Water System Supports Mill through Tank Replacement and During Hurricane



Water pumped through 20 sand filters, into a 3 acre-feet storage LakeTank® for a temporary water conveyance system during mill repairs

PROJECT SCOPE

Paper mill required temporary system to replace their primary water system and maintain production while the primary water storage tank was replaced.

CLIENT

Pulp and Paper Mill Facility

INDUSTRY SEGMENT

Pulp and Paper / Construction

EQUIPMENT

- 8 12" High Head pumps
- 20 48-4 Sand Media Filters
- 1 3 acre-feet B-24 LakeTank[®]
- 24" HDPE pipe with fittings
- RiteFlo® Instrumentation and App



BACKGROUND

A large paper mill needed to rebuild their failing water storage tank. In order to avoid a shutdown and maintain uninterrupted production while the tank was out of operation, the mill would require a temporary water conveyance system. A shutdown could cost the mill thousands of dollars per day, and would impact the suppliers, finishing mills, and families supported by the jobs that the mill provides.

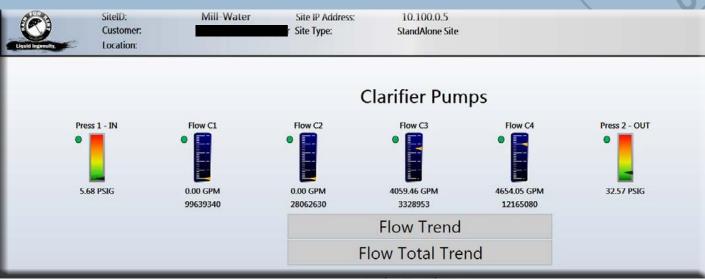
OUTCOME

To maintain production, Rain for Rent designed, installed, and operated a temporary bypass, filtration, and storage system to replace the mill's water system. Water from a nearby reservoir supplied a pump station consisting of four HH325c pumps which moved water through 24-inch piping to a bank of twenty 48-4 sand filters, and ultimately into a B-24 LakeTank®. One million gallons of clean water was stored in the LakeTank® from where a second 15,000 GPM pump station supplied the facility's pumping system at variable flow rates.

HIGHLIGHTS

- During a period of 18 months, a team from Rain for Rent invested time with the mill's planning team to communicate capabilities, outline ideas, and establish comfort and confidence between our teams.
- In addition to our own safety requirements, everyone working onsite completed a TAPPI industry compliance safety program.
- The LakeTank® and pumping system became the temporary heart of the plant, and supplied water for paper production, demineralized water, fire protection, boilers, and cooling water for plant equipment.

Water System Supports Mill through Tank Replacement and During Hurricane



The RiteFlo[®] guage dashboard provides an at-a-glance, real time update of the pumps' flows, pressure levels, and temperatures etc.

HIGHLIGHTS CONT.

- •A 24/7 Pump watch team from Rain for Rent utilized the RiteFlo® system to manage the project flows and provide valuable at-a-glance information to the mill's management team, including: a summary of which pumps were on or off, the rate, volume, and pressure at the LakeTank®'s intake point and the discharge point which supplied water to the entire facility's water system.
- Flooding and power outages caused by Hurricane Harvey resulted in a controlled shutdown of the mill. Throughout the storm our dedicated teams worked in tough conditions to keep the bypass maintained at a reduced flow through manual operation.
- A week after the hurricane hit, the facility was brought back online, and the temporary pumping system maintained the high flows required to provide tens of thousands of gallons of water to the mill's equipment as it restarted.

CUSTOMER FEEDBACK

When initial planning began, the paper mill's sister-companies recommended a partnership with Rain for Rent. Their experiences with us proved that we are a company capable of handling impactful projects and dedicated to solving problems.

The Texas paper mill's project management team was very impressed by Rain for Rent's tenacity, problem solving abilities, and dedication to the job, and was happy with the system's ability to keep pace with the ever-changing conditions.

