

# HOW AN INNOVATIVE WTP EQUIPMENT MANUFACTURER IS INVESTING IN OUR NEXT GENERATION OF EXPERTS

My first few minutes waiting in line at Starbucks were enough to prove that times are changing... fast. Local and national news organizations tell us tales of technologic advancement, the rise of artificial intelligence, and changing weather patterns.

As I watch the hive of activity behind the counter, I notice the continuous use of one thing that hasn't changed.

Water.

The most universally required resource on the planet. Some organisms don't need oxygen but one thing that they all need

We need water. When I was a teenager, I remember the media foreshadowing overpopulation and impending water scarcity that was in 1987. The world had only reached around 5 billion in population and now the United Nations projects a water-hungry population of 8.6 billion by 2030, just 11 years from now!

So, what about water?

An innovative company in Santa Rosa, California has apparently been asking the same question. They've been in the municipal drinking water industry for three decades, manufacturing an elegantly simple secondary containment vessel for chlorine gas designed to process and prevent a chlorine gas release, protecting workers and surrounding communities from a serious health hazard.

TGO Technologies, the maker of the secondary containment vessel called "ChlorTainer," began asking their customersand other industry experts in the waste and water treatment industries one simple question.

"What's the most important investment we can make to protect the future of water?"

They discovered something interesting and surprising. The overwhelming answer had nothing to do with water... but rather, the stewarding of our water.

# AGING WORKFORCE WILL IMPACT PLANT MANAGEMENT

The collective knowledge hidden within our workforce is often viewed as the most valuable asset in the waste and water treatment industry.

But the industry is going to experience a loss of these key knowledge holders, specifically, the plant management who guide the current and future direction. In fact, the "2018 Longer Working Careers Survey" of 143 large US employers revealed that while older employees are crucial for business success, 83% of employers, "have a significant number of employees at or nearing retirement." (Willis Towers Watson, 2018).

Plant managers look to innovative companies as they adapt to workforce changes. By providing simplified solutions and training, vendors and suppliers like TGO Technologies can become strategic partners to help plant managers shorten the learning curves in plant operations, as less experienced workers replace their retiring colleagues.

"As long as the equipment information is effectively passed on, there shouldn't be any problems for new people," noted Alex Mares, the water utilities supervisor for Lake Havasu City, AZ. "Meanwhile, overall, our city is looking at optimizing training programs to get new guys interested in plant operations, including drawing them from our own distribution system crews, toward getting them interested in training for wholeplant operations."

Another manager noted how the design of the secondary containment vessels, and the manufacturer's training in their use, can help.

Mike Holloway, the chief operator at Walnut Creek Special Utility District in Lake Bridgeport, TX, believes that equipment design is a crucial component to efficiently operating his water treatment facility.

Reflecting on his organizations use of TGO Technologies' chlorine gas containment system, Mr. Holloway says "Training for this equipment is pretty straightforward; we just need to



have somebody with experience on site when we are changing out the chlorine cylinders."

"It's not a long process to learn," he continued. "We don't need six months to train somebody. It shouldn't take more than four change-outs to learn it well."

# THE VALUE OF INDUSTRY SCHOLARSHIP COMMITMENTS

The American Water Works Association (AWWA) has recognized the importance of raising student awareness and interest in the water industry. By encouraging well-educated entrants into the water industry, robust AWWA Scholarships range from \$5,000 to \$10,000 and are awarded to aspiring civil and environmental engineering students.

## WHAT'S NEXT: HOW WE CAN HELP

If we agree that water is a crucial resource for our modern society, wouldn't the stewards of our water benefit from the same entrepreneurial passion that currently drives our technological advancement?

What if water were the next oil? The management of this most crucial resource would command the same entrepreneurial passion that we see driving transformative technological advancements.

The communities and industries that depend on safe water, those that protect our water resources, may call upon us to develop comprehensive investments that combine innovation, creative problem solving, and educational engagement.

How can we engage youth in a meaningful way, igniting their natural curiosity, interest, and energy in this promising field?

As the knowledge holders, we have the ability to create paths leading the brightest minds to a promising, meaningful career in the water industry.

Water has no boundaries. Enriching careers that span government, environmental protection, engineering, science and technology await those who discover the water industry. Let's inspire them! Let's invest in their future.

## ABOUT CHLORTAINER

TGO Technologies, also known by its product name ChlorTainer, manufactures a high-pressure containment vessel into which a one-ton or a 150-pound chlorine gas cylinder is inserted using its custom-designed roller system. ChlorTainer's user-friendly design adapts easily to current chlorine gas systems.

The vessel processes chlorine though a vacuum regulator connected to a failsafe actuator. If the cylinder should leak, ChlorTainer contains the chlorine gas and continues to process at a normal flow rate. There is no interruption of service. The system allows use of all the chlorine gas and does not generate hazardous waste.

ChlorTainer eliminates the need for a scrubber or emergency response team.

ChlorTainer systems are being used at municipal water sites nationwide and internationally to provide protection to operators and the surrounding community. ChlorTainer's long-lasting design allows water managers to continue benefiting from their chlorine gas investment while achieving a new standard of safety.

