more efficient water management saves refinery US$450,000 and improves environment

challenge
An audit by SUEZ of the water management programs at this Canadian refinery revealed opportunities for cost savings and environmental improvements in boiler, cooling and wastewater treatment systems.

solution
The resulting changes reduced energy requirements by 31,025 million BTU per year, saved 82.2 million gallons (311,161 m³) of water per year, controlled corrosion that was causing premature boiler tube failures, and increased cooling cycles of concentration from 6 to 10. The introduction of environmentally friendly treatment chemicals in boilers and cooling towers simplified wastewater processing and improved effluent quality. The refinery also converted to a drumless bulk delivery program that eliminated concerns with storage, handling and disposal.

results
The refinery’s net annual savings from these improvements totaled US$673,309 and included significant environmental, health and safety benefits.