

## Case Study

SCA Tissue

application | **Geotube® Container Keeps Pulp & Paper Mill Running**  
 location | **Cherokee, Alabama**  
 product | **Geotube® Dewatering Technology**

TenCate™ develops and produces materials that function to increase performance, reduce costs, and deliver measurable results by working with our customers to provide advanced solutions.

### THE CHALLENGE

SCA Tissue's Cherokee Alabama, USA, waste water treatment system has minimal sludge storage, about six hours, with all sludge going directly to a dewatering table, followed by a screw press, which is then discharged to trucks for hauling to a landfill. There is no emergency spill basin. The screw press broke its shaft which took almost a week to repair. With only six hours

of sludge storage, the mill had to shut down. Hauling the liquid sludge was not an option due to volume and finding an approved disposal facility. The challenge became how to keep the mill up and running while finding an economical way to dewater and store the volume being generated.

### THE SOLUTION

SCA purchasing agent remembered a neighboring mill using Geotube® containers to contain and dewater sludge prior to mixing with bark and sending into their bark boiler. SCA contacted the mill and were able to borrow a Geotube® container. With time running out, they placed the Geotube® unit on the access road next to the sludge

thickening building. Connecting a line from the bottom flange on the sludge storage tank allowed gravity flow to the Geotube® container. Using the Geotube® container, SCA personnel were able to get the mill back up and running on schedule without disrupting other plant activities.

Dewatering with Geotube® technology is a three-step process. In the confinement stage, the Geotube® container is filled with dredged waste materials. The Geotube® container's unique fabric confines the fine grains of the material.

In the dewatering phase, excess water



*Randy Paff of SCA Tissue is extremely pleased with the Geotube® that allowed entire mill to get back and stay in production."*



Geotube® GT500 dewatering fabric

simply drains from the Geotube® container. The decanted water is often of a quality that can be reused or returned for processing or to native waterways without additional treatment.

In the final phase, consolidation, the solids continue to densify due to desiccation as residual water vapor escapes through the fabric. Volume reduction can be as high as 90 percent.

Sludge flowing into the Geotube® containers provided a continuous, safe, dry storage system for over a week when the shaft was finally repaired. Solids contained in the units were the same as the mechanical system. Since the solids were contained inside the Geotube® container, SCA did not have to worry about rain causing the dewatered solids to re-absorb water prior to disposal. Filtrate was so clean that it was allowed to flow naturally to the surrounding area.

SCA sees Geotube® containers as an important part of their operation. They keep several units on hand for similar emergencies.

Because of the success and flexibility that Geotube® containers provided, the mill decided to provide a permanent location adjacent to the existing mechanical building and dump pad. This allows the mill to schedule routine maintenance, repairs and inspections during normal operation hours, not during mill shutdowns when



Solids safely contained waiting for disposal.

manpower is at a premium, thus avoiding costly overtime charges.

**THE PERFORMANCE**



Planned area adjacent to existing system to provide quick fast deployment of Geotube® containers when needed.

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