

Compiled by WWD Associate Editor Caitlin Cunningham



keeping up in chicago

Planning for effective plant management and maintenance

John F. Spatz, Jr.

Caitlin Cunningham: The Jardine Water Purification Plant (JWPP), the world's largest conventional treatment plant and an AWWA ACE10 facility tour host, has been serving the city of Chicago since 1964. How has the plant evolved over its lifetime?

John F. Spatz, Jr.: One way the James W. Jardine Water Purification Plant has evolved has been to stay current with technology. At JWPP we have the SCADA that allows us to control, monitor and adjust the water treatment process remotely. We have installed backup power systems, multiple layers of redundancy, enhanced security systems and a new roof. Further, we will be seeking proposals for a new state-of-the-art laboratory which will allow us to expand for future regulatory requirements and perform analyses for unregulated contaminants. We have installed a green roof, an indigenous landscape native to Illinois and a bird sanctuary.

Cunningham: This massive, decades-old plant continues to send about 1 billion gal of safe water to customers in and around the city every day. What experiences or advice can you offer other municipalities for maintaining their facilities?

Spatz: The engineers and planners of JWPP were visionaries. JWPP was constructed in a manner that contemplated not only redundancy within the treatment process but also allows for expansion in the event of population growth. Although we as a city and community are conserving water, as seen by the decline in pumpage of water despite an increase in population, JWPP was constructed in a manner such that when demand increases, additional systems can be installed readily.

Not only planning for the future but also having operating engineers who are certified and have completed training regularly is critical for effective operations. Finally, it is important to have a regularly scheduled preventative maintenance program, along with a robust capital program.

Cunningham: What plant management challenges is the city facing today?

Spatz: First, population growth: It is estimated that the overall population for Chicago and surrounding communities will grow by approximately 1.3 million people by 2050, according to the Chicago

Metropolitan Agency for Planning.

Second, legislative challenges: the Chemical Security Act (pending legislation in Congress), unregulated contaminants and pharmaceuticals.

Third, environmental challenges: Conservation cannot be looked at in a silo. Water and electricity go hand in hand. We are in the second year of our MeterSave program, an incentive-based voluntary meter installation program that seeks single-family and two-flat non-metered homeowners to have a water meter installed free of charge to conserve water.

Cunningham: What upgrades, if any, does the city of Chicago have in the works for JWPP and its other water/wastewater facilities?

Spatz: Our capital plan includes the installation of a new roof for the east side of the JWPP building. We are completing construction of a new chlorine building at the South Water Purification Plant.

We will be converting from steam to electric at our Springfield Pumping Station. Further, in partnership with the DuPage Water Commission, we are in construction at the Lexington Pumping Station [also an AWWA ACE10 facility tour host] for backup generation, a green roof and one of the largest solar panel installations in the Midwest. **WWD**

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Report: Add Water Systems to U.S. Infrastructure Challenges



Urban areas in the U.S. are facing growing pressures on their water infrastructure systems, necessitating both greater investments for overhaul and the establishment of development patterns that are more conducive to conservation, according to "Infrastructure 2010: An Investment Imperative," a new publication released by the Urban Land Institute and Ernst & Young.

The report points out that, according to the World Bank, 80 countries have water shortages that threaten health and economies, and 40% of the world has no access to clean water or sanitation. Water supply cannot keep pace with demand as populations increase—creating an acute problem in America and worldwide.

Vineland, N.J., Awards Hungerford & Terry \$1.4-Million Contract

Hungerford & Terry, Inc. has been selected by the city of Vineland, N.J., to design equipment



to remove radium from four city wells. All of the systems for the four designated wells are identical in specifications and design, and each includes two 102-in.-diameter exchangers to remove radium.

Prior to this radium removal process, the city of Vineland had been unable to utilize these wells because they exceeded the MCL drinking water regulations for radium.

Groundbreaking Held for Hawaii Wastewater Treatment Plant

A groundbreaking and blessing for the expansion of the Kaua'i County Waimea Wastewater Treatment Plant (WWTP) in Hawaii was held with a celebration following at the Kekaha Harbor House.

The events marked the start of the Waimea WWTP's Expansion, Phase 1 Project. In November 2009, the county of Kaua'i selected Briant Construction, Inc., the construction subsidiary of Kaua'i-based Aqua Engineers, Inc., to upgrade and expand the county's Waimea WWTP.



Wastewater Treatment Plant (WWTP) in Hawaii was held with a celebration following

IFAT Preparations Underway

IFAT ENTSORGA, a leading trade fair for water, sewage, waste and raw materials management, will be coming to Munich, Germany, Sept. 13 to 17, 2010. In 2008, 2,605 exhibitors from 41 countries and 120,000 visitors from 170 countries participated in IFAT—its highest numbers yet. Preparations for the upcoming show are moving ahead quickly, and new technologies will be a major part of the event.



Expanded hall space will be dedicated to water extraction and water and sewage treatment, featuring companies such as Andritz, Huber, Kemira, Norit, Passavant-Geiger and Siemens. IFAT will host conferences, symposia, workshops and forums throughout the week. Experts representing trade associations, ministries, government agencies and other industry organizations will be present.

Agriculture Secretary Announces Ohio Wastewater Project



U.S. Agriculture Secretary Tom Vilsack announced the funding of a regional wastewater system in Scioto County, Ohio. The project is being funded through the American Recovery and Reinvestment Act and will provide a centralized wastewater treatment system for 1,340 users in four rural Ohio communities.

"The recovery act is funding critically needed community projects across rural America," Vilsack said.

RSS Water Solutions Opens Office in Cyprus

Rental Solutions & Services (RSS), a provider of rental power and cooling, has recently launched its latest product offering, temporary desalination or mobile water. Coinciding with the launch of new mobile desalination water, RSS also has opened a new office in Cyprus to serve the Mediterranean market.

Robert Bagatsing, group marketing manager of RSS, explained that rental desalination—or mobile water technology—has various applications, especially in areas where freshwater is scarce or is nonexistent.



Hach Co. Announces Compliant Lab Products

Hach Co. announced the availability of laboratory products for compliance with the U.S. EPA's new chlorine analyzer regulation,



Method 334.0. These products can be used with any online chlorine analyzer that must meet the requirements of Method 334.0.

Networking News

Bluewater Bio, Ltd., a wastewater company, announced the appointment of nonexecutive director Dr. Piers Clark, a technical and industry expert within the water and energy sectors.

American Water Works Co., Inc., a U.S. water and wastewater utility company, announced that John Young, president of American Water Services and American Water Works Service Co., has been elected to the WaterReuse Foundation Board of Directors. **WWD**