



June 30, 2013

To Whomsoever IT May Concern:

Evaporative cooling towers contributed to about 30% of all water consumption on campus in FY 2011. Water use in cooling towers is driven by both the cooling load and the water quality of the incoming water. While the former is tied to building energy efficiency, the latter is driven by both water treatment and efficient monitoring. The latter is typically the Achilles heel of any water conservation program.

It is in this context, that the University's use of an innovative water quality monitoring system (Trasar 3D supplied by Nalco Chemicals, IL) is worthy of mention. This system monitors several chemical parameters necessary to maintain good control of the cooling tower such as scaling, corrosion, and biological fouling potential using a fluorescence based system and automatically adjusts the parameters. These actions minimize water use, effluent generation, chemical discharge to environment, and extend asset utilization. The use of this technology has reduced water consumption by 14% in one year at the North Campus Chiller Plant.

We view use of such technology as an innovative approach to minimizing water use on Campus and reflective of a shift in management philosophy to one of predictive control.

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