

Compiled by WWD Managing Editor Elisabeth Lisican

tour time



ACE14 takes visitors to Boston-area facilities

The water supply for 42 communities in the metropolitan Boston area currently is treated at the Massachusetts Water Resources Authority's (MWRA) 405-million-gal-per-day (mgd) John J. Carroll Water Treatment Plant in Marlborough, about 25 miles west of Boston. The plant is one of the featured facility tours of AWWA ACE14. Here Managing Editor Elisabeth Lisican discusses the facility with David Coppes, director of water works for the MWRA.

Elisabeth Lisican: What is this plant's infrastructure? What makes it unique?

David Coppes: It is the second-largest unfiltered treatment plant in the country. It uses four separate disinfection processes: ozonation, ultraviolet (UV), free chlorine and chloramines.

Lisican: Please provide a summary of this plant's history. How was it funded?

Coppes: The plant was completed in July 2005 as part of an overall modernization of the MWRA's water system, which also included a new 17.6-mile-deep rock tunnel and seven covered storage facilities. The initial cost of the ozone plant was \$145 million, and the addition of UV was \$32 million. These projects were funded through state revolving fund loans and municipal bonds, paid for by the ratepayers in the cities and towns that are served by the plant.

Lisican: What can visitors expect when they tour this facility?

Coppes: Visitors will be able to see the ozone generators used to turn pure oxygen into ozone. Ozone originally was used at the plant for regulatory compliance with a 3-log (99.9%) inactivation of *Giardia* as well as a voluntary target of 2-log *Cryptosporidium* inactivation based on site-specific criteria.

Ozone also was found to be extremely effective at improving the clarity and taste of the water. With

the addition of UV disinfection, the plant now is able to meet the U.S. Environmental Protection Agency's requirements for two primary disinfectants as well as the now mandatory 2-log inactivation of *Cryptosporidium*. The use of ozone upstream of UV increases the clarity and transmissivity of the water, increasing the cost-effectiveness of UV and decreasing total energy use.

Lisican: What changes or upgrades are ahead for this facility?

Coppes: In addition to the recently completed UV facility, MWRA is about to begin construction on a 240-mgd zero net energy backup raw water pumping station. The plant also hosts a solar field to reduce its use of electricity and improve its carbon footprint.

Lisican: How does MWRA integrate public education and outreach into its operations?

Coppes: MWRA has a dedicated school education program that visits classrooms in the 61 cities and towns in its service area to teach kids about their role in the water cycle. This helps students see the links between their daily lives and important environmental issues like water conservation and pollution.

Each year, MWRA hosts a poster, essay and video contest on current issues facing the water and sewer industry. Last year's topic was "Bottled Water vs. Tap Water." For this year, the topic is "It's a Toilet, Not a Wastebasket," aimed at raising awareness of the increasing number of wipes and other non-flushable items that have been clogging pipes and pumps across the country. [www](#)

David Coppes is director of water works for the Massachusetts Water Resources Authority. Coppes can be reached at dave.coppes@mwra.com or 508.424.3645.

Elisabeth Lisican is managing editor of *Water & Wastes Digest*. Lisican can be reached at elisican@sgcmail.com or 847.391.1012.

For more information, write in 1114 on this issue's reader service form on page 63.

News Briefs compiled by WWD Associate Editor Amy McIntosh

Singapore Summits Encourage Integrated Urban Solutions



The World Cities Summit, Singapore International Water

Week and CleanEnviro Summit Singapore will be jointly held June 1 to 5, 2014, at the Sands Expo & Convention Center at Marina Bay Sands, Singapore. The events are designed to encourage governments and industries to share and co-create solutions with an integrated approach to urban sustainability.

Experts Launch Forward Osmosis Association



The International Forward Osmosis Assn. officially launched April 7 and will promote forward osmosis technology throughout industry and academia.

Founded by four members—Modern Water, Hydration Technology Innovations, Trevi Systems and Porifera—the group's annual world summit will be held Sept. 18 and 19, 2014, in Lisbon, Portugal.

Registration, Housing Opens for WEFTEC 2014



Registration and housing now are open for WEFTEC 2014, the Water Environment Federation's

87th Annual Technical Exhibition and Conference. Scheduled for Sept. 27 to Oct. 1 at the New Orleans Morial Convention Center in New Orleans, WEFTEC offers best practices, technologies, and solutions for sustainable and effective water management.

State of the Water Industry Report Released



The state of water and wastewater infrastructure is the top current issue facing water professionals

and those they serve, according to the AWWA's 2014 State of the Water Industry Report, with long-term water supply second on the list.

RJN Conducts Monitoring for Illinois Sanitary District



RJN Group Inc. is conducting a 90-day flow monitoring program for the Urbana and Champaign Sanitary District in Illinois, with flowmeters set-up and installed at four locations to measure, record and analyze flows for the purpose of developing a wet-weather inflow/infiltration analysis.

Survey Reveals Water Risks for Corporations



A new survey of major U.S. corporations released by the Pacific Institute and VOX Global, titled, "Bridging

Concern and Action: Are U.S. Companies Prepared for Looming Water Challenges?" reveals that most companies believe that water challenges will significantly worsen in the next five years.

U.S. Water Prize Winners Honored



U.S. EPA Administrator Gina McCarthy addressed more than 300

water leaders at the U.S. Water Prize ceremony April 7 at the National Geographic Society's headquarters in Washington, D.C. The ceremony celebrated four winners: Alliance for Water Efficiency, Chicago; American Water, Voorhees, N.J.; Metropolitan Sewer District of Greater Cincinnati; and Orange County Water District and Sanitation District, California.

Global Organizations Pledge to Support Water Stewardship



Nestlé and General Mills were among businesses that announced

their commitment to the Alliance for Water Stewardship. Twenty-seven other organizations, including FEMSA Foundation, Water Footprint Network, WaterAid, World Wildlife Fund and The Nature Conservancy, pledged to promote a global framework for sustainable use of the world's limited freshwater resources.

AWR, Metro Water Services Employees Volunteer at Food Bank



American Water Resources and Nashville Metro Water Services employees

recently volunteered at Second Harvest Food Bank of Middle Tennessee. AWR presented a check for \$2,500, which will be used to purchase 10,000 meals.

GE Technology Selected for Canadian Coal Mine



Anglo American has selected GE's Advanced Biological Metals Removal

Process technology to remove nitrate and selenium from wastewater discharge at its Peace River Coal Trend Mine in Tumbler Ridge, British Columbia, Canada. The project will be the first Canadian installation of the technology.

Industry News

- Grundfos named Dieter Sauer president and general manager of its North American water utility business.
- John Crum was named president and COO of Seaman Corp.
- Aqua America Inc.'s Pennsylvania wastewater subsidiary purchased the Penn Township wastewater system. [www](#)

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