

Cooling Tower Efficiency

CLIENT PROFILE

A leading supplier of energy products and services to wholesale and retail electric and natural gas customers, and a major generator of electricity with a diversified fleet of generating units strategically located throughout the United States and Canada, totaling approximately 9,000 megawatts of generating capacity.

OPERATIONAL CHALLENGE

Once consumed in a boiler, coal that is used as an energy source at the facility is cooled in a sluicing process to form a byproduct call black beauty, a material used as a sand blasting medium or concrete additive.

If the water is not at the right temperature during the sluicing process, then the coal does not properly form black beauty, and operators need to shut down and clean the tank. This costs in maintenance and downtime. Ultimately, the company needed to eliminate solids carryover where solids fouled the cooling tower, causing structural damage and lost cooling efficiency.

CHEMICAL SOLUTION

Kroff Chemical Company, Inc. engineered a chemical treatment program to remove fines and solids from the process that did not settle out in the dewatering bins as the black beauty did. By treating and cleaning the water, the cooling tower is more efficient.

BOTTOM-LINE RESULTS

As a direct result of Kroff's chemical treatment program, the plant will save an estimated \$200,000 a year in labor, tower replacement, sludge hauling and lost production.



Before



After



Kroff Chemical Company, Inc. provides custom-blended chemicals and specialty services that improve clients' critical water and process system performance, which helps maximize efficiency of operations and lower costs of operation.

Kroff Chemical's services focus on energy efficiency, regulatory compliance, waste minimization and water reuse, fully automated and integrated chemical applications, and a safety-conscious approach.

With the support of Kroff Chemical Company, Inc., facilities operate with less staff, but they operate safely, efficiently and profitably. Clients focus more on their core competencies and look to Kroff Chemical Company, Inc. to treat, operate and maintain their critical water and process systems.