

## Sustainable Solutions for Water Energy

# The benefits of Increased Boiler and Cooling Cycles

## Sustainability Benefits

Ĭ

Improved worker safety by reducing chemical usage by over 4,000 pounds annually.

Fewer chemicals used equals less handling which reduces the chances for lifting injuries.

## Challenge

This fast-growing regional hospital was looking for ways to reduce facilities operating costs without compromising patient care or comfort. As part of their improvements they replaced 3 older boilers with newer boilers and were looking to Rochester Midland Corporation to reduce their water, chemical and energy costs while protecting their capital investment.

#### Solution

Rochester Midland Corporation (RMC) conducted a detailed Water Management system wide survey to determine areas for potential savings. This Joint Process Improvement (JPI) survey found savings opportunities in their boiler systems and in their cooling towers. For the new boilers a boil-out procedure was recommended to optimize start up boiler energy-efficiency. Next, a change was made to a customized boiler treatment program to ensure optimum operating efficiency with minimal chemical waste. For the cooling towers additional cycles of concentration were implemented to save on overall water use.



10 Million gallons in annual water savings.

Reduced chemical discharge.

Reduced the number of chemical drums to dispose of.

### Sustainable Results

After the hospital reviewed the JPI results RMC took action and implemented the plan for improvement. Based on the proposed changes over \$90,000 in savings will be realized annually.



More than \$45,000 saved in annual chemical costs. Over \$30,000 in water usage costs. \$5,000 in lower annual energy costs.

## **Business Profile**

St. Luke's Quakertown Hospital Quakertown, PA

**Industry** Healthcare

#### **Products Used**

- BSC-30 for boil out
- BFW-81 and OS-912 for boiler maintenance chemistry

#### **Benefits**

- By using BSC-30 the boiler started up with clean heat exchange surfaces.
- BFW-81 keeps boiler system surfaces clean and deposit-free and allows for higher cycles.
- Improves efficiency through increased heat transfer.