The Flow

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Water Distribution

Because of differences in elevation throughout our service area, additional pump stations are needed to push water to the higher elevations of Willisburg, Mackville, Old Etown, Simmstown, and then even higher elevations at Wesley Chapel. Operators monitor these pump stations (tank levels, pump run times, chlorine residual) and tanks through our SCADA (Supervisory Control and Data Acquisition) system. Distribution operators also physically check the sights and sounds at each pump station on a daily basis.

Elevated storage tanks are needed for multiple reasons including pressure (one ft of water elevation equals .433 psi of pressure), fire protection, and to accommodate fluctuations in customer demands.

Last Mailed Newsletter

This will be the last newsletter that will be printed and mailed to you, however, it will be available via email. Please subscribe to this by clicking the QR code to the right or by visiting “news” on our website. In addition, “The Flow” is posted on the website and Facebook on the 1st of the month.

Water System Challenges

Some drinking water systems in the United States are over 100 years old. Cracked pipes, water main breaks, and other age-related issues increase the chance for germs or chemicals to get into the water and can lead to drinking water advisories.

The American Water Works Association has estimated that it will cost nearly $1 trillion in the next 25 years to repair and expand our drinking water systems to meet the demands of the growing U.S. population.

Another challenge that can affect our water supply is climate change and warming temperatures, which can cause contamination of water sources with harmful chemicals and toxins.

Water Treatment Plant Operators

Water treatment plant (WTP) operators cannot be quickly replaced. There are intricacies of operations that take years of training and each WTP is different in source water, water quality, WTP processes and methods. The Safe Drinking Water Act, which was originally enacted in 1974, was further revised in 1996 and 1999 to provide guidelines for operator certification.

Four classes of WTP operators were developed based on the size of the WTP:

- Class I-AD Water treatment plant with a design capacity $<$ 50,000 gallons per day
- Class II-A Water treatment plant with a design capacity $\geq$ 50,000 but $<$ 500,000 gallons per day.
- Class III-A Water treatment plant with a design capacity $\geq$ 500,000 but $<$ 3,000,000 gallons per day.
- Class IV-A Water treatment plant with a design capacity $\geq$ 3,000,000 gallons per day.

A high school graduate (or a college graduate that lacks relevant college courses) is required to work one full year before being eligible to test for a Class I certification, two full years before being eligible to test for a Class II certification, three full years before being eligible to test for a Class III certification, and 5 full years before being eligible to test for a Class IV certification. Relevant college courses can expedite the process to the point that a person with a bachelor's degree in science or engineering could test for a Class IV certification after 1 year of experience.

The Springfield WTP has a design capacity of 3 MGD and is thus rated a Class IV WTP – the highest class requiring the most experience. Our operators must maintain awareness of WTP processes as well as monitor the distribution system through SCADA (Supervisory Control and Data Acquisition). Operators run hundreds of process control tests daily. They maintain grounds and facilities, maintain equipment, order supplies, answer customer questions about water quality, comply with state and federal regulatory requirements – all this in an effort to bring customers a safe, reliable, and refreshing product!