

Ask the Experts

Each issue, we ask members of the On Tap Editorial Advisory Board to answer a drinking water-related question. We then print as many responses as space permits.

With the known risks of working in a drinking water treatment facility, how important is it for drinking water systems to provide safety training to their employees, and why?

Editor's note:

Frank DeOrio, On Tap editorial advisory board member, relied on the expertise of David Newert, Auburn, New York, safety officer, to answer this question.

Communities Should Stay Up-to-date

With the increased need for safe drinking water, communities are building new water treatment facilities or upgrading older ones. The need for safety training expands with the building. Communities must keep up with safety-training needs and stay up-to-date about new technology and treatment methods that drinking water systems use. Communities should do this not only to keep our customers (taxpayers) safe and healthy, but just as importantly, to keep our employees safe and healthy. Here are a few examples of safety incidents that have happened in our facility.

Auburn usually hires about a half dozen seasonal employees, usually college students, every summer to work at the city's water treatment facility. Every year, some of the previous year's seasonal workers return and, as safety officer for the city, I train them before they begin work.

During the summer of 2000, an incident occurred that sent all the seasonal workers to the area hospital's emergency department. The system needed some diluted chlorine one afternoon and several of the workers decided to dilute a small amount. They worked on this dilution indoors in a small room. Almost immediately, some of the workers had symptoms of dizziness and sore throats.

The system then evacuated the area and called the fire department to investigate the situation. They also called me to the scene. Even though everyone was feeling better after leaving the area, we sent them all to the local emergency department for evaluation.

As safety officer, I took this as a personal failure. I felt that I did not stress how important it is not to take on additional duties until a trained worker showed them how to do the new duties properly and safely. I now use what happened as a training lesson. Several of

these seasonal workers still come back every year, but now they listen much better during safety training.

Last year at the same facility, a one-ton chlorine tank began to leak. The leak activated the automatic alarm signaling a chlorine leak. We contained the leak to the chlorine room and called the fire department in to assist. Using the training that the water treatment facility personnel had, along with that of the fire department's training, we formulated a plan about how to stop the leak.

Before entering the room, we assigned everyone to a very specific duty. The six-person team entered the chlorine room with personal protective equipment and stopped the leak in less than 90 seconds. In just a few more minutes, the chlorine in the area dissipated and was gone. We then declared the area and facility safe, and the situation was over.

Thanks to the safety training that everyone involved had, no one was injured. With continuous safety training, workers can and will avoid injuries. This should be done not just because of Occupational Safety and Health Administration or other outside agency requirements, but because we all want to.

Yearly safety training needs to be constantly updated and documented. For systems to stay on top of the training and skills needed to run a safe operation, it is important to mandate monthly training—even if it is just a couple of hours a month—along with yearly training to keep the information fresh and current.

The gift of being able to live and reach retirement safely and healthy should not be taken away from anyone.



David Newert
Safety Officer
City of Auburn, New York

Safety Is Everyone's Responsibility

To paraphrase the punch line from a famous TV commercial, "Having personnel properly trained in all aspects of plant safety—priceless!" The Occupational Safety and Health Act (OSHA) of 1970 affects some 80,000,000 employees nationwide. The odd thing is that for some reason, municipalities are exempt from OSHA regulations. Small systems may or may not be exempt based primarily on how their state views drinking water system ownership. Your local agency can tell you what regulations you are required to follow.

Water utilities must make safety a part of management responsibilities. Once management puts an effective program in place, the task of ensuring that employees apply and maintain the program falls squarely on the shoulders of the supervisors. It would behoove all utility supervisors to follow the basic requirements and guidelines of OSHA in their workplaces, even if they are not obligated to do so.

Supervisors' responsibilities should include training employees about how to use and care for personal protection equipment (PPE) and reviews of all material safety data sheet (MSDS) information, as well as regular reviews of safety issues regarding hand and power tools, proper lifting techniques, and vehicles and heavy equipment.

Although safety should be primarily the supervisor's responsibility, as we have all been told over and over, "Safety is everyone's responsibility." Properly trained personnel who keep an eye out for each other and the plant is the most important key is to eliminate accidents and safety concerns.



Nelson Yarlott
Resident Operator
Bellvue Water Treatment Plant,
Greeley, Colorado

Is your scene safe?

A safety program is like...well, it's like a haircut. Everyone needs one, but we always put off getting it done until the last minute. And even though no two are ever alike, we are always looking at others and thinking, "I want one like that."

So why is this true about safety programs? Is it lack of operator time? Is it lack of resources? Or is it a lack of value? Most likely, it's all these and more. Safety should be a matter of common sense. It just makes good sense to have an effective safety program.

The first rule in emergency response is: "is the scene safe?" The same should be true for the drinking water profession. "Is your scene safe?" Small water systems may not have abundant resources. And this may cause management to be hesitant to expend those resources on something that isn't directly related to putting water in the pipe. But systems should look at a safety program as an investment.

Comparing the costs of implementing a safety program, to the costs related to injury or lost time at work should make the decision easy. When you consider that there are a lot of safety-related resources out there coming from organizations like the American Water Works Association or the National Rural Water Association, implementing a program is relatively easy.

And just like "one haircut doesn't last forever," neither does safety. It is an ongoing, continuous process that should be incorporated into the work environment and implemented on a daily basis. And that really makes good sense!



Rodney L. Coker
Tribal Utility Consultant (retired)
Indian Health Service

RUS Interest Rates Down; Only Poverty Line Remains Unchanged

The Rural Utilities Service (RUS) has announced its water and wastewater loans for October 1, 2002, through December 31, 2002. RUS interest rates are set at three levels: the poverty line rate, the intermediate rate, and the market rate, each of which have specific qualification criteria. The rates are:

- Poverty Line—unchanged at 4.500 percent
- Intermediate—decreased to 4.625 percent
- Market—decreased to 4.875 percent

RUS loans are administered through state Rural Development offices, which can provide specific information concerning RUS loan requirements and applications procedures.

For the phone number of your state Rural Development office, contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191. The list is also available on the RUS Web site at www.usda.gov/rus/water/states/usamap.htm.