America's Water Infrastructure Act of 2018: Risk Assessments and Emergency Response Plans

On October 23, 2018, America's Water Infrastructure Act (AWIA) was signed into law. The law requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and emergency response plans (ERPs). The law specifies the components that the risk assessments and ERPs must address and establishes deadlines by which water systems must certify to EPA completion of the risk assessment and ERP.

Water Systems with a population of 3,301-49,999 must submit a Risk Assessment by June 30, 2021 and an Emergency Response Plan by December 30, 2021. Emergency response plan certifications are due six months from the date of the risk assessment certification. Therefore, the dates shown above are certification dates based on a utility submitting a risk assessment on the final due date.

Risk and Resilience Assessment Requirements

Each community water system serving a population of greater than 3,300 persons shall assess the risks to, and resilience of, its system. Such an assessment shall include:

1. the risk to the system from malevolent acts and natural hazards;
2. the resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;
3. the monitoring practices of the system;
4. the financial infrastructure of the system;
5. the use, storage, or handling of various chemicals by the system; and
6. the operation and maintenance of the system.

The assessment may include an evaluation of capital and operational needs for risk and resilience management for the system.

Emergency Response Plan Requirements

No later than six months after certifying completion of its risk and resilience assessment, each system must prepare or revise, where necessary, an emergency response plan that incorporates the findings of the assessment. The plan shall include:

1. strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;

2. plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
3. actions, procedures and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes and construction of flood protection barriers; and
4. strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

Community water systems shall to the extent possible coordinate with local emergency planning committees established under the Emergency Planning and Community Right-To-Know Act of 1986 when preparing or revising an assessment or emergency response plan under the AWIA. Further, systems must maintain a copy of the assessment and emergency response plan for five years after certifying the plan to the EPA.

Certification Process

The EPA is currently developing a process for community water systems to certify completion of risk assessments and emergency response plans. Three options will be provided for risk assessment and emergency response plan certification submittals:

1. regular mail
2. email
3. user-friendly, secure online portal.

Contact information for each option will be available no later than August 1, 2019.

Third-Party Standards

The EPA does not require water systems to use any designated standards, methods or tools to conduct the risk and resilience assessments or to prepare the emergency response plans required under AWIA Section 2013. Rather, community water systems must conduct risk and resilience assessments and prepare emergency response plans that meet the specific requirements outlined under AWIA Section 2013.

Community water systems may use any standards, methods or tools that aid the system in meeting the requirements of AWIA Sections 2013(a) and (b). However, regardless of the use of any standard, method or tool, the community water system is responsible for ensuring that its risk and resilience assessment and emergency response plan fully address all AWIA requirements.

Five-year Review, Revision and Certification Requirements

Each community water system serving more than 3,300 persons must review its risk and resilience assessment at least once every five years to determine if it should be revised. Upon completion of such a review, the system must submit to the EPA a certification that it has reviewed its assessment and revised it, if applicable.

Further, each community water system serving more than 3,300 persons must review and, if necessary, revise its emergency response plan at least once every five years after the system completes the required review of its risk and resilience assessment. The emergency response plan must incorporate any revisions to the risk and resilience assessment. Upon completion of such a review, but not later than six months after certifying the review of its risk and resilience assessment, the system must submit to the EPA a certification that it has reviewed its emergency response plan and revised it, if applicable.

Final Disposition of Bioterrorism Act Vulnerability Assessments

Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act) amended the Safe Water Drinking Act by adding new sections 1433 through 1435 pertaining to improving the security of the nation's drinking water infrastructure. Section 1433 of the Bioterrorism Act required each community water system serving a population greater than 3,300 persons to conduct a vulnerability assessment, certify completion of its assessment and submit a written copy to the EPA where it would be stored in a secure location. These assessments are now greater than 10 years old and therefore pursuant to EPA's Records Management Policy, the EPA can retire the certifications and assessments.

The EPA intends to retire the vulnerability assessments. Utilities may request the EPA return their vulnerability assessments in lieu of destruction. If utilities wish their documents returned, they may submit a letter to the EPA by email. Please email the request letter to WSD-Outreach@epa.gov on utility letterhead and include the following information: utility name, PWS ID#, address and point of contact information for the individual who will be responsible for receiving the vulnerability assessment. To request the return of the vulnerability assessment prior to destruction, the community water system will need to make the request not later than the initial date by which the community water system must certify a risk and resilience assessment to EPA as required under Section 1433(a) of the Safe Drinking Water Act as amended by section 2013 of AWIA.

Training

The EPA is currently developing a comprehensive training schedule, which will include both classroom and webinar options. Please stay tuned for more information.

Steps to Achieve Drinking Water Resilience in Your Utility:

1. Assess
    a. Conduct a risk assessment
    b. Learn financial and health impacts of a water disruption
    c. Create resilient water utilities
    d. Adopt cybersecurity best practices
2. Plan
    a. Develop emergency response plans
    b. Build hazard resilience
    c. Build relationships in your community
    d. Share resources during an emergency
3. Train
    a. Access the All-Hazards Boot Camp
    b. Develop a training and exercise plan
    c. Conduct tabletop exercises
    d. Find training opportunities
4. Respond
    a. Response On-The-Go Tool
    b. Print a checklist to help you respond
    c. Monitor severe weather
5. Recover
    a. Find federal funding for your utility
    b. Decontamination resources
    c. Get reimbursement tips
    d. Learn about the Public Assistance Program
6. Surveillance
    a. Learn about water quality surveillance
    b. Learn from other utilities
    c. Access training resources
7. Laboratory Resources
    a. Accessing Laboratory Support
    b. Analytical Preparedness Self-Assessment (APS)
    c. Practice Analytical Response (AP-FSE Toolkit)
    d. Participate in Trainings
    e. Discover Decontamination Resources