where the most recent performance test has shown that control of a source's emissions are greater than 25% but less than 50%, performance testing shall be performed every three years;

iii. Where the most recent performance test has shown that control of a source's emissions are greater than 50% but less than 75%, performance testing shall be performed every two years;

iv. Where the most recent performance test has shown that control of a source's emissions are greater than 75% of the allowable limit, performance testing shall be performed annually.

c. All tests shall be conducted when the source being tested is operating at a process input weight rate or fuel firing rate (BTU per hour hear input) representative of the highest 24- hour average as determined by operating records from the preceding 12 months.

d. All required continuous monitoring system(s) and monitoring devices shall be calibrated and operating when the test(s) are conducted.

e. Copies of the daily record of operating parameters, and the output data from all monitoring system and devices, shall be submitted with the test report for each day of testing.

Recovery Boiler U500

4.2.7 Within 60 days, but no later than 180 days, of achieving maximum operating rate for Recovery Boiler U500 after completion of Phase I of the modifications to increase capacity, the Permittee shall conduct an initial performance tests for the following:
[40 CFR 52.21; 40 CFR 60 Subpart Db; 40 CFR 60 Subpart BB; 40 CFR 63 Subpart MM; 40 CFR 63 Subpart S; 391-3-1-.02(2)(b); 391-3-1-.02(2)(e)]

a. Particulate matter and opacity. The opacity tests shall be conducted while burning black liquor solids and while burning fuel oil. During the performance tests the Permittee shall establish a total power value for Recovery Boiler ESP CDU1 to be used in determining excursions under Condition 6.1.7.c in order to demonstrate compliance with the particulate matter limit in Condition 3.3.2.b.

b. Nitrogen oxides, sulfur dioxide, and total reduced sulfur. The sulfur dioxide tests shall be conducted while burning black liquor solids and while burning fuel oil. Following the performance tests, compliance limits shall be demonstrated using the continuous monitors required in Condition 5.2.1.c.

c. Carbon monoxide and volatile organic compounds. During the performance tests, the Permittee shall collect data necessary to establish the flue oxygen concentration to be used in determining an excursion under Condition 6.1.7.c. The Permittee shall submit the excursion value to the Division as part of the performance test report. The Permittee shall provide, in writing, justification for the selected excursion value(s).

d. Total particulate matter. Ongoing compliance with the total particulate matter limit in Condition 3.3.2.i shall be determined through subsequent performance testing.

Following the initial performance testing, the Permittee shall comply with the testing schedule in Condition 4.2.1.b.

4.2.8 If the maximum capacity of Recovery Boiler U500 during the testing required by Condition 4.2.7 is 90% or greater of the maximum capacity of Recovery Boiler U500 after completion of Phase II of the modifications to increase capacity, no additional initial performance testing is required. If the maximum capacity during the testing conducted in accordance with Condition 4.2.7 is less than 90% of the maximum capacity upon completion of Phase II of the proposed modification, the Permittee shall repeat the performance tests required under Condition 4.2.7.
[40 CFR 52.21; 40 CFR 60 Subpart Db; 40 CFR 60 Subpart BB; 40 CFR 63 Subpart MM; 40 CFR 63 Subpart S; 391-3-1-.02(2)(b); 391-3-1-.02(2)(e)]

Smelt Dissolving Tank U508

4.2.9 Within 60 days after achieving the maximum production rate at which Smelt Dissolving Tank U508 will be operated following the modifications to Recovery Boiler U500, but not later than 180 days after initial startup following the modifications, the Permittee shall conduct performance tests for particulate matter, total reduced sulfur, and opacity for Smelt Dissolving Tank U508 in order to demonstrate compliance with Conditions 3.3.4, 3.4.7, and 3.4.8. During the performance tests required by this condition, the Permittee shall establish the minimum pressure drop and scrubbant flow rate for Smelt Tank Scrubber CDU5 to be used in determining exceedances and excursions under Condition 6.1.7. The Permittee shall repeat these tests if additional Recovery Boiler U500 initial tests are required by Condition 4.2.8. The Permittee may conduct additional performance tests to expand the range of values for the minimum pressure drop and scrubbant flow rate.
[40 CFR 52.21; 40 CFR 60 Subpart BB; 391-3-1-.02(2)(b)]

## PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

### 5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

### 5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

c. TRS and oxygen on a dry basis, opacity, nitrogen oxides, and sulfur dioxide from Recovery Boiler U500. Opacity is to be sampled and analyzed for each successive 10-second period, at a minimum, and averaged and recorded for each successive 6-minute period.
[40 CFR 63 Subpart MM; 40 CFR 60 Subpart BB; 40 CFR 60 Subpart Db and 40 CFR 52.21]

5.2.2 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 70.6(a)(3)(i)]

f. Secondary current and secondary voltage for each electrical isolatable section (bus section) of the electrostatic precipitator for Recovery Boiler U500. The total power for the precipitators shall be determined and recorded from the secondary parameters on a continuous basis.

g. Quantity of fuel oil burned in Recovery Boiler U500 alone and quantity of fuel oil burned with black liquor solids.

5.2.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

d. Secondary current and secondary voltage for each electrical isolatable section (bus section) of the electrostatic precipitator for Lime Kiln U800. Data shall be recorded once per shift of operation. The total power for the precipitator shall be determined and recorded from the secondary parameters no less than once per shift of operation.

5.2.12 The following pollutant specific emission unit (PSEU) is subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

| Emission Unit | Pollutant |
|---|---|
| Recovery Boiler U500 | Particulate Matter |

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

5.2.13 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from Recovery Boiler U500.
[40 CFR 64.6(c)(1)(iii)]

| Performance Criteria [64.4(a)(3)] | Indicator No. 1 ESP Total Power | Indicator No. 2 Opacity |
|---|---|---|
| A. Data Representativeness [64.3(b)(1)] | Continuous monitoring of secondary current and secondary voltage. Calculation of ESP total power on a continuous basis. | Continuous monitoring of Recovery Boiler opacity with a COMS. |
| B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)] | N/a | N/a |
| C. QA/QC Practices and Criteria [64.3(b)(3)] | Routine maintenance and annual calibrations. | Routine maintenance and calibrations per NSPS Performance Specification 1 |
| D. Monitoring Frequency [64.3(b)(4)] | Continuous monitoring of secondary current and secondary voltage. Calculation of ESP total power on a continuous basis. | Continuous. |
| Data Collection Procedures [64.3(b)(4)] | Data is recorded in the Process Information System. | Data is recorded in the Process Information System. |
| Averaging Period [64.3(b)(4)] | 15-minute average | 6-minute average. |

### 5.3 Record Keeping and Reporting Requirements (associated with Specific Monitoring Requirements)

5.3.2 The Permittee shall maintain the following records for Recovery Boiler U500. Reports shall be submitted in accordance with the requirements of Condition 6.1.4 of this permit. [40 CFR 60.49b(k)]

a. Calendar dates covered in the reporting period.

b. Each 30-day average sulfur dioxide emission rate (ng/J or 1b/million Btu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

c. Identification of the steam generating unit operating days that 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 operating day; justification for not obtaining sufficient data; and description of corrective action taken.

d. Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

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

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

g. Identification of the times when the pollutant concentration exceeded full span of the CEMS.

h. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.

i. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

j. The annual capacity factor of each fuel fired as provided under 40 CFR 60.49b(d).

## PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

### 6.1 General Record Keeping and Reporting Requirements

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)

Recovery Boiler U500

iv. Any 12-hour period during which the average TRS concentration measured and recorded in accordance with Condition 5.2.1.c for Recovery Boiler U500 is in excess of 5 ppm on a dry basis corrected to 8 percent oxygen.
[40 CFR 60 Subpart BB and 40 CFR 52.21]

v. Any six-minute period during which the average opacity from Recovery Boiler U500 measured and recorded in accordance with Condition 5.2.1.c exceeds 35 percent while not burning fuel oil.
[40 CFR 60 Subpart BB]

vi. Any 12-hour period during which the average sulfur dioxide concentration measured and recorded in accordance with Condition 5.2.1.c for Recovery Boiler U500 is in excess of the following:
[40 CFR 52.21]

$E = (75 \text{ ppm} * H_b + 400 \text{ ppm} * H_{fo}) / (H_b + H_{fo})d$

where: $E = SO_2$ emission limit in ppmvd @ 8% $O_2$
$H_b$ = heat input, in MMBtu, from black liquor solids firing
$H_{fo}$ = heat input, in MMBtu, from fuel oil firing

xx. Any 30-day rolling period during which the average sulfur dioxide emissions measured and recorded in accordance with Condition 5.2.1.c for Recovery Boiler U500 is in excess of 0.5 lb/MMBtu when firing any fuel combination.
[40 CFR 60 Subpart Db]

xxi. Any six-minute period during which the average opacity from Recovery Boiler U500 measured and recorded in accordance with Condition 5.2.1.c exceeds 20 percent while burning any oil, except for one 6-minute period per hour of not more than 27 percent.
[40 CFR 60 Subpart Db]

xxii. Any 12-hour period during which the average nitrogen oxides concentration measured and recorded in accordance with Condition 5.2.1.c for Recovery Boiler U500 is in excess of 100 ppm on a dry basis corrected to 8 percent oxygen.
[40 CFR 52.21]

Lime Kiln U800

xxiii. Any 24-hour period during which the average sulfur dioxide concentration measured and recorded in accordance with Condition 5.2.1.b for Lime Kiln U800 is in excess of 260 ppm on a dry basis corrected to 10 percent oxygen.
[40 CFR 52.21]

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)

40 CFR 63 Subpart MM

vii. Period of monitoring exceedances reported for Conditions 6.1.7.b.vii(A) and 6.1.7.b.vii(A) shall be a violation of 40 CFR 63 Subpart MM when six or more 3-hour average parameter values (excluding periods of startup, shutdown, or malfunction) within any 6 month reporting period are outside the parameter limits listed below. For purposes of determining the number of non-opacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
[40 CFR 63.864(k)(2)(iii) and 40 CFR 63.864(k)(3)]

(A) Smelt Tank Scrubber U508 pressure drop less than 9.1 inches of water column or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

(B) Smelt Tank Scrubber U508 scrubbant flow rate less than 360 gpm or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

Recovery Boiler U500

viii. Any time of process operation during which the annual capacity factor for oil fired in Recovery Boiler U500 is greater than 0.10. The annual capacity factor is determined on a 12- month rolling average basis, with a new annual capacity factor calculated at the end of each calendar month.
[40 CFR 60 Subpart Db]

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)

Smelt Tank U508

iv. Any three-hour period during which the average pressure drop or scrubbant flow rate measured and recorded in accordance with Condition 5.2.2.c from Smelt Tank Scrubber CDU5 is below the following values:

(A) Pressure drop: 9.1 inches of water column or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

(B) Scrubbant flow rate: 360 gpm or the value determined in accordance with Condition 4.2.9 or determined by subsequent performance testing.

Recovery Boiler U500

viii. Any three hour period during which the total power for the Recovery Boiler ESP (CDU1) falls below 75% of the values determined in accordance with Condition 4.2.7 or 4.2.1.

xii. Any 3-hour period during which the average Flue Oxygen concentration for Recovery Furnace U500 falls below the concentration determined in accordance with Condition 4.2.7.

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:

vii. The annual capacity factor for oil for Recovery Boiler U500 for the past twelve consecutive months. The annual capacity factor shall be recorded at the beginning of each month.

## 6.2 Specific Record Keeping and Reporting Requirements

Tanks

6.2.15 The Permittee shall keep the following records for Methanol Storage Tank P814: [40 CFR 60 Subpart Kb]

a. Readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

b. A record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period for Methanol Storage Tank P814 only.

Recovery Boiler U500

6.2.30 The Permittee shall submit notification of the date of initial startup for modified Recovery Boiler U500 as provided by 40 CFR 60.7. The notification shall meet the requirements of 40 CFR 60.49b(a).
[391-3-1-.02(2)(b)(1) and 40 CFR 70.6(a)(3)(i)

6.2.31 The Permittee shall record and maintain records of the amounts of fuel oil combusted in Recovery Boiler U500 during each day and calculate the annual capacity factor for the calendar month and the reporting period. The annual capacity is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
[40 CFR 60 Subpart Db]

6.2.32 The Permittee shall furnish the Division written notification as follows:
[40 CFR 60.7]

a. Notifications of the dates the modifications to Recovery Boiler U500 are to commence for each of the two project phases, postmarked no later than 30 days after commencement of construction. One notification shall be submitted for each of the two project phases.

b. Notifications of the date the modifications to Recovery Boiler U500 are complete for each of the two project phases, postmarked no later than 15 days after such dates. One notification shall be submitted for each of the two project phases.

General

6.2.33 The Permittee shall commence construction of the modification proposed in Application No. 15956 within 18 months of the date of issuance of this permit. Approval to construct shall become invalid if construction is not commenced by that date. For the purposes of this Permit, the definition of "commence" is given in 40 CFR 52.21(b)(9).
[40 CFR 52.21(r)]

## PART 7.0 OTHER SPECIFIC REQUIREMENTS

### 7.4 Insignificant Activities Associated with this Amendment

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

### 7.14 Specific Conditions Associated with this Amendment

7.14.3 Cylinder Mould Decker P400, Cylinder Mould Decker Filtrate Tank P408, and Cylinder Mould Decker Vacuum Pump P409 shall be permanently decommissioned upon startup of Wash Press P450 and Filtrate Tank P451. Condition 3.3.9.j shall be effective at such time that the Permittee completes construction of Phase II of the mill production expansion project.
[391-3-1-.02(6)(b)(1) and 40 CFR 70.6(a)(3)(i)]

7.14.4 Until modifications are completed on Recovery Boiler U500, the permit limits contained in Condition 3.3.2 of Permit No. 2631-193-0013-V-01-0 remain in effect. Upon completion of the first phase of modifications to Recovery Boiler U500, as indicated in the notification submitted under Condition 6.2.32 of this amendment, the permit limits contained in Condition 3.3.2 of this amendment shall become effective.
[391-3-1-.02(6)(b)(1) and 40 CFR 70.6(a)(3)(i)]

## Attachments

B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups

# ATTACHMENT B

## INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

| Description of Emission Units / Activities | Quantity |
|---|---|
| 1st Stage Brownstock Washer Filtrate Tank | 1 |
| Broke Chest (in pulp finishing area) | 1 |
| Brownstock Diffusion Washer | 1 |
| Causticizer Set (3 Tanks) | 1 |
| Chemical Storage Tank (Flocculant) (in freshwater treatment area) | 1 |
| Dregs Filter | 1 |
| Dregs Filter Vacuum Pump | 1 |
| Fourdrinier Machine (including press section) | 1 |
| Green Liquor Storage Tank | 1 |
| Hydrogen Peroxide Tank | 1 |
| Knotter Accepts Tank | 1 |
| Lime Mud Filter | 2 |
| Lime Mud Mix Tank | 1 |
| Lime Mud Storage Tank | 1 |
| Lime Mud Vacuum Pump | 2 |
| Lime Mud Washer | 1 |
| No. 1 Turpentine Condenser | 1 |
| Wet End Repulper (in pulp finishing area) | 1 |
| White Liquor Mix Tank | 1 |
| Whitewater Filter (in pulp finishing area) | 1 |
| Whitewater Storage Chest (in pulp finishing area) | 1 |
| Turpentine Storage Tank | 1 |
| Soap Separation Tank 1 | 1 |
| Soap Storage Tank | 1 |
| Spill Collection Tank | 1 |
| Spiral Heat Exchanger | 1 |