



Polyester Plant Cools Down and Reduces Wetlands Discharge



INSIGHT

A U.S.-based polyester resins and fibers plant had its discharge permit for its cooling tower blowdown restricted for environmental reasons. During times of drought, rather than discharging into nearby wetlands, the state required the plant to send its blowdown discharge to the municipal wastewater treatment plant. The city wastewater treatment plant charged a treatment fee of \$4.00 per 1,000 gallons. Reducing the amount of cooling tower blowdown sent to the city was critical to controlling the customer's overall cost of operations. A limitation on silica in the plant's cooling water prevented plant operators from optimizing cooling tower concentration cycles to control those costs.

INNOVATION

The Nalco Water team introduced the plant to a new line of cooling water treatment products containing Performance Polymer. The new product, combined with 3D TRASAR™ Technology for Cooling Water, allowed the plant to operate at higher cycles of concentration, increasing from six to eight in one tower, and six to 10 in another tower, without being constrained by silica deposition. The Performance Polymer reduced the amount of blowdown water sent to the city's wastewater plant by 29 million gallons annually. The solution helped reduce the amount of treatment chemicals required, supported the plant's sustainability objectives and improved worker safety by reducing chemical handling.

TECHNOLOGY:

3D TRASAR™ Technology for Cooling Water with Performance Polymer

eROISM IMPACT



RESOURCE SAVINGS

WATER **29** MILLION GALLONS



COST SAVINGS

\$116,000
(ANNUAL SAVINGS)

For more information about sustainability at Ecolab, please visit ecolab.com/sustainability.

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