ADEQ

A R K A N S A S
Department of Environmental Quality

July 27, 2017

Sarah M. Ross
Environmental Manager, Crossett Paper Operations
Georgia-Pacific Crossett, LLC
PO Box 3333
Crossett, AR 71635

RE: NPDES Permit No. AR0001210, AFIN 02-00013
Request to Perform Trial of Adding Oxygen to the Influent of the Clarifier

Dear Ms. Ross:

Georgia Pacific, Crossett LLC (GP) has notified the Department that it intends to conduct a trial by introducing oxygen into a side stream and subsequently reinjecting it into the clarifier influent. The addition of oxygenated water into the clarifier is believed to result in the following enhancements to treatment: (1) it reduces the potential for odors by oxidizing dissolved sulfites into sulfates, (2) it increases the solids settling efficiency by increasing the oxidation-reduction potential, (3) it enhances the dewatering characteristics of the settled solids because it is more aerobic, and (4) it oxidizes other organic substances in the wastewater stream.

GP's intention is to run the trial for a period not to exceed twelve (12) months following procurement and installation of equipment. Should GP determine that it would like to make the oxygen system permanent an Application for a State Construction Permit and a NPDES permit modification should be submitted within forty five (45) days following the end of the trial period. GP will notify the department ten (10) days prior to beginning the trial period.

During the trial GP shall comply with all NPDES permit conditions and, in addition, monitor the clarifier influent and the clarifier launder for the following constituents:

1. Clarifier inflow
2. Dissolved oxygen
3. Dissolved sulfide
4. Gas Phase Hydrogen Sulfide (launder only)
5. Oxidation-Reduction Potential (ORP)
6. Temperature
7. pH

In addition, within forty five (45) days of the completion of the trial, GP will submit a report detailing the results of the trial, including, but not limited to, a correlation between the hydraulic retention time (HRT) of the clarifier and the dissolved sulfide removal rate, the corresponding dissolved oxygen concentrations, and the pH.

If you have any questions, please contact the undersigned or Loretta Reiber, P.E. at reiber@adeq.state.ar.us or at (501) 682-0612.

Sincerely,

Robert E. Blanz, PhD, P.E.
Chief Technical Officer
Office of the Director

Cc: Caleb Osborne, Associate Director, Office of Water Quality
Stuart Spencer, Associate Director, Office of Air Quality
Bryan Leamons, P.E., Senior Operations Manager, Office of Water Quality
Loretta Reiber, P.E., NPDES Permit Engineer, Office of Water Quality