March 16, 2010

Via Federal Express Overnight Deliver

Arkansas Department of Environmental Quality
Permits Branch – Water Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

Attn: Ms. Loretta Reiber, P.E.

Subject: Georgia-Pacific Comments
Discharge Permit No. AR0001210
AFIN 02-00013

Ms. Reiber:

Georgia-Pacific (GP) appreciates the opportunity to provide written comments to you for the Draft NPDES permit (AR001210) for Crossett Paper Operations. Based on our review of the draft permit, we provide the following comments for your consideration:

Permit cover page:

- The location provided (latitude 33° 08' 30"; longitude 91° 58' 12") is for the front door of the Administration building at Crossett Paper Operations. The location for the written description (ending at the T in the road near the primary clarifier) is latitude 33° 07' 34"; longitude 91° 59' 35".

- For the description of the receiving waters for Outfall 001, we suggest the description of "Mossy Lake" be modified to read for accuracy, "The upper reaches of Mossy Lake".

- The correct latitude/longitude for the sampling building and flume at Outfall 001 is: latitude 33° 06' 22.5", longitude 92° 02' 17.2".

Pages 1 - 3 of Part IA (General):

- New numerical limits are proposed for several compounds for both Outfall 001 and SMS 002. As allowed under ADEQ Regulation 2.104, we request a compliance schedule of three years for any parameter not listed in the previous permit that is ultimately included in the final permit with numerical limits. We also note that the increase in monitoring of overall pollutants in this draft permit is substantial, and will have significant cost implications in a difficult business climate. We request that the ADEQ reconsider several of the monitoring frequencies proposed as highlighted in the following comments. The proposed frequencies will generate enormous amounts of data that go far beyond the need to assure compliance, or

provide additional data about the effluent and /or impacts on the watersheds. Operational costs will be considerably increased with no direct benefit in environmental compliance.

Page 1 of Part IA:

- For Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS), we request rounding both mass and concentration values to the nearest whole integer.

- We are including monitoring data for the last two years of AOX monitoring (Attachment A). The table on Page 1, Part IA continues to specify daily (once/day) monitoring. Since this has been in our permit for one permit cycle, EPA allows for a reduction in daily AOX monitoring in accordance with EPA guidance.[1] Based on the calculated long term average value of 36 percent of the monthly average permit limit, the corresponding allowed monitoring frequency from Table 1, page 5 of the EPA document is three times per week. We request this monitoring frequency for Outfall 001 for AOX.

- We have conducted additional monitoring for dieldrin at Outfall 001 (Attachment B). Since Mossy Lake has been flooded for several months, no additional monitoring could be undertaken at SMS 002. All the data measured at Outfall 001 were non-detectable. We are including that data with our comments. We do not use dieldrin as a component of any process materials. We request the removal of dieldrin and the corresponding limits at Outfall 001. The detection of dieldrin at SMS 002 may not be representative of GP's discharge given the substantial watershed that drains into Mossy Lake, which is outside of GP's control. Furthermore, GP cannot be held responsible for any dieldrin concentrations measured at SMS 002 (Mossy Lake) since the ADEQ has taken the position that Mossy Lake is Waters of the State, and it has been demonstrated that GP's effluent does not contain dieldrin. Therefore, there should be no limits for dieldrin imposed at SMS 002 either.

- The permit proposes numerical limits for total recoverable copper and zinc at a monitoring frequency of once per month at both Outfall 001 and SMS 002. However, the Fact Sheet (pages 4 and 29) documents that the impairments for zinc and copper are listed in Category 5d in the Ouachita River, and the impairments are in need of additional assessment to verify the accuracy of the impairment (i.e., whether the stream really is impaired). Therefore, in lieu of numerical permit limits, we propose the inclusion of a permit condition that requires the collection of six grab samples annually in-stream (in the Ouachita River) for copper and zinc during the first two years of the permit using "clean hands" techniques. The Ouachita River monitoring data would be submitted to ADEQ within 60 days after the first two years of the effective date of the permit. This data could then be used by ADEQ Water Quality section in determining whether an impairment exists in the Ouachita River, and whether numerical limits for copper and zinc would be triggered that would be listed in a compliance schedule in Part IB of the permit. This is consistent with the "Incentives for Ambient Monitoring" on pages 9 and 10 of EPA's *Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies*:

[1] *Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies*, EPA, April 1996.

> "One of the most important aspects of a successful watershed protection approach is to get the best possible monitoring information on the conditions, causes and sources of impairment, and relative impact of these sources on the overall health of a watershed and the effectiveness of our control actions in a watershed….. Therefore, in order to encourage NPDES dischargers to voluntarily provide this information or collect additional ambient monitoring information, permitting authorities may consider granting additional reductions in compliance reporting and monitoring, over and above the reductions granted based on good performance if permittees agree to collect or provide additional ambient monitoring information. "

As part of this change, GP also proposes to collect six composite samples per year from Outfall 001 for copper and zinc with a "Monitor Only" requirement during the first 3 years of the permit, since a compliance schedule of three years should be allowed for any new numerical limits. For the reasons set forth in the comments to Page 3 of Part IA below, zinc and copper monitoring at SMS 002 should be omitted.

- The proposed permit includes numerical limits for mercury for Outfall 001 and SMS 002. The mercury impairment in the Ouachita River is primarily from air deposition and other non-point sources[2] based on the TMDL: less than 1 percent of the mercury load is attributable to point sources. Since the point load component of the TMDL is small compared to the load from air deposition and non-point sources, we request a permit condition requiring a mercury minimization plan in lieu of the numerical limits listed in Part IA for Outfall 001. This type of approach is supported by EPA:[3]

  > "For mercury TMDLs where point sources are very small compared to loadings from air deposition, states continue to have the option of implementing the WLA in permits through mercury minimization plans where appropriate."

  We have attached an example draft condition from the Louisiana DEQ *Mercury Minimization Program Plan Guidance* (Attachment C) for your consideration. For the reasons set forth in the comments to Page 3 of Part IA below, mercury monitoring at SMS 002 should also be omitted.

- The proposed permit includes monitoring requirements for Outfall 001 and SMS 002 for nitrate and total phosphorus at the frequency of three times per week. For a "Report" requirement, this is a substantial increase in outside laboratory costs that will provide a total of 750 data points for each parameter for each outfall, or more than 3000 total data points, over the five year term of the permit. This permit requirement is not based on a water quality or effluent guidelines basis, but solely on the judgment of the permit writer. GP's untreated wastewater is nutrient-deficient, and we only add nitrogen and phosphorus ahead of the biological treatment unit to add sufficient nutrients for efficient biological reduction of compounds contributing to BOD. This feed rate is fairly constant (the typical target flow rate is 600 gallons per day). Since GP purchases this nutrient solution, it is in our best business

[2] *TMDLS for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana*, US EPA VI, May 2002.

[3] *TMDLs Where Mercury Loadings Are Predominantly From Air Deposition*, EPA, September 2008.

interest to apply it prudently. Additionally, there is no impairment for which GP has been identified as a contributor for nitrogen or phosphorus. In lieu of nitrate and phosphorus monitoring for Outfall 001 and SMS 002, we request a condition requiring the maintenance of a daily log of nutrient solution usage (gallons). This could be sent in periodically with DMRs or be available for inspection by an ADEQ inspector. This provides an equivalent control of how much nitrogen and phosphorus GP applies to provide efficient biological treatment.

- The frequency of WET testing has been increased from the current permit monitoring frequency (quarterly) to once per two months (page 1 of Part IA). Page 36 of the Fact Sheet documents that <u>there have been no lethal failures</u> during the prior five year term of the permit but there were three *P. promelas* sublethal failures (none have occurred since 2005) and seven *C. dubia* sublethal failures. We attribute the sublethal test issues for the reproduction portion of the *C. dubia* test to a combination of laboratory problems and an indeterminate cause. Additional short term retest measures have also been included in the permit for a sublethal or lethal failure. We request the test frequency be retained at quarterly due to the inclusion of the rigorous retest and TRE schedule for lethal and sublethal failures, which provide more than adequate detection and resolution of any WET problems, and since sublethal issues do not necessarily indicate an acute or chronic toxicity potential, or a cause-effect relationship between adverse receiving water effects and sub-lethal failures.

- The footnotes on the bottom of Page 1 of Part IA should be corrected as follows:

  Footnote 1 – the conditions beginning on page 16 of Part II are misnumbered as the numbers skip from Condition 21 on page 7 to Condition 24 on page 16. The conditions should be renumbered and the references modified accordingly.
  Footnote 2 – the correct reference should be Condition No. 9
  Footnote 3 – the correct reference should be Condition No. 21
  Footnote 4 – the correct reference should be Condition No. 9
  Footnote 5 – the correct reference should be Condition No. 20
  (Note: As set forth in the comments below, we also believe Condition 6 of Part II should be removed as it simply states a definition for process wastewater for the Timber Products subcategory. This is already stated in the Fact Sheet and does not provide for any requirement or action. We have also requested certain conditions to be omitted or modified related to the chloroform certification option. These requested changes may require the references in the above footnotes to be renumbered accordingly.)

<u>Page 2 of Part IA:</u>

- The correct latitude/longitude for the sampling building and flume at Outfall 001 is: latitude 33^{o} 06’ 22.5”, longitude 92^{o} 02’ 17.2”.

<u>Page 3 of Part IA:</u>

- The outfall from Mossy Lake was listed in the 1991 permit (the permit prior to the current 2004 permit) as Outfall 002. The 2004 permit redesignated this outfall from Mossy Lake as SMS 002 (Stream Monitoring Station). This nomenclature is continued in the proposed permit. GP has always maintained that Mossy Lake was created in 1937 as part of the wastewater treatment system, which was well in advance of the enactment of the Clean Water

Act. GP continues to maintain that Mossy Lake is part of its wastewater treatment system, and therefore, not waters of the United States.[4] Without the GP effluent and maintenance of the dikes and final weir structure, Mossy Lake would be expected to be similar to upstream Coffee Creek during nonflooded conditions, consisting of shallow pools and potentially dry areas with no flow.

- However, since the ADEQ has taken the position that Mossy Lake as a water of the United States and the discharge from Mossy Lake is listed as a Stream Monitoring Station, we do not believe additional permit limits are appropriate for this location. The 2004 permit listed only limitations for BOD, TSS and pH for SMS 002, which were also the only limitations in the 1991 permit. In this proposed permit, the ADEQ has included permit limits for dieldrin, copper, mercury and zinc, and reporting requirements for phosphorus and nitrate. These parameters are already proposed for monitoring at Outfall 001 or will otherwise be addressed. This issue of monitoring additional parameters at SMS 002 was also addressed in the comments received for the 2004 permit renewal. The ADEQ's response to a comment about including other parameters was as follows:

  > "Outfall SMS 002 was included in the permit to gather information on BOD5 and TSS prior to discharge to the Ouachita River from Coffee Creek downstream of Coffee Creek. AOX limits are included in the actual outfall (Outfall 001)."

  The SMS 002 monitoring station always has been a point to ensure that the dissolved oxygen criteria for the Ouachita River are maintained per the water quality model that was done, and as stated by the ADEQ above. The application of limits for the same parameters already regulated at Outfall 001 represents a significant additional and redundant monitoring expense as well. The measurement of these additional parameters at SMS 002 may not be representative of GP's discharge given the substantial watershed that drains into Mossy Lake, which is outside of GP's control. Additionally, since sampling techniques for these substances (metals and dieldrin) require strict handling to avoid potential trace contamination, the collection of such samples is much more difficult at SMS 002 (a remote location) as compared to Outfall 001. The ADEQ is, in essence, treating this as both a stream monitoring station (SMS) and an effluent outfall by establishing additional limits in addition to the historically established water quality model limits. GP requests that the limits and monitoring requirements for dieldrin, copper, mercury, zinc, phosphorus and nitrate be completely removed from the permit for SMS 002.

- The footnotes on the bottom of Page 3 of Part IA should be corrected as follows:

  Footnote 2 – the correct reference should be Condition No. 20
  (Note: We also believe Condition 6 of Part II should be removed as it simply states a definition for process wastewater for the Timber Products subcategory. This is already stated in the Fact Sheet and does not provide for any requirement or action. We have also requested certain conditions to be omitted or modified related to the chloroform certification option. These requested changes may require the reference in the above footnote to be renumbered accordingly.)

Pages 4, 5 and 6 of Part IA:

[4] 40 CFR 122.2.

- We request a reduction in monitoring for all the chlorophenolics, TCDD and TCDF for internal outfalls 101, 102 and 103. There have been no detects for the last two years for any of these substances. Since this has been in our permit for one permit cycle, EPA in 40 CFR 430.02(b) allows for a reduction in monitoring frequency. We request the reduction in monitoring frequency from monthly to semi-annually.

- We previously had requested the certification option as allowed in 40 CFR 430.02(f)(4). We are requesting the withdrawal of the chloroform certification option, and have included production data corresponding to internal outfalls 101, 102 and 103 for the calculation of chloroform limits per 40 CFR 430.24. Permit limits for chloroform for internal outfalls 101, 102 and 103 should be included in the tables listed on pages 4, 5 and 6 of Part IA. This would also necessitate the removal of Conditions 16-21 on Pages 5 and 6 of Part II of the proposed permit.

  We also request that the required monitoring for chloroform be reduced from weekly to once every two months, since the chloroform long term averages have been below 25 percent of the permit limits for all internal outfalls 101, 102 and 103. A copy of this data for the last two years is included.

Page 1 of Part IB:

- In Paragraph 1, the correct condition number is 10.

- In Paragraph 2, the correct condition number is 12.

Page 2 of Part II:

- Condition 6 is a definition of 40 CFR 429.11(c) that is described in the Fact Sheet. It contains no pertinent action items to the permit, and should be omitted. Note that the deletion of this item will renumber all subsequent conditions and change previous references to following conditions.

Page 3 of Part II:

- Condition 10 requires the submittal of a report within 30 days after permit issuance indicating compliance with all items having deadlines in accordance with 40 CFR 430.03(j). This letter certifies that the facility has performed all actions as required by 40 CFR 430.03(j) in the time frames specified. We request removal of this requirement from Condition 10.

Page 8 of Part II:

- In Paragraph 2.a.ii. and iii., the permittee must notify the ADEQ in writing within 5 days of the failure of any retest. The analysis of tests and composition of results by the testing laboratory may not be completed and the permittee notified within 5 days following the completion of the tests. We suggest a clarification that states that the ADEQ must be notified within 5 days of the permittee receiving written or verbal notification of the failure of any retest.

Page 13 – 14 of Part II:

- Paragraph 5 does not differentiate between TREs for lethal and sub-lethal failures. While the investigation methods may be similar, the process fails to consider that sub-lethal failures may result in situations in which specific toxicants cannot be identified. In following the progression of the TRE process described, expensive and perhaps unnecessary additional treatment and/or process modifications may be required to comply with limits that may result in no measurable benefit to the receiving water. There is no evidence for this requirement based on sublethal failures **alone** demonstrating a verifiable cause-effect relationship between adverse receiving water effects and effluent discharges that had only sub-lethal failures. This is a major deficiency in the application of the sub-lethal WET endpoint as a permit limit, and this requirement of the TRE process should be removed from this permit.

Page 15 of Part II:

- Paragraph 5.e does not recognize that inconclusive TREs may occur as stated in EPA's Guidance document *Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program*. This is especially true for sub-lethal failures of endpoints in which there is no demonstrated cause-effect link between a failed sub-lethal test and an in-stream biotic effect. We propose the following sentence be added to Paragraph 5.e before the last sentence on Page 15: "However, if an inconclusive TRE is demonstrated in which no specific control mechanism can be identified to eliminate a sub-lethal failure effect, then best practicable control mechanism that can be implemented to reduce or potentially reduce the sub-lethal effect shall be identified based on the evaluations of the data, studies and evaluations."

Page 16 of Part II:

- Condition 24 (and subsequent conditions) should be renumbered to be in sequence with previous sections.

- Despite the description in Condition 24, GP has no plans to sell or divest any parts of the complex. We request the simple clarification that only the first two sentences remain in this condition, as any other discussions are subject to business negotiations should such an unlikely scenario ever occur. Likewise, Condition 25 should be deleted in its entirety.

Fact Sheet, General:

- The Fact Sheet does not address "Product Stewardship Wastewaters" as an allowed component of discharges from Outfall 001 as noted in Section II.B of Form 2C for Outfall 001, and as described in the Georgia-Pacific LLC Crossett Complex description included with the permit application as follows:

  > "Product Stewardship wastewaters, better defined as wash water or contaminated rainwater associated with other GP chemical or building product facilities are routinely shipped to the GP's Crossett complex for treatment in its WWTP. All waters received are "characteristically like" the wastewater already being generated and treated at the GP complex."

Product Stewardship wastewaters are clearly excluded by EPA from the Centralized Wastewater Treatment CWT subcategory (40 CFR 437) as described in the preamble to the final regulation:

> "In the supplemental proposal, EPA proposed subjecting centralized waste treatment operations at manufacturing facilities to the provisions of the rule unless one of the following conditions was met:
>
> · In the case of manufacturing facilities subject to national effluent limitations guidelines for existing sources, standards of performance for new sources, or pretreatment standards for new and existing sources (national effluent guidelines and standards), if the process or operation generating the wastes received from off-site for treatment is subject to the same national effluent guidelines and standards as the process or operation generating the onsite wastes; or
>
> · In the case of manufacturing facilities not subject to existing national effluent guidelines and standards, if the process or operation generating the waste received from off-site is from the same industry (other than the waste treatment industry) and of a similar nature to the waste generated on-site.
>
> After careful consideration of comments and further review of its database, EPA continues to regard this approach as appropriate…"[5]

EPA goes on to say about wastewaters of similar nature:

> "Furthermore, EPA determined there are other instances of off-site waste acceptance at manufacturing facilities in which the off-site wastes, while not from the same industrial category, are similar to the on-site generated manufacturing wastewaters and compatible with the manufacturing wastewater treatment system. Consequently, for purposes of this rule, EPA has decided that, where the discharger establishes that the wastes being treated are of similar nature and compatible with treatment of the on-site wastes, the CWT limitations and standards will not apply to the resulting discharge."[6]

We thus request that the Fact Sheet acknowledge that the handling of such wastewaters from other GP Chemical and Wood Products facilities which are similar in nature to those already treated are not subject to the CWT and are allowed for treatment under this permit by the Crossett wastewater treatment system, subject to the approval of the ADEQ.

Fact Sheet, Page 2:

- The data and DMR referenced in the DMR Review paragraph for December 2006 was a typographical issue. This data has been clarified and resubmitted to the ADEQ.

- In the first paragraph of Use Attainability Analysis, add a final sentence, "This UAA was approved by EPA Region VI in a letter dated April 26, 1988."

- In the second paragraph of Use Attainability Analysis, revise the first sentence to accurately state, "EPA Region VI developed and proposed a UAA in 2007, though this UAA has not been through a public notice and comment period."

[5] Federal Register, 65 FR 247, pages 81255-81256
[6] Federal Register, 65 FR 247, pages 81256

Fact Sheet, Page 3:

- The last sentence in paragraph 7 incorrectly refers to the Ouachita River as the receiving stream. This sentence should be modified to read, "The Ouachita River is a Water of the State classified for primary and secondary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses."

Fact Sheet, Page 5:

- The first paragraph list the "Design Flow" as 45 MGD. This is the average flow that the facility typically experiences. The facility is capable of adequately treating much higher rates of flow based on the stormwater surges that may occur. "Design Flow" should be changed to "Average Design Flow".

We appreciate the efforts of the ADEQ in processing this permit renewal. Should you have any questions about these comments, please contact Jim Cutbirth at (870) 567-8144.

Sincerely,

Karen Dickinson
Vice President, Georgia-Pacific LLC
100 Mill Supply Road
Crossett, AR 71635

Enclosures