

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. The opinions expressed are not necessarily those of NESCA.



Q: Why should a What kinds of

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Being Prepared Is Everybody's Business

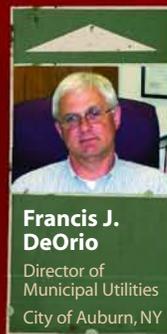
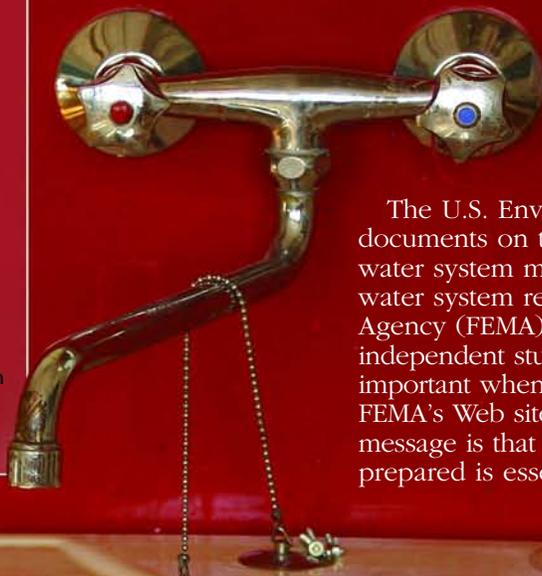
Although Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act, Public Law 107-188 requires drinking water facilities serving populations of more than 3,300 to perform a vulnerability assessment and to prepare an emergency response plan (ERP) to incorporate the results of the vulnerability assessment, all water plants of any size would benefit from this exercise.

The preparation for any water emergency whether natural or manmade is necessary as everyone relies on the availability of safe and dependable water supply. As essential as managing the day-to-day operation of a water plant, the management of an emergency is actually best handled when planned and prepared for in advance. When you ask yourself what should you be prepared for, the answer is simply "everything and anything."

Start at the very beginning with your new water intake and move through your process and distribution system. Ask yourself the question, "How can I deal with this piece of equipment or process if it is damaged and out of service?" In most cases, it is good to include those in the planning process who will be responding for your emergency. This list would include all of your staff, fire, police, state and federal agencies, equipment and chemical suppliers, and other neighboring water utilities who may be able to offer assistance during a crisis.

Most communities have local emergency planning committees (LEPC) that can be a great assistance in identifying potential problems in your water system that are easily overlooked by operators and managers use to their routines. These LEPCs can also play an important role in planning your coordination and response to water system emergencies.

The U.S. Environmental Protection Agency provides a few excellent documents on their Web site (www.epa.gov/safewater) that can help water system managers organize their process and plan for dealing with water system related emergencies. The Federal Emergency Management Agency (FEMA) also offers an excellent interactive and free Web-based independent study course on incident command, which will become very important when dealing with emergencies. This course can be found on FEMA's Web site at training.fema.gov. I would say that the take home message is that no water emergency is too small or unimportant. Being prepared is essential.

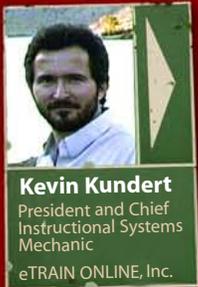


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water system be prepared for an emergency?

emergencies should they be prepared for?



Always Be Ready

Stuff happens! That's why a water system should be prepared for an emergency.

Preparation for emergencies has always been an important task for water operations. The kinds of emergencies that each system should prepare for varies to a large degree on the physical location and size of the system, treatment technologies employed, and proximity of populations to hazardous chemicals in large quantities. Each system should know of all the apparent risks to its customers and to the water system. Routines for handling those risks, if they were to turn into emergencies, should be practiced on a regular basis.

The emergency that can really do serious damage is the one that you as an operator are not prepared for. When I worked as an operator we all had a mental priority list drilled into us that we were to follow in emergency situations:

1. Protect the people;
2. Protect the system;
3. Then worry about the other stuff, like saving money, optimizing operations, etc.

I realize this may seem like an oversimplification, but when emergencies happen and decisions must be made immediately, you'd be surprised how mixed up things can get and none of us want to make a decision that results in the sickening or death of our coworkers or people in the community.

Here's a brief list of emergencies to prepare for:

1. Biological or chemical contamination (of source water, final water, or the atmosphere);
2. Loss of electricity or electrocution of personnel;
3. Intentional vandalism or tampering with system components to cause harm;
4. System or component damage caused by weather (such as floods, lightning, wind and fire) or more severe events such as earthquakes;
5. Construction and repair-related accidents; and
6. Mechanical equipment failure that puts the community or system at risk.

Consider how emergencies will be handled for all system components and processes related to:

- source,
- treatment,
- distribution and storage, and
- pumps, facilities and controls.

Every operations team should analyze specific emergency risks and formulate an emergency plan. You should know how to coordinate with police, fire and other emergency service departments in your community. Keep the emergency plan updated and practice, practice, practice! As an operator this is a priority and the customers you serve are relying on you to prepare for and know how to handle emergencies...because stuff happens!