

Rayonier

Performance Fibers

Fernandina Mill

January 8, 2009

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Certified Mail, Return Receipt Requested

BUREAU OF AIR REGULATION

Mr. Syed Arif, P.E.
New Source Review Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Request for Permit Expiration Date Extension and Approval to Increase the Red Liquor Solids Firing Rate for the Sulfite Recovery Boiler
Project No. 0890004-023-AC

Dear Mr. Arif:

This letter is in response to your October 16, 2008 request for additional information regarding Rayonier's request for extension of the expiration date for construction permit No. 08900004-018-AC, and approval to increase the red liquor solids firing rate for the existing sulfite recovery boiler. For ease of reference, our responses are numbered in the same order as your questions.

1. Regarding subsection D of the construction permit, you requested that we submit the following information:
 - a. a detailed description of work and testing performed to date;
 - b. a detailed description of work and testing remaining;
 - c. a preliminary schedule for completing any remaining work; and,
 - d. the current production capacity of the mill (ADMT per year).

This information was submitted on February 26, 2008 with the facility's AOR as required by condition D.5. A copy of that submittal is attached. The production capacity of the mill is still 162,000 ADMT/year.

Table 1, below, provides an updated project schedule. Because the schedule for several of the planned projects remains indefinite, it is our understanding that the Department will require us to obtain a new permit for those projects rather than granting a multi-year permit extension. Therefore, those projects are noted as "cancelled" in Table 1.

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Certificate No. A2072

10 Gum Street • P.O. Box 2002 • Fernandina Beach, FL 32035-2002
Telephone (904) 261-3611 • Fax (904) 277-1411

Table 1

<i>Project</i>	<i>Date</i>
Upgrade dryer cans (machine speed increase)	Completed
Continue first improvements to pulp machine (replace lump breaker arms)	Completed
Add Red Stock Washer Press Roll	Cancelled
Begin second improvements to pulp machine (Pocket Ventilation piping and headbox)	Cancelled
Add an new HCE cell	Cancelled
Install a new HCE washer	Cancelled
Install a new post HCE washer	Cancelled
Install new HCE blow heat recovery system to control all HCE cells	First Half 2010

In addition to authorizing the above projects, the construction permit imposed a requirement to install bleach plant emission controls by February 20, 2010 to meet the requirements of 40 CFR 63.445 (MACT Subpart S). Although this date is well before the deadline imposed by Subpart S, Rayonier accepted this permit condition and plans to install a bleach plant scrubber. Our tentative construction schedule is shown in Table 2.

Table 2

<i>Project</i>	<i>Date</i>
Washer hood installation/ modification and equipment tie-ins	February 2009
Install collecting ductwork, scrubber tower, and associated equipment	Third Quarter 2009
Scrubber start-up	Fourth Quarter 2009
Compliance testing	January 2010

In order to provide sufficient time for installation and testing of this emissions control equipment and time for incorporation of the scrubber into the Title V permit, we are requesting extension of the construction permit until September 1, 2010.

Finally, the construction permit authorized burning wastewater treatment sludge on a trial basis. We completed the first set of sludge burn trials and submitted the results on November 25, 2008. The extension of the permit expiration date will enable us to complete the sludge burning trials. We anticipate conducting the remaining sludge burning in March/April 2009, and will not exceed the limit of 500 ODT total sludge burned that was established in the construction permit.

2. You requested an explanation of changes made to the recovery boiler to allow an increase in the red liquor solids firing rate. *Rayonier has not made any modifications to the boiler.* The rated capacity of the boiler is 653.1 MM Btu/hour heat input, as stated in the existing Title V permit. Attached is the original recovery furnace specification sheet that outlined predicted capacity of the boiler. As with most industrial units, the boiler can operate at somewhat higher rates on a short-term basis but would not be expected to do so on a sustained basis, and would average less than the rated capacity on a rolling twelve-month basis. The heat content of the red liquor solids can also vary, so the boiler could actually require a greater volume of red liquor solids to achieve the rated heat input.
3. Testing of the recovery boiler was conducted in a way that ensured the processing rate of 70,000 lbs/hr of red liquor solids was not exceeded for any consecutive three-hour average. Rayonier believed this was compliant with the conditions of the Title V permit, but has since been engaged in discussions around a consent order with the Northeast District office regarding the appropriate averaging time for this limit, and we are currently controlling the liquor processing rate on a one-hour average basis.
4. Because the recovery boiler can operate at a slightly higher liquor firing rate without a physical change or change in the method of operation, the requested increase in liquor firing rate should not be considered a "modification" under the Prevention of Significant Deterioration (PSD) regulations. In order to facilitate completion of the construction permit extension; however, Rayonier is withdrawing the request to increase the liquor firing rate and will submit a separate request for that permit revision at a later time.
5. An application has been submitted to the Northeast District office to incorporate the new No. 6 power boiler and the production increase into the Title V permit. Should we decide to pursue a permit change for the recovery boiler red liquor solids firing rate, we will submit a separate application at that time.

As required by Rule 62-212.420, F.A.C. and Rule 62-4.050(3), F.A.C., Responsible Official (R.O.) Certification and Professional Engineer (P.E.) Certification Statements from DEP Form No. 62-210.900(1) are enclosed with this submittal.

If you have additional questions regarding this information, please contact David Rogers at (904) 277-1346, email: david.rogers@rayonier.com or Debra Lane at (912) 588-8117, email: debra.lane@rayonier.com.

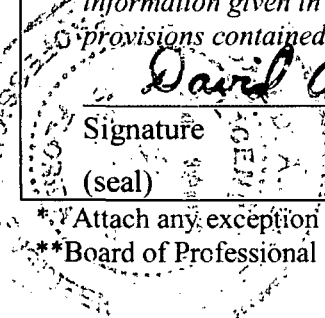
Sincerely,



Jack Perrett
General Manager

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: David A. Buff Registration Number: 19011
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6241 NW 23rd Street, Suite 500 City: Gainesville State: FL Zip Code: 32653
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4. Professional Engineer E-mail Address: dbuff@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature: <u>David A. Buff</u> Date: <u>1/8/09</u> (seal)

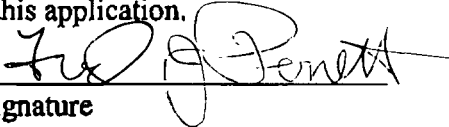
* Attach any exception to certification statement.

** Board of Professional Engineers Certificate of Authorization #00001670.

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: () ext. Fax: ()
5. Application Responsible Official E-mail Address:
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application. Signature: <u></u> Date: <u>1-8-09</u>

Rayonier

February 26, 2008

Performance Fibers

Fernandina Mill

Certified Mail, Return Receipt Requested

7007 0710 0005 5955 2601

Department of Environmental Protection
 Division of Air Resources Management, MS5500
 2600 Blair Stone Road
 Tallahassee, Florida 32399-2400

Re: Permit 0890004
 Construction Permit Condition D.5 and E.1 Submittal, Project No. 0890004-018-AC

Please find enclosed pages 1 and 2 of our 2007 EAOR. We have filed the AOR electronically.

Condition D.5. of the Construction Permit Project 30890004-018-AC requires an annual report of construction progress be submitted to the FDEP along with the Annual Operating Report. This correspondence is that report. It should be noted that this construction permit was a non-PSD permit and therefore the elapsed time restrictions on construction do not apply. Nevertheless construction was commenced within 18 months of issuance and will continue at regular intervals.

a. Thus far, the #6 power boiler has been installed and is operational (December 2006), the HCE Evaporator line has been installed and is operational (June 2007), and a portion of the machine speed improvements project (Machine Dandy roll) has been installed and is operational (May 2007).

b/c. The current projects and estimated schedule for those listed on the permit are:

<i>Project</i>	<i>Date</i>
Upgrade dryer cans (machine speed increase)	February 2008
Continue first improvements to pulp machine (replace lump breaker arms)	2008
Add Red Stock Washer Press Roll	February 2009
Begin second improvements to pulp machine (Pocket Ventilation piping and headbox)	2009
Add a new HCE cell	2013
Install a new HCE washer	2013
Install a new post HCE washer	2013
Install new HCE blow heat recovery system to control all HCE cells	TBD

* It continues to be noted that this schedule is preliminary and subject to the success of the earlier projects.

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d. The present production capacity of the mill is 162,000 ADMT/year.

Condition E.1, of the above referenced Construction Permit also requires an annual report of Demand Growth Emissions submitted in conjunction with the Annual Operating Report. Demand Growth emissions are associated with the production increase portion of the Construction Permit. The application demonstrated that the existing power boilers and recovery boiler could maintain the 175,000 ADMT production rate. The Power boiler baseline used in the application is presented in the table below along with the reported emissions in the 2007 AOR. The difference is taken as Demand Growth Emissions. However, as there is yet to be any realized production increase above our previously permitted limits, there is yet to be any true demand growth emissions.

Power Boiler Demand Growth Emissions Accounting:

Pollutant	Baseline Emissions from No. 1,2 & 3 boilers ton/yr	Reported Emissions No.6 boiler 2007 AOR ton/yr	Demand Growth Emissions from Boiler ton/yr
PM	276.06	21.59	-254.47
PM10	242.48	21.59	-220.89
SO ₂	181.96	146.1	-35.86
NO _x	340.95	270.1	-70.85
CO	690.75	158.8	-531.95
VOC	52.40	0.93	-51.47

Likewise the application demonstrated that the existing recovery boiler was capable of burning 70,000 lbs/hour of red liquor solids. Its baseline was not provided in the application, but the baseline below is based on the 2003-2004 Annual Operating Report.

The emissions from the current 2007 Annual Operating Report are compared to determine Demand Growth Emissions. However, this overstates these emissions by that portion of the Significance Level applied to the Recovery Boiler, which has not been calculated as it makes the determination unnecessarily complicated.

Recovery Boiler Demand Growth Emissions Accounting

Pollutant	Baseline Emissions from Recovery Boiler ton/yr	Reported Emission from Recovery Boiler 2007 AOR ton/yr	Demand Growth Emissions from Recovery Boiler ton/yr
PM	61.88	72.5	10.62
PM10	55.26	64.76	12.5
SO ₂	821.25	486.4	-334.85
*NO _x	1997.96	1940.1	-57.86
CO	344.84	623.32	-278.48
VOC	31.26	22.99	-8.27

*The Nox emission factor from the 2003 AOR was recalculated in 2004. For this demand growth discussion the 2003 NOx emissions were recalculated using the 2004 emission factor in order to develop an accurate baseline.

Due to the fact that pulp production and steam production in the first full year of power boiler #6 operation in 2007 was less than the prior two-year average, it is reasonable to state that all pulp produced in 2007 could have been accommodated by the previous boilers and thus qualify as emissions due to demand growth.

Designated Representative Certification

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

If you have any questions, please contact David Rogers at (904) 277-1346 or david.rogers@rayonier.com.

Sincerely,



F. J. Perrett
General Manager

A		B		C	
FUEL		PREDICTED PERFORMANCE		EQUIPMENT PER AIR	
SPECIFIED BY PURCHASER		STEAM	M LB/HR - 392	2	TYPE TFC DRUM RECOVERY
TYPE ALKANTA LIQUOR		LIQUOR SOLIDS	M LB/DAY 1000	3	SIZE 22 - 20/24
%		EXCESS AIR LYG. BOILER	5	5	95 - 50/48
BY WEIGHT, DRY SOLIDS		B&W BTU-TONS/DAY	688	6	BOILER H S. SQ FT. 22851
Cl	0.2	TOTAL HEAT INPUT MKB/HR	689	8	DRUM BAFFLE, TYPE 39 - 11" CYCLOPENS TILTED PRIMARY
Nb	0.2	HEAT AVAILABLE TO FURNACE MKB/HR	599	9	AND TYPE 78 SECONDARY SCRIBBERS
S	5.0	LIQUOR TO BURNERS	125.8	10	H. S. SQ FT. 17702
H	5.8	SALT CAKE MAKEUP	---	11	NO. OF STEAM PASSES COMP
C	51.7	STEAM TO STEAM COIL AH	15.8	12	TUBES, OD. IN. 31
O	34.7	STEAM TO LIQUOR HEATERS	---	13	NO. LOOPS 9
INERTS	0.7	STEAM TO LIQUOR HEATERS	---	13	56 ROWS AT 4 IN.
N	1.7	FLUE GAS LYG. ECONOMIZER	647.0	14	20 WIDE AT 7.5 IN.
TOTAL	100.0	AIR TO AH	496.5	15	H. S. SQ FT 9271
GROSS HEATING VALUE, 80F		STEAM AT SUPERHEATER OUTLET	900	17	TUBE LENGTH, FT 20'-2"
9500 BTU/LB DRY SOLIDS		DROP, DRUM TO SH OUTLET	95	18	TUBES, OD. IN. 2.0
28 ROWS AT 3.5 IN.		DROP THRU ECONOMIZER	15	19	31 WIDE AT 4
% BY WEIGHT, AS DELIVERED		SUPERHEATED STEAM	875	20	DESIGN PRESSURE, LB/SQ. IN. 1150
SOLIDS	53.0	LEAVING BOILER	850	22	FURNACE VOLUME 40100 6 CU FT.
WATER	47.0	LEAVING ECONOMIZER	450	23	FURNACE WIDTH 20'-8"
TOTAL	100.0	LEAVING TUBULAR AIR HEATER	555	24	FURNACE DEPTH 24'-0"
SPECIFIED BY PURCHASER		TO ECONOMIZER	700	25	FURN. HS. 11250° SQ FT.
TYPE BUNKER "C" FUEL OIL		TO BOILER	340	26	INCLUDES 11300 CU. FT. IN SECONDARY FURNACE
		TO AIR HEATER (SCAH/TUB A.H.)	80/800	27	INCLUDES 5780 SQ. FT. IN SECONDARY FURNACE
		LEAVING AIR HEATER	700	28	TYPE TUBULAR - 2" O.D. ALL GAGE - H.S. = 63615 SQ. FT.
		TO EVAPORATOR		29	TYPE SCAH ROUTE SATURATED STEAM AT 60 PSIG
		TO BURNERS	180	30	TYPE NO. 18 MAKE NO./UNIT
		LEAVING EVAPORATOR		31	DIAM FT. WIDTH FT.
		TO BURNERS	55	32	LIQUOR SPRAY OSCILLATOR NO/UNIT
		FURNACE DRAFT	0.7	33	TYPE CIRCULAR - 21 1/2"
		BOILER & SUPERHEATER	1.9	34	LOCATION: 80TOWERS 6 EACH WALL
		ECONOMIZER	1.6	35	REAR MAIN, 2 (LIQUOR ONLY)
		TUBULAR AIR HEATER	2.5	36	TOTAL 14
		DUST COLLECTOR	3.0	37	TYPE (G) ARE COMBINATION LIQUOR AND OIL
		SECONDARY SYSTEM (SPECIFIED)	25.0	38	STEAM CAPACITY, AUXILIARY BURNERS (APPROX) 50 3
		DAMPERS & FLUES	1.6	39	TYPE SPRAY ATTENUATOR
		NET DRAFT LOSS	34.9	40	LOCATION 11TH STAGE
		WINDBOX AND BURNERS	5.2	41	NET REQUIREMENTS 496,500 LB/HR AT 13.3 IN. H ₂ O AND 90 F NO./UNIT
		AIR HEATER (SCAH/TUB A.H.)	1.5/4.1	42	TEST BLOCK SPECS 595,500 LB/HR AT 13.6 IN. H ₂ O AND 105 F 22.00 °HG
		DUCTS & DAMPERS	2.5	43	NET REQUIREMENTS LB/HR AT IN. H ₂ O AND F NO./UNIT °HG
		NET RESISTANCE	17.3	44	TEST BLOCK SPECS LB/HR AT IN. H ₂ O AND F NO./UNIT °HG
		DRY GAS	7.1	45	NET REQUIREMENTS 647,000 LB/HR AT 34.9 IN. H ₂ O AND 450 F NO./UNIT °HG
		WATER EVAP IN FURNACE	10.8	46	TEST BLOCK SPECS 767,000 LB/HR AT 37.4 IN. H ₂ O AND 475 F 22.00 °HG
		WATER EVAP IN EVAPORATOR	---	47	* NO TEST BLOCK MARGIN IS INCLUDED FOR THE SECONDARY SYSTEM.
		HYDROGEN IN SOLIDS	6.3	48	
		MOISTURE IN AIR	0.2	49	
		RADIATION LOSS	0.5	50	
		UNACC. FOR & MFRS. MARGIN	2.5	51	
		WATER FROM ATOMIZED STEAM	1.9	52	
		HEAT OF REACTION CORRECTION	1.9	53	
		REDUCTION OF SULPHUR IN LIQUOR	---	54	
		STEAM	68.7	55	
				56	
				57	
				58	
				59	
				60	
PREDICTED PERF. IS BASED ON COMBUSTION AIR ENTERING UNIT AT 80 F. 0.013LB MOISTURE/LB DRY AIR, 29.92 IN HG. BAROMETRIC PRESSURE ON CONDITIONS & EQUIPMENT GIVEN ON SUMMARY SHEET & ON ARRANGEMENT SHOWN ON DRAWING.					
P12-6014-210					
BY MPB DATE 1-3-74 APPD. Ad					
THE BABCOCK & WILCOX COMPANY					
P12-6014-210-130					

I. T. T. MOYNIER
FERNANDINA BEACH