DEQ
Montana Department of Environmental Quality

PUBLIC WATER SUPPLY SYSTEM EMERGENCY RESPONSE

As the owner or operator of a public water supply system, it is your responsibility to provide safe and reliable drinking water to your community and customers. Emergency response planning is an essential tool for ensuring a safe supply. Your ability to identify an emergency and initiate timely and effective response actions, will minimize your system's downtime and provide protection to your consumers.

As a result of the 2002 Public Health Security and Bioterrorism Preparedness and Response Act passed by Congress, all community public water systems serving more than 3,300 people are required to conduct a vulnerability assessment (VA) and prepare an emergency response plan (ERP). However, no matter what the size, Montana DEQ strongly encourages all public water suppliers to take these steps to protect your system.

What is an Emergency?

Any incident or situation that can result in a threat to water quality or quantity is considered a water emergency. The threat can be caused by Mother Nature (i.e. flood, blizzard, earthquake, wind storm), caused by a system deficiency (power outage, treatment lapse), or it can be a direct and intentional threat against a water system (purposeful contamination or vandalism).

What is a Vulnerability Assessment?

A Vulnerability Assessment (VA) identifies weaknesses in your system's security and focuses on the types of possible threats that could keep you from providing a safe and reliable supply of water to your customers. It is a step-by-step evaluation of your system and its operations that assesses your ability to reduce the risk of different threats. Once your VA is completed, you can begin to identify and prioritize the security upgrades and operational changes that will reduce risks to your system.

What is an Emergency Response Plan?

An Emergency Response Plan (ERP) is a written, well-thought-out series of planned actions that help you respond to emergencies of all types. An effective ERP for a drinking water system makes use of the system's VA by addressing possible consequences of vulnerabilities. An ERP does the following:

- Presents clear and logical steps to take in response to possible emergencies,
- Designates persons responsible for specific actions,
- Provides for training and planned practice exercises that simulate the occurrence of an emergency, and
- Ensures effective coordination with first responders, law enforcement, and health officials.

Early in the emergency situation you will have more options for response and a greater chance for minimizing damages. The ERP will identify the steps to be taken in order of priority when the emergency is first recognized.

Developing Your ERP

Eight core elements have been established to ensure that your ERP contains the information necessary to efficiently respond to any kind of emergency. Additional information and a more detailed discussion of each element is available on the EPA Water Security Website (http://epa.gov/safewater/watersecurity).

Your ERP should be a "living document." It should be reviewed on an on-going basis and updated at least annually. Make sure it's available in hard copy print in strategic locations within your system.

Eight Core Elements of an ERP

1. *System Specific Information (such as maps, "as-built" drawings, operations manuals, etc.)*
2. *System Roles and Responsibilities, (including chain of command and contact information)*
3. *Communication Procedures – Who, What, and When*
4. *Personnel Safety*
5. *Identification of Alternative Water Sources*
6. *Replacement Equipment and Chemical Supplies*
7. *Property Protection*
8. *Water Sampling*

Developing Partnerships

In developing an ERP, you should identify and form partnerships with the people and organizations whose help your system will need in an emergency, including:

- Local police and fire departments
- Public health officials
- Local Emergency Planning Committees
- Local government/city managers
- State and federal agencies
- Nearby water utilities (for developing interconnections and mutual aid agreements)
- Health care providers
- Equipment suppliers
- News media

Forming effective partnerships with organizations and individuals will help you better develop the core elements of your ERP and better coordinate emergency activities when the ERP is put into action. The partnerships also will help everyone become better prepared for emergency response.

Local Emergency Planning Committees (LEPCs)

Many Montana communities have an LEPC made up of representatives of the municipal government, fire department, hospitals, environmental organizations, citizen groups, law enforcement and other emergency response officials, industry, and other interested parties. You should work closely with the LEPC when developing your ERP. Doing so will help ensure that your response to any emergency is coordinated as efficiently as possible.

National Incident Management System (NIMS)

Your system should be compliant with the NIMS Incident Command System (ICS) which is the standard organizational structure for all major domestic incidents. It helps to coordinate the efforts of many emergency responders. NIMS will enable responders at all levels to work together to effectively manage domestic incidents no matter what the cause, size, or complexity. You can obtain more information on NIMS and the NIMS ICS from FEMA at http://www.fema.gov/nims. Federal preparedness funding is contingent upon full NIMS compliance.

Water/Wastewater Agency Response Network (WARN)

The Montana Water and Wastewater Critical Infrastructure Committee is working to establish a regional or statewide Water/Wastewater Agency Response Network (WARN). WARN facilitates a utilities-helping-utilities approach to providing assistance during times of crisis. By establishing mutual aid agreements before a crisis occurs, WARN participants pave the way for member utilities within (and outside) of their respective states to send valuable aid in a quick and efficient manner.

Action Plans

An Action Plan provides your system with immediate responses to specific types of emergencies. The Action Plans that you develop should complement the general activities outlined in the core elements of your ERP and should be tailored to specific events (e.g., floods, tornadoes). Action Plans should be short and concise "rip and run" documents that can be detached from your ERP and taken into the field by emergency responders. The activities listed in the Action Plans should complement actions already initiated under your ERP.

Training, Exercises, and Drills

The purpose of the plan is to be prepared for an emergency. Simply writing an ERP and putting the plan on a shelf will not meet these goals. Training in how to use your ERP is just as important as developing and updating the plan. Even the best ERP will be difficult to implement during an emergency if people do not know their responsibilities. You should regularly practice implementing your ERP. Orientation exercises, table-top workshops, functional exercises, and full-scale drills are all ways in which you can help to make sure that your well-planned ERP is executed properly and efficiently when a real emergency arises. Make sure to include emergency partners in the training process.

Resources

- For your assistance, EPA has prepared a Protocol Toolbox for Emergency Response that describes the steps to be taken in the case of various emergencies. The toolbox is available at EPA's Water Security Website http://epa.gov/safewater/watersecurity
- DEQ Security and Emergency Preparedness Coordinator (phone: 406-755-8958)
- Statewide WARN Network (available February 2009)
- MT DEQ Security website http://deq.mt.gov/wqinfo/pws/securitylinks.asp
- EPA, Local Emergency Planning Committee database, http://yosemite.epa.gov/oswer/lepcdb.nsf/HomePage?openForm