# **Part 70 Operating Permit Amendment**

Permit Amendment No.: 2421-107-0011-V-02-3 Effective Date: July 16, 2007

Facility Name: Rayonier Wood Products LLC-Swainsboro Sawmill

8796 Highway 297

Swainsboro, Georgia 30401 Emanuel County

Mailing Address: 8796 Highway 297

Swainsboro, Georgia 30401

Parent/Holding Rayonier Wood Products LLC,

**Company:** a wholly owned subsidiary of Rayonier Inc.

**Facility AIRS Number:** 04-13-107-00011

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

The modification and operation of lumber drying kilns (DK07 and DK08), converting them from batch to continuous type. This permit also authorizes an increase in the lumber drying capacity to 220 MMBF/year.

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. 2421-107-0011-V-02-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 16512 dated December 22, 2005; any other applications upon which this Permit Amendment or Permit No. 2421-107-0011-V-02-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **10** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 2421-107-0011-V-02-0.

Director
Environmental Protection Division

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#### PART 1.0 FACILITY DESCRIPTION

#### 1.3 Process Description of Modification

Rayonier Wood Products LLC (Rayonier) currently operates the Swainsboro Sawmill plant with a capacity to manufacture 150 million board feet (MMBF) of lumber per year. The annual production through the dry kilns is limited to 118,421 Mbf of lumber by the current permit. Logs are debarked, sawn, kiln dried, planed and bundled for shipment as manufactured dimensional lumber. Lumber is currently dried using two wood gasifier driven direct heated dry kilns (DK7 and DK8). Each kiln has its own gasifier, combustion unit and blend chamber. Green sawdust supply the fuel needed to dry green lumber. In this process, wood is gasified in a specially designed retort. This gas is then burned in a subsequent combustion chamber with secondary and tertiary air being supplied to the combustion chamber.

The proposed project includes the modification of these two dry kilns. Under the proposed modification, the batch operated kilns will be converted into continuous drying operation kilns, by increasing their length to about three times their existing length, adding a mechanism to move stacks of green wood through the kilns on two tracks, and reconfiguring the floor baffles. With this modification, the maximum annual lumber production capacity for the facility will increase to 220 MMBF per year.

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### 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.

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#### 3.1.1 Emission Units After modification

	Emission Units	Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
DK07	Lumber Dry kiln, direct heated by wood residue fired gasifier (110MMBF/Yr capacity)	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD GA Rule 391-3-102(2)(b) GA Rule 391-3-102(2)(e) GA Rule 391-3-102(2)(g)	3.2.2, 3.2.4, 3.3.4, 3.4.2, 3.4.3, 3.4.7, 5.2.5, 5.2.6, 6.1.7, 6.2.1, 6.2.3, 6.2.9, 6.2.10, 6.2.11	N/A	None
DK08	Lumber Dry kiln, direct heated by wood residue fired gasifier (110MMBF/Yr capacity)	40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD GA Rule 391-3-102(2)(b) GA Rule 391-3-102(2)(e) GA Rule 391-3-102(2)(g)	3.2.2, 3.2.4, 3.3.4, 3.4.2, 3.4.3, 3.4.7, 5.2.5, 5.2.6, 6.1.7, 6.2.1, 6.2.3, 6.2.9, 6.2.10, 6.2.11	N/A	None
PC01	Planer Mill Shavings System	GA Rule 391-3-102(2)(b) GA Rule 391-3-102(2)(e)	3.2.3, 3.4.4, 3.4.5, 3.5.1, 3.5.2, 4.2.2, 4.2.3, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.3.1, 6.1.7, 6.2.11	BH01	Baghouse (with cyclone)
FS01 To FS05	Fugitive Emission Sources (Vehicular traffic, sawing operations, planing operations, maintenance, and material handling)	GA Rule 391-3-102(2)(n)	3.4.6, 6.2.7	N/A	N/A

<sup>\*</sup> Generally applicable requirements contained in this permit may also apply to emission units listed above.

#### 3.2 Equipment Emission Caps and Operating Limits

- 3.2.2 The Permittee shall not dry more than 220 million board feet of lumber per any twelve consecutive months in the lumber dry kilns (Source Codes DK07 and DK08). [40 CFR 52.21 and 391-3-1-.03(2)(c)]
- 3.2.3 The Permittee shall not cause, let, suffer, permit or allow the rate of emissions from the planer mill baghouse (APCD ID. No. BH01), any gases that contain particulate matter (PM<sub>10</sub>) in excess of 1.07 lb/hr. The Permittee shall not operate the planer mill shaving system (PC01) for more than 5250 hours per year.

  [PSD Avoidance limit, 40 CFR 52.21, and 391-3-1-.03(2)(c)]

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3.2.4 The Permittee shall not cause, let, suffer, permit or allow the rate of emissions from the modified lumber dry kilns (Source Codes DK07 and DK08), any gases that contain Volatile Organic Compounds (VOC) in excess of 4.6 lb /1,000 board feet lumber dried. [PSD/BACT, 40 CFR 52.21, and 391-3-1-.03(2)(c)]

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### 3.3 Equipment Federal Rule Standards

3.3.4 The Permittee shall comply with all applicable provisions of the National Emission Standard for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – "General Provisions" and Subpart DDDD– "Plywood and Composite Wood Products," in so far as they apply to lumber kilns.

[40 CFR 63, Subpart A and 40 CFR 63, Subpart DDDD]

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#### PART 4.0 REQUIREMENTS FOR TESTING

#### 4.2 Specific Testing Requirements

4.2.2 The Permittee shall conduct performance tests for particulate matter emissions from the baghouse (APCD ID Nos. BH01) associated with the planer mill (Source Code: PM01), if required by the Division. The Permittee shall submit the test results as required by this condition and Condition No. 4.2.3 within 45 days of completion of the testing. [391-3-1-.02(6)(b) 1(i)]

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4.2.3 If a performance test for particulate matter emissions from the baghouse (APCD ID Nos. BH01) associated with the planer mill is carried out, the Permittee shall, using the monitoring systems required by Condition 5.2.1, acquire pressure drop data across the baghouse. Using data from performance tests that demonstrate compliance with the applicable particulate matter emission limit, the Permittee shall determine the arithmetic average of that pressure drop data and submit to the Division a report containing the pressure drop data and arithmetic averages for each test run. The report shall be submitted to the Division within 45 days of completion of the testing.

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

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

#### **5.2** Specific Monitoring Requirements

- Within 180 days of the issuance of this permit, the Permittee shall develop and implement a Work Practice and Preventive Maintenance Program for the modified lumber drying kilns (DK07 and DK08) to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and modification by the Division. At a minimum, the following operational and maintenance checks shall be made, and a record of the findings and corrective actions taken, shall be kept in a maintenance log:

  [391-3-1-.02(6)(b) 1 and 40 CFR 70.6(a)(3)(i)]
  - a. Measurement of the combustion chamber exit temperature.
  - b. Measurement of the blend box exit temperature (dry bulb readings).
  - c. Within 6 months of the start-up of each kiln, the Permittee shall submit to the Division, for approval, the ranges of temperatures, per paragraph a and b of this condition, that are indicative of good operation and minimization of VOC emissions.
  - d. Any time a combustion chamber exit temperature and/or blend box exit temperature exceeds targeted values, investigate the cause within a reasonable amount of time and correct any adverse condition discovered as quickly as possible.
  - e. Check to verify that the heating system, including gasifier, combustion chamber and blend box, is operating properly.
  - f. If it is determined that the gasifier, combustion chamber, or blend box, is operating improperly, during an inspection done in accordance with this condition, correct in the most expedient manner possible and note the corrective action taken. The Permittee shall also record any corrective action(s) taken to prevent any future exceedances.
- 5.2.6 The Permittee shall monitor the combustion gas temperatures, including combustion chamber exit and blend box exit temperatures, for a period of six months to establish combustion gas temperatures which represent good operating conditions for the modified lumber drying kilns (DK07 and DK08), as specified in Condition No. 5.2.5, and to assure that the provisions of Condition 8.17.1 are met. The report shall be submitted to the Division within 30 days of completion of this monitoring.

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

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#### 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)

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None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
  - i. [Reserved]
  - ii. [Reserved]
  - iii. Any twelve consecutive months during which more than 220,0000 board feet of lumber are dried in the modified lumber drying kilns (DK07 and DK08).
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
  - i. Any adverse condition(s) discovered by the weekly inspections, as required in Condition No. 5.2.2, of the Planer Mill Shaving System cyclone and baghouse (BH01).
  - ii. Any visible emissions from the baghouse (BH01), which occurs for two consecutive determinations, done to comply with Condition 5.2.3.
  - iii. Any failure to follow any procedure of the work practice and preventive maintenance plan required in Condition 5.2.5.
  - iv. Any adverse condition(s) found for two consecutive days in accordance with Condition 5.2.5.

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- v. Any exceedance of the combustion chamber and/or blend box exit temperature in accordance with Condition 5.2.5d. As part of the reporting, the Permittee shall report any corrective action taken.
- vi. Any twelve consecutive months during which the planer mill is operated more than 5250 hours.

### **6.2** Specific Record Keeping and Reporting Requirements

- 6.2.2 [Revoked]
- 6.2.8 [Revoked]
- 6.2.9 The Permittee shall furnish the Division written notification as follows: [391-3-1-.03(2)(c) and 40 CFR 60.49b(a)]
  - a. The actual date of the shut-down of each kiln (Source Codes DK07 and DK08) for modification, within 15 days after such date.
  - b. The actual date of initial startup of each modified lumber drying kiln (Source Codes DK07 and DK08), within 15 days after such date.
  - c. Certification that a final inspection has shown that construction of both the kilns have been completed in accordance with the application, plans, specifications and supporting documents submitted in support of this permit.
- 6.2.10 The Permittee shall maintain a kiln operation and maintenance log book for the following records, in a permanent form. These records shall be retained for at least five years following the date of entry. The records shall be available for inspection or submittal to the Division upon request.

[40 CFR 52.21 and 391-3-1-.03(2)(c)]

- a. Reports shall be kept manually or in an electronic format for each day's production and shall contain as a minimum the date, charge quantity, actual drying time, maximum wet-bulb actual and set-point temperatures, dry-bulb actual and set-point temperatures over the lumber drying time range, and the final target moisture content.
- b. For each visual inspection, the logbook shall contain the date, the initials of the person conducting the inspection, the results of the visual inspection, documentation of any maintenance performed, and any calibration performed on the kiln equipment.

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- The Permittee shall retain operational records on the modified drying kilns (Source Codes: 6.2.11 DK07 and DK08), and planer mill shaving system (Source Code: PC01) for five years after the date and year of record. The records shall be available for inspection and/or submittal to the Division and contain:
  - A log of the monthly hours of operation of the planer mill shaving system. The total a. hours of operation during the previous 11 consecutive months must be included in each month's log.
  - A log of the monthly total lumber dried in the kilns (in million board feet). The total b. lumber dried for the previous 11 consecutive months must be included in each month's log.
  - A log of the monthly total lumber processed in the planer mill and total dimensional c. lumber produced (in tons). The total lumber for the previous 11 consecutive months must be included in each month's log.

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# PART 7.0 OTHER SPECIFIC REQUIREMENTS

## 7.14 Specific Conditions Associated with this Amendment

7.14.1 [Revoked]

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