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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

JUL 03 2001

Bob Singleton  
Water Quality Division  
Arkansas Department of Environmental Quality  
8001 National Drive  
Little Rock, AR 72219-8913

Dear Mr. Singleton:

We have reviewed the following documents to evaluate the wasteload allocation (WLA) for the Georgia Pacific Corporation at Crossett, Arkansas: (1) the total maximum daily load (TMDL) projections for Ouachita River - Felsenthal Lock and Dam, Arkansas to Sterlington, Louisiana, dated April 1999; (2) review comments dated August 2, 2000, prepared by the Louisiana Department of Environmental Quality (LDEQ); (3) review comments dated October 5 and 19, 2000, prepared by the Environmental Protection Agency (EPA) Region 6; (4) response to comments dated February 28, 2001, prepared by ADEQ; (5) response to comments dated February 5, 2001, prepared by AquAeTer, Incorporated; and (6) the Compliance Monitoring Report(s) dated December 12, 2000, prepared by EPA Region 6.

Based on our review of the above mentioned documents, we find that the TMDL model used for wasteload evaluation includes the Ouachita River segment starting from Felsenthal Dam (RM 227) in Arkansas to Sterlington (RM 190) in Louisiana. The original model was reviewed by ADEQ and LDEQ. Both states' review noted concerns about the model calibration related to chlorophyll-a. The model predicted chlorophyll-a concentrations were (range from 8.6 ug/l to 46.0 ug/l) higher than the measured chlorophyll-a concentrations (range from 1.0 ug/l to 11.0 ug/l).

To address the above mentioned concern, EPA Region 6 reran the model using the input files prepared by AquAeTer and setting: (1) the oxygen production rate by algae at 1.6 mg - Oxygen per mg -Chl-a; (2) the algae maximum specific growth rate at 2.0 per day; (3) the light function option, LFNOPT equal to 1; and (4) the headwater 7Q10 flow for critical season equal to 1200 cfs. The model was executed for the critical months (June - September), and the initial WLA for the Georgia-Pacific at Crossett, Arkansas, were included in the model. The initial WLA presented below for Georgia-Pacific at Crossett, is technically acceptable, however, the following recommendations are noted:

1. The NPDES permit should include instream and effluent monitoring requirements for sulfate, total dissolved solids (TDS), and chloride to address the decomposed duckweed problem below the OUTFALL #002. The decomposed duckweed problem was documented during a reconnaissance/sampling inspection conducted by EPA Region 6 on October 23-24, 2000.

2. The NPDES permit should include conditions to address the applicable water quality standards for dissolved oxygen for the constructed channel (portion of Coffee Creek) between the OUTFALL #001 and Mossey Lake.
3. The NPDES permit should include a condition to allow the Georgia Pacific Corporation at Crossett to collect additional monitoring data for chlorophyll-a during the months of June through September to verify the model predicted chlorophyll-a values and rerun the model to adjust the initial wasteload allocations (if needed).

The initial WLA for the Georgia Pacific Corporation at Crossett, Arkansas, is presented below.

Design Flow = 45.0 MGD

Month(s)	BOD5 (mg/l)	BOD5 (lbs/day)	TN (mg/l)	TN (lbs/day)	TP (mg/l)	TP (lbs/day)	DO (mg/l)
October - May**	21.3	8000	N/A	N/A	N/A	N/A	3.5
June - July***	21.3	8000	4.00	1501.2	0.40	150.12	3.5
August ***	5.0	1876.5	4.00	1501.2	0.70	262.71	3.5
September ***	5.0	1876.5	4.00	1501.2	4.00	1501.2	3.5

\*\* Note that the wasteload allocations for the months of October through May for BOD5 are based on the current permitted BOD5 loading of 8000 lbs/day.

\*\*\* Note that the wasteload allocations for the months of June through September for total nitrogen (TN), total phosphorus (TP), and BOD5 are based on the model and an assumed headwater 7Q10 flow of 1200 cfs.

The final wasteload allocations should be released for public comment. At the end of the comment period, a letter should be submitted to the EPA Region 6 Water Quality Protection Division Director for formal action. If revisions to the draft document have occurred, please send a copy of the final wasteload allocation document with your submittal. If no changes were necessary, please submit a final WLA cover page for the existing WLA report. The WLA approval request may be combined with the request to update the Water Quality Management Plan.

Thank you for the opportunity to review this WLA. Please call me at (214) 665-6576 if you have any questions.

Sincerely,

*Golam Mustafa*

Golam Mustafa, Ph.D.  
Watershed Management Section

**Georgia-Pacific Crossett Paper Operations**  
**EPA/ADEQ Site Visit**  
**June 14, 2000**

<b>Arrival:</b>	<i>EPA/ADEQ</i>	1200
<b>Presentation:</b>		
Introduction and Welcome	<i>Ted Sapoznik</i>	1200-1205
Overview of NPDES permit application	<i>Mayes Starke</i>	1205-1215
TMDLs		
Legal issues		
Brief History		
Safety Orientation	<i>Scott Bailey</i>	1215-1225
<b>Tour:</b>	<i>Mayes Starke</i>	1230-1600
	<i>Scott Bailey</i>	
	<i>Tom Gathright</i>	
Drive from Environmental to Piggy Back Yard		5 minutes
Tour Piggy Back Yard, P1, P3, area		10 minutes
Drive from Piggy Back Yard to Clarifier		5 minutes
Tour clarifier, bar screen, and belt press		15 minutes
Drive through tour of sludge pond closure area		10 minutes
Tour ash-settling basins		5 minutes
Drive past surge basin		5 minutes
Tour E1		10 minutes
Drive from E1 to R1		2 minutes
Tour new MCC station and upper pond		10 minutes
Tour port, and lower pond		15 minutes
Drive to E2		2 minutes
Tour E2		10 minutes
Drive from E2 to Mossy Lake		35 minutes
Tour Mossy Lake and area		30 minutes
Drive back to Crossett		35 minutes
<b>Total time</b>	<b>204 minutes</b>	<b>3.40 hours</b>
<b>Meet with City of Crossett:</b>	<i>Claude Spainhour</i>	1730-1900

Georgia-Pacific Crossett Paper Operations  
EPA/ADEQ Site Visit  
June 15, 2000

<b>On site at G-P Facility:</b>	<i>EPA/ADEQ</i>	0830
<b>Tour Ouachita River:</b>	<i>All</i>	0900-1200
<b>Lunch:</b>	<i>On own</i>	1200-1300
<b>Review:</b>	<i>All</i>	1300-1400
<b>Depart Facility:</b>	<i>EPA/ADEQ</i>	1400