

# Case Study

Pulp & Paper

industry

## Mobile DI Unit Produced 3.5M Gallons, Company Avoids Profit Loss

### Problem

During a scheduled outage at an East coast paper mill, personnel discovered holes in the condensate surge tank. The tank needed to be repaired and relined, a process that would take longer than the length of the scheduled outage. The mill could not afford to extend the outage since they produced more than 2,500 tons per day of paperboard products. Mill personnel concluded that the water could not be rerouted to the mill's condensate polishing system. They determined that high quality deionization (DI) water would be required on an interim basis in order to resume operations. The MPW Water Management division was immediately contacted to provide a rapid water treatment solution.

### MPW Solution

MPW Water Management specialists consulted with engineering personnel on-site to determine the best plan of attack. Based on the well water analysis, the appropriate purification system was designed. To sustain the production demand of the mill, a flow capacity between 400-1000 gpm of high purity water was required. Once the influent and



*The Dominator™ is the world's largest and most economical mobile deionization system. Custom loaded for each application, it serves large consumers of high purity water, with 10 million grains of exchange capacity on each unit.*

effluent water requirements were established, the project team concluded that mobile deionization units were the optimal solution.

MPW initially dispatched six deionization trailers that arrived on-site within hours. As the units were fully leveraged, they were exchanged with regenerated units at a rate of three per day, such that four trailers were continuously producing high purity deionization water. In addition to the proprietary Deminator™ 10 trailer configuration, MPW matched the variable demand of the facility by utilizing custom designed equipment.

## Results

MPW Water Management specialists assisted mill personnel by suggesting water treatment alternatives and by providing a rapidly deployed mobile fleet of deionization units. The water purification system produced 3.5 million gallons of high purity water during the 5-day outage. Due to a swift response from MPW, the condensate surge tank was repaired and relined without causing production interruption and profit loss to the mill.

*All MPW Water Management Services are custom designed and available in mobile form for short-term and emergency use.*



*MPW responds immediately to customer needs by providing support 24-hours a day. Our expertly designed water purification services are available for any circumstance including emergency, pre-commissioning, plant outages, and scheduled maintenance.*