

ICI Special Process Rebate

BAE SYSTEMS

BAE Integrated Vision Solutions

Cooling Tower Efficiency Using Treated Reclaimed Water

BAE Integrated Vision Solutions of Austin is saving about 10 million gallons of water annually by using reclaimed water for two chilling stations that supply chilled water to the entire 142-acre facility. Reclaimed water is created by reusing treated wastewater effluent that is normally discharged to the Colorado River.

BAE received rebates from Austin Water of over \$21,000 for a water softener and filtration system to treat the reclaimed water to increase the cycles of concentration to more than 40 cycles that significantly reduces blowdown. A typical cooling tower achieves about 5 cycles of concentration.

"The switch to reclaimed water was a good decision for the company," said Walt Black, BAE Austin facility manager. "Reclaimed water is less expensive than potable water, and since the Austin-area is experiencing a severe drought, it made good environmental sense."

In June 2012, BAE used 940,000 gallons of potable water, paying \$4.85 a gallon. In June 2013, after switching to reclaimed water and installing the new treatment system, the company used 764,000 gallons of reclaimed water at \$1.50 per gallon. BAE officials estimate that, after taking the per-month cost of the new equipment into consideration, the switch saved the company \$5,400 this June, and will save about \$65,000 a year. According to Black, BAE will make up the infrastructure investment to switch to reclaimed water in just two years.

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- Walt Black, Facility Manager

- 10 million gallons per year in water savings
- Increased cycles of concentration to over 40 cycles
- Investment \$120,000
- Annual water cost savings of \$65,000
- Payback period of two years
- Total rebate amount over \$21,000

Best Management Practice:

Replacing potable water with treated wastewater and treating it with a water softener and filtration system to reduce blowdown and increase cooling tower cycles of concentration to more than 40 cycles.

For more information please visit our web site, www.WaterWiseAustin.org

Case Study



Austin
WATER
Clearly Reliable