THE WATER WELLSPRING

A Flowing Source of Information for Water and Wastewater Utilities

Summer 2015

Workshop a Success

The Water/Wastewater workshop held on April 17, 2015, was a tremendous success. Approximately 40 representatives from various utilities attended. Topics discussed in the workshop included Energy Savings and the Cost of Energy; Hydropneumatic Tanks; Sewer System Overflows; and Water Meter Management. The ORS thanks the speakers for their informative presentations, which can be found on the ORS website at http://www.regulatorystaff.sc.gov/waterwaste/Pages/WaterWastewaterWorkshop.aspx.

Asset Management: A Best Practices Guide

The EPA has published an online best practices guide for asset management. The EPA states that an asset is "a component of a facility with an independent physical and functional identity and age (e.g., pump, motor, sedimentation tank, main). The renewal and replacement of the assets that make up our nation's water infrastructure is a constant and ongoing task. To efficiently manage this important part of a utility's business, many have turned to asset management. This approach has gained recognition all across the world—and across all infrastructure-heavy sectors—for its effectiveness in maximizing the value of capital as well as operations and maintenance expenditures. The guide can be found on the EPA's website at http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems_assetmanagement_bestpractices.pdf

Each utility is responsible for ensuring that its system stays in good working order, regardless of the age of components or the availability of additional funds. Asset management programs with good data—including asset attributes (e.g., age, condition and criticality), life-cycle costing, proactive operations and maintenance (O&M), and capital-replacement plans based on cost-benefit analyses—can be the most efficient method of meeting this challenge.

Field Technology Sees Innovation Growth

Various technologies are now available to assist water utilities in optimizing their efficiency in the field. The increase in mobile computing allows utilities to provide hardware and software to collect and deliver information instantaneously. The Water Research Foundation sponsored a research project in 2008 evaluating the trends in wireless technology and water utility applications for field use. The report can be found at www.waterrf.org and is titled *Field Computing Applications and Wireless Technology for Water Utilities*. The report indicates that field technology has steadily improved through the use of various applications including Global Positioning Systems (GPS) that assist in collecting geographical data on the assets; Supervisory Control and Data Acquisition (SCADA) that uses radio networks and wireless internet communications to assist with communications between the office and the field; automatic meter reading that uses remote sensors; and Mobile Resource Management (MRM) that helps utilities decrease operating costs by optimizing route planning, dispatching, GPS tracking, mobile applications, telematics, fleet/driver, compliance, and performance analytics.

Sensor technologies and the Internet of Things are examples of growing innovation. The use of sensors in pipes, manholes, lift stations, and other structures has enabled SCADA users to narrow the gap in the transmission of information when comparing plant facilities with transmission and distribution networks. However, SCADA users can now connect to cloud-based servers through a secure wireless internet.

Utilities will continue to see technologies evolve and should recognize their potential in customer satisfaction, financial gain, and streamlined operations.

Reference:
Stern, C. (2015, March). Field Technologies Advance Utility Operations. *Opflow*,*41*(3) 10-15.
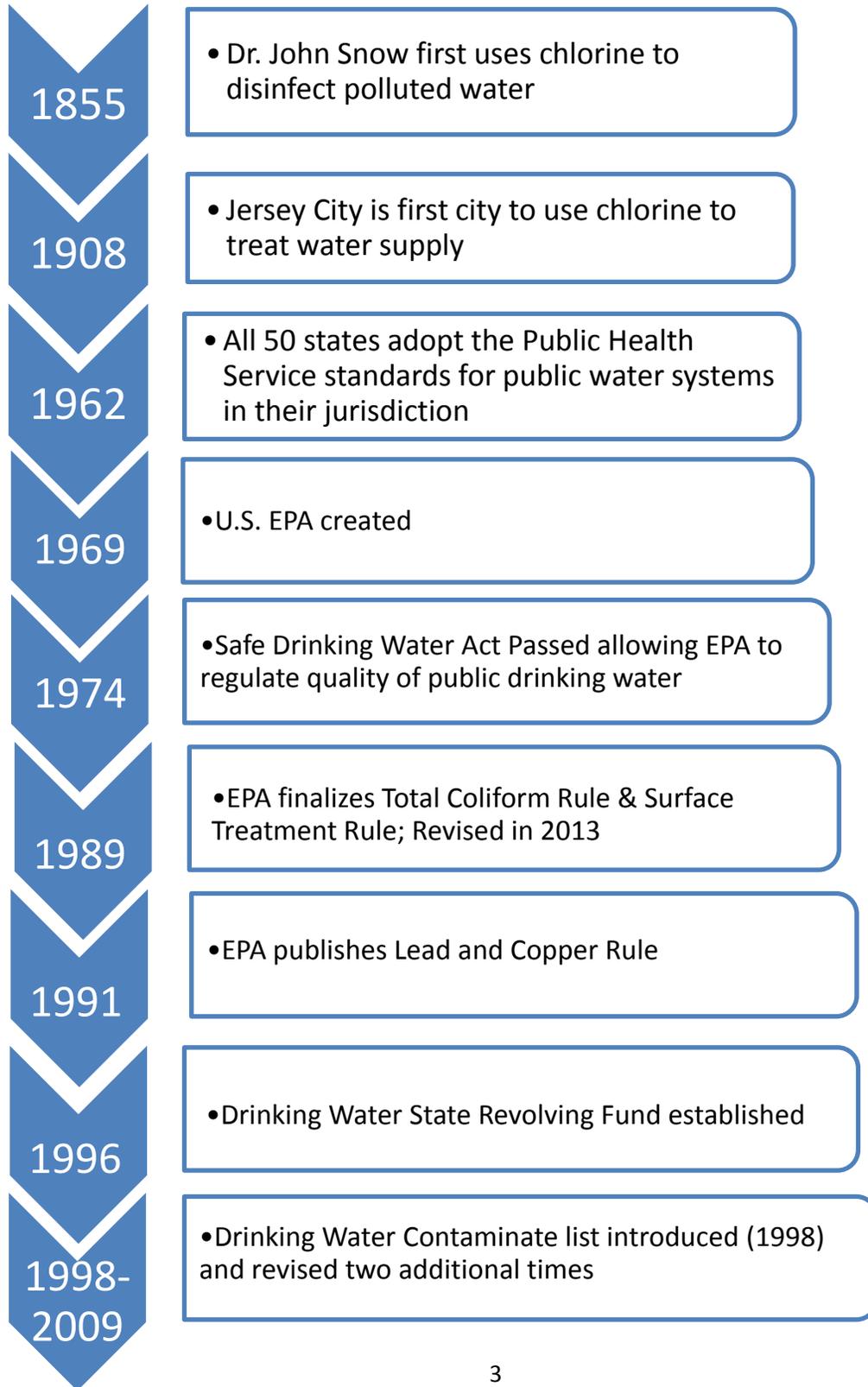
DHS Cybersecurity Services

The US Department of Homeland Security (DHS) is responsible for helping federal civilian departments/agencies secure their networks. DHS also works with the private sector to promote cybersecurity. The Critical Infrastructure Cyber Community (C^3) Voluntary Program assists critical infrastructure owners and operators to adopt the National Institute of Standards and Technology's (NIST) Cybersecurity Framework which serves to guide and improve cybersecurity systems. The program encourages organizations to manage cybersecurity as part of an all-hazards approach to enterprise risk management. The program also offers:

- Forums for knowledge sharing and collaborations
- Technical assistance, tools, and resources
- Risk management communications assistance

To request assistance or to learn more about the C^3 Voluntary Program, visit www.dhs.gov/ccubedvp.

Celebrating 40 Years of Clean Drinking Water

In 2014, the U.S. Environmental Protection Agency (EPA) marked the 40th anniversary of the Safe Drinking Water Act. The Act was passed to protect public health by regulating the nation's public drinking water supply. Have you ever wondered why the Safe Drinking Water Act was implemented and how it evolved?

1855
- Dr. John Snow first uses chlorine to disinfect polluted water

1908
- Jersey City is first city to use chlorine to treat water supply

1962
- All 50 states adopt the Public Health Service standards for public water systems in their jurisdiction

1969
- U.S. EPA created

1974
- Safe Drinking Water Act Passed allowing EPA to regulate quality of public drinking water

1989
- EPA finalizes Total Coliform Rule & Surface Treatment Rule; Revised in 2013

1991
- EPA publishes Lead and Copper Rule

1996
- Drinking Water State Revolving Fund established

1998-2009
- Drinking Water Contaminate list introduced (1998) and revised two additional times

Accounting for Utility Property Taxes

Utility companies are assessed property taxes on utility property such as land, buildings, reservoirs, and mains as well as equipment, vehicles, and office furniture. In accordance with NARUC guidelines, property taxes are to be recorded in account 408 - Taxes Other Than Income.

The information to determine utility property values is provided on form PT-139 – Property Tax Return – to the South Carolina Department of Revenue. PT-139 can be accessed here http://www.sctax.org/forms/property/pt-139-form.   In addition, form PT-427 – Distribution Information – should be filed if property is located in multiple counties, municipalities, or tax districts. PT-427 can be accessed here http://www.sctax.org/forms/property/pt-427-form and is used for billing purposes. Property tax returns are due the last day of the fourth month from the taxpayer's accounting closing date. For example: if the taxpayer's accounting closing date is December 31, then the property tax return would be due April 30.

Property taxes are assessed on all real and personal property using the SC assessment ratio for water & sewer companies of 10.5%. This assessment information is then submitted to the appropriate county for the tax millage calculation which determines the property tax expense to be billed to the utility. ***Completing and filing the proper forms are very important in receiving the appropriate assessment and property tax billings.***

In addition, ensuring that property taxes are ***paid annually*** and in a ***timely manner*** is very beneficial in ***securing/keeping*** your utility assets and sustaining the overall financial health of the utility. Consult your tax professional for information and help, if needed.

Sources: http://www.sctax.org/tax/utilities, NARUC Chart of Accounts.