

INDUSTRYINSIGHT

Compiled by Rebecca Wilhelm



Energy Efficiency

An expert's perspective on implementing cost-effective energy efficiency practices

Rebecca Wilhelm, assistant editor of Water & Wastes Digest, recently spoke with Steve Austin, engineering manager at Schneider Electric Co., about how water professionals can begin improving energy efficiency.

Rebecca Wilhelm: How are current regulations affecting the way water professionals see energy efficiency?

Steve Austin: In some cases they have been compatible, and in some cases they have been incompatible. Many regulations are important for safety and production, and energy efficiency may or may not be important in that. Sometimes regulations are at the expense of energy—it takes more energy to comply. But I think that is changing. Those pressures still may be in place, but I think there is a shift underway for regulations to drive energy efficiency.

With the increase in oil prices, everyone agrees that we need to reduce our dependence on foreign oil. With emissions and environmental concerns increasing, there is a sense of urgency to do something about that. We are going to have regulations; for example, carbon taxes. That is one of the first ones to be mentioned. What that means is energy efficiency is going to be key in helping meet future regulations. So it is a shift, I think, in regulatory focus.

Wilhelm: What are some obstacles water professionals face when trying to improve energy efficiency?

Austin: There is always the competition for capital money. You have a primary mission to provide quality water or an end-product, and so you have to do it safely, reliably and economically. Energy is always competing for production types of capital spending, and so that is a hurdle. That is the single biggest hurdle.

Wilhelm: Why is a focus on energy efficiency important?

Austin: In my lifetime, I have seen energy importance rise and fall depending on what was going on with the market. Now the demand and the competition for energy resources are like never before. You've got Asia, China and India competing in the market for the same type of energy sources the U.S. is competing for.

Wilhelm: What changes can water professionals expect to see regarding energy efficiency?

Austin: This demand is not going to go away. In the past, there have been things that have caused energy pricing to go up and importance to go up correspondingly, but it would eventually subside. The thing that has changed now is while there may be some pullback, everyone would agree that higher energy prices are here to stay.

The best way to compete in this new energy world is energy efficiency—it is the place to start. It is the least costly option for what you get for your money.

You can look to renewable resources, and that is going to be an important factor in the future, no doubt about it. All the different renewable resources are going to be in the mix. But they all have trade-offs. They all require considerable investments. And there are also issues that energy efficiency does not have. Energy efficiency is going to be the single best way, the first step, in dealing with the new world order of energy importance.

Wilhelm: What are some simple ways to implement energy-efficient practices?

Austin: The first step is to look at what you are using and how you are using energy and reducing waste; it is as simple as that. Then you move up in complexity.

You are using electricity to do a lot of different things: to move water, or to move air, and there are efficient ways to do that—some more than others. Some of them have trade-offs and cost a lot of money for rather marginal improvements.

Once you have decided, "I'm making the best use of energy, I'm not wasting it directly," then you can start looking at equipment efficiencies and performance. Once you are satisfied you are getting the most out of it, this leads you to look at how the equipment is controlled and how it is controlled in the mix with all the other equipment you have in the facility. Ask yourself if there are trade-offs you can do—some equipment is better suited to do certain things than others. There are always different ways to do things, ways to look at equipment efficiencies and equipment control. This eventually leads to automation. It is obviously more efficient to do things automatically than have people intervening, but you have to spend money. The equipment can be dialed in very precisely. You can get the most out of the equipment you have with effective controls and automation. So you kind of work your way up the chain of energy complexity. **WWD**

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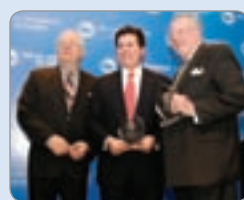
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American Water Receives Public-Private Partnership Award



American Water has received the 2008 Excellence in Public-Private Partnership

Award from the U.S. Conference of Mayors. American Water and the city of Buffalo, N.Y., were honored for the results of a public-private partnership and improvements to the city's water system.

Improvements include the complete automation of customer records, the construction of a new customer service center and a new computerized maintenance and management system.

After six years of working with American Water, the city of Buffalo recognized \$21 million in savings through operational and financial improvements.

U.S. EPA Releases Energy Management Guidebook



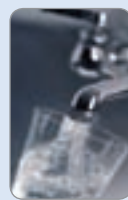
In response to rising energy costs, the EPA has released Ensuring a Sustainable Future: An Energy Management Guidebook for

Wastewater and Water Utilities to help utilities assess, improve and monitor their energy costs and practices.

The guidance was developed with the help of utilities that are successfully confronting their own energy challenges. It will serve as a step-by-step guide to help utilities systematically manage their energy programs over time.

An electronic copy of the handbook is available at the EPA's website, www.epa.gov.

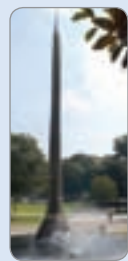
AdEdge Awarded Arsenic Treatment Demonstration Projects



AdEdge Technologies, Inc. has been awarded three full-scale demonstration sites for its Round 2a arsenic removal technology demonstrations for municipal drinking water systems.

The EPA's Arsenic Removal Technology Demonstration Program conducts arsenic removal demonstrations at selected public water facilities across the U.S. The program was divided into two rounds of demonstrations: 12 locations were funded for round one, and 27 locations were funded for round two. Round 2a is now under way at nine locations.

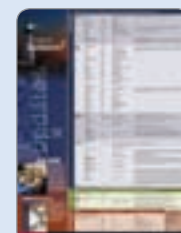
Siemens to Supply Georgia Tech with Water Treatment System



The Georgia Institute of Technology has selected Siemens Water Technologies to provide multimillion-dollar wastewater and ultrapure water treatment systems for a new \$80-million nanotechnology research center located in Atlanta.

The wastewater treatment system will treat acid and alkaline waste streams, and the ultrapure water treatment system is designed to meet very tight water quality specifications required by the center's research programs.

12th Edition of SDWA Wall Chart



The 12th edition of HDR's Safe Drinking Water Act wall chart includes updated and revised rules.

HDR has distributed more than one million of the poster-sized charts around the world since 1992. The chart provides an easy-to-use reference to all drinking water regulations. This edition includes information on the new Ground Water Rule and revisions to the Lead and Copper Rule. Also added were the National Secondary Drinking Water Standards that address the aesthetic properties of drinking water.

EPA Seeks Public Comment on Possible Contaminants



The EPA is asking for public comment on a list of 104 possible drinking water contaminants that may need to be regulated in the future to ensure the continued protection of drinking water.

The draft list includes chemicals used in commerce, pesticides, biological toxins, disinfection byproducts and waterborne pathogens. The agency evaluated approximately 7,500 chemicals and microbes and selected 104 candidates for the final draft list based on their potential to pose health risks through drinking water exposure.

Neulight Elected to AWWA Board

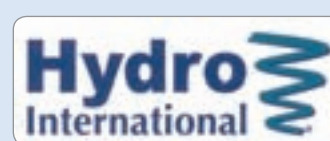


The American Water Works Association (AWWA) has elected Joel Neulight, northeast regional sales manager for Severn Trent Services, as a board

director-at-large representing service providers. He was elected to the three-year post in a January meeting of the AWWA board of directors and will take office after the organization's annual conference in Atlanta in June.

Neulight has been a member of AWWA for nearly 30 years. He has served on the organization's Granular Activated Carbon (GAC) Standards Committee and has co-authored several papers on GAC water treatment.

Hydro Intl. Creates Two New Managerial Roles



Hydro Intl. recently announced the appointment of Dave Mongeau as general manager of storm water and Neil Raymond as general manager of wastewater. Both positions are newly created roles at Hydro Intl.

Mongeau and Raymond will be responsible for the day-to-day operations and management of the storm water and wastewater divisions, respectively. They will develop and deliver all aspects of the annual budget for Hydro Intl. U.S., including managing, enhancing and expanding business by increasing sales and maximizing profits in their divisions. **WWD**

News compiled by Rebecca Wilhelm

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