



MPW customizes resolution for Canadian chemical manufacturer

Problem

For years, springtime had presented a distinct challenge for a large chemical-production complex in Alberta, Canada. With rain and melting snow, the facility could not handle the high turbidity and TOC (Total Organic Carbon) in its feed water.

With elevated TOC levels, the facility was forced to halt production, which resulted in lost revenue.

The company needed a reliable solution that met its challenging requirements and fell within its budget. MPW Industrial Water provided the best answer.

Solution

MPW's Technical Applications and Field Services teams conceived and executed a system that utilizes mobile ultrafiltration [UF], reverse osmosis [RO], and a proprietary 10-million-grain demineralization system for the facility.

MPW custom engineered an operational container that provided feed pumps, chemical storage and neutralization of the facility's pre-sump waste water. The system automatically neutralized the concentrate by dosing chemicals and recirculating the water in a holding tank. It could also automatically put the entire water treatment system into recirculation to protect it from freezing, if the water supply to the customer needed to be stopped. MPW delivered the customer over 50m³/hour (220 gpm) of ultra-pure water that exceeded the required quality specifications.

Key to this project's success was MPW's Project Management team which provided daily on-site and off-site remote-monitoring of system performance for 24/7 reliability and coordination with customer operational needs.

Results

MPW supplied the customer with more than 28.5 million gallons of ultra-pure water over a three-month period.

TOC levels were always well below the 200 ppb specification (average TOC level was < 50 ppb).

MPW's program costs were below the customer's allotted budget for the three-month project.

Custom innovation, seamless execution, zero safety-related incidents and a track record of customer-service excellence led MPW to a multi-year contract with this company.

