Emergency Planning for Public Water Systems

New Hampshire Administrative Rule Env-Dw 503.21 requires all community public water systems to have a formal emergency plan. These plans are action steps to follow in the event that a source of drinking water becomes contaminated or any other component of the storage or distribution system becomes damaged or is at risk. Completion of an emergency plan is a significant endeavor, but one that can benefit the system and its users by minimizing disruptions in service in the event of an emergency.

**Rule Requirements**

Env-Dw 503.21 requires that all community water systems submit a formal plan to NHDES once every six years beginning in March 2003. It further requires that the plan be reviewed annually by the system and updated as needed. Additionally, the plan will be subject to review during each sanitary survey, and lack of a current plan will be a survey deficiency.

**Bureau Actions to Foster Emergency Planning**

To aid water systems in preparing an effective emergency plan, NHDES has developed an Emergency Planning Guide, which is intended to help water system planners understand and meet the basic standards for an emergency plan as set forth in Env-Dw 503.21. The guide illustrates the content and format of a basic plan. By following these guidelines, you are assured a thorough emergency plan.

**Assistance in Plan Development**

Developing a plan that meets NHDES requirements should require minimal time and only in-house resources. Some systems may decide to develop, implement, or maintain their plans at a more advanced level. Technical assistance is available from a variety of technical assistance providers such as NHDES, Granite State Rural Water Association and RCAP Solutions, Inc.

**Components of a Basic Plan include:**

- **Chain of Command:** To identify who is responsible for making decisions during an emergency and outline each person’s responsibilities during an emergency.

- **Notification Procedures:** To identify who will be contacted and how during an emergency, and details for boil orders, critical users and mutual aid agreements.
**System Components:** Accurate, up-to-date information about a system’s facilities, equipment, design, and record drawings. This will facilitate repair during an emergency and help assess a system’s vulnerability to emergencies.

**Alternate Water Sources:** Identifies how a system might obtain water from outside sources, or modify treatment capabilities to meet basic water needs during an emergency.

**Alternate Power Supply:** Details regarding available alternate power supplies.

**Water Use Restrictions:** Steps that could be taken to cope with losses of source capacity.

**Return to Normal Operation:** Follow-up actions and staff responsibilities to return to normal system function.

**Plan Readiness and Training:** Access to the plan, rehearsals and special staff training or certifications such as incident command system training.

**Risk Assessments**
Although not required as part of the emergency plan, a risk assessment should be performed by every water system. Some emergencies are caused by reasons beyond the control of the water system, such as floods, sabotage, ice storms, earthquakes, droughts and power outages. Other emergencies may be preventable. Age and obsolescence of equipment, lack of equipment, poor maintenance, poor system design, lack of spare parts, high-risk or ill advised land uses near sources of water, and lack of source protection efforts are all preventable factors that can cause water system emergencies. Each system should assess its potential susceptibility to unpreventable and preventable emergencies and consider the impact of each identified vulnerable factor to the supply, storage, distribution and cyber components of the system. Reducing a system’s vulnerability to emergencies is a key element of any emergency plan.

**Practicing the Plan**
For an emergency plan to be effective, the staff must have a clear understanding that management supports the plan. Systems should occasionally practice scenarios to evaluate actual system readiness. A practice scenario would be created and would then be acted out. The system should then evaluate staff actions and make any necessary changes to the plan to address observed problems.

**For More Information**
Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at des.nh.gov.

Note: This fact sheet is accurate as of July 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.