Complying with Risk Assessment and ERP Requirements under America’s Water Infrastructure Act

February 13, 2019
About WaterISAC

- Established in 2002 at the urging of the White House, US EPA and the FBI
- Non-profit; dues-based
- Created by and for the water and wastewater sector
- Membership open to:
  - Water and wastewater utilities
  - Consulting and engineering firms
  - State/provincial and federal agencies
  - Law enforcement, fusion center and homeland security personnel
Supporting Organizations
Mission

• To help build secure and resilient utilities
  • Physical
  • Cyber
  • Natural and man-made threats
Polls
Recording & Slide Deck

• Available Feb. 14
• www.waterisac.org/awia
How to Ask a Question

Type and send
AWIA (Public Law No: 115-270)

• AWIA amends the Safe Drinking Water Act (SDWA)
• AWIA Section 2013 amends SDWA Section 1433
  – Risk and resilience assessments
  – Emergency plans
Agenda

• David Travers and Dan Schmelling, US EPA
  – Risk assessment and ERP provisions of AWIA
  – EPA AWIA resources
• Kevin Morley, AWWA
  – Risk assessments, J100 and other AWWA resources
• Mikko McFeely, WaterISAC
  – Other available resources
AWIA 2018: Risk Assessments and Emergency Response Plans
Overview

AWIA Section 2013 (a) – (f)

• Replaces SDWA Section 1433 (from 2002 Bioterrorism Act)
• Applies to all community water systems serving more than 3,300 people
• Conduct Risk and Resilience Assessments and update Emergency Response Plans
• Submit **certifications to EPA** by specified deadlines
• Review risk assessments and ERPs every five years
• Coordinate with local emergency planning committees
• Maintain records
Risk and Resilience Assessments

• Consider risks from malevolent act and natural hazards

• Include:
  - Pipes/conveyances, source water, water collection/intake, pretreatment, treatment, storage and distribution, electronic, computer, or other automated systems (including security);
  - Monitoring practices;
  - Financial infrastructure;
  - Use, storage or handling of chemicals;
  - Operation and maintenance; and
  - May include capital and operational needs for risk management
Emergency Response Plans

• Prepare or revise an ERP that incorporates findings from the risk assessment

• Include:
  - Strategies and resources to improve resilience, including physical security and cybersecurity;
  - Plans, procedures, and equipment for responding to a malevolent act or natural hazard;
  - Actions, procedures, and equipment to lessen the impact of a malevolent act or natural hazard, including alternative source water, relocation of intakes, and flood protection barriers;
  - Strategies to detect malevolent acts or natural hazards.
Coordination

• Coordinate with local emergency planning committees when preparing or revising the risk assessment and ERP
  o EPA recommends coordination with federal, state, local, and private sector partners

Record Maintenance

• Maintain the risk assessment and ERP for 5 years after the due date for certification
Certification

• Each CWS must certify to EPA that the CWS completed the risk assessment and ERP
  ➢ Do NOT send the actual risk assessment or ERP!
  ➢ Include only the CWS name, date of completion, and statement of completion
  ➢ EPA will provide an optional certification template for the risk assessment and ERP
Certification Due Dates

Risk Assessment

- Population served ≥100,000
  - Due date: March 31, 2020

- Population served 50,000-99,999
  - Due date: December 31, 2020

- Population served 3,301-49,999
  - Due date: June 30, 2021

ERP

- Certify ERP not later than 6 months after completion of the risk assessment
Submittal of Certifications

• EPA will provide three options for submittal:
  1) Regular mail
  2) Email
  3) Secure online portal
    ▶ Under development
    ▶ Will provide online receipt

• Detailed information on submittal procedures will be provided by August 1, 2019
  o Baseline threat information, plus risk assessment and ERP tools, will be published by this date

• EPA requests that all CWS wait until after August 1, 2019 to submit risk assessment and ERP certifications
5 Year Review and Revision

• Each CWS must review and, if necessary, revise the risk assessment every five years after the certification deadline
  ➢ Submit a certification to EPA that the CWS has reviewed and, if applicable, revised the risk assessment

• Each CWS must review and, if necessary, revise the ERP every five years following review of the risk assessment
  ➢ Incorporate any revisions to the risk assessment into the ERP
  ➢ Submit a certification to EPA that the CWS has reviewed and, if necessary, revised the ERP not later than 6 months after the CWS has reviewed the risk assessment
Use of Previous Risk Assessment and ERP

• A CWS may use a risk assessment or ERP developed prior to enactment of the AWIA.

• To meet certification requirements, a previous risk assessment or ERP must:
  - Include all assessment or response components listed in the law; and
  - Reflect the current condition of the CWS.

• If required assessment or response components have been omitted, the CWS may add those components.

• If the CWS has undergone modifications, the CWS may update the risk assessment or ERP where needed.
Use of Standards and Tools

• EPA does not require the use any standards or tools to develop a risk assessments or ERP under AWIA
  o CWS are only required to follow the law

• The use of standards (e.g., AWWA methods) and tools from EPA and others is recommended
  o Methods and tools can facilitate the development of sound risk assessments and ERPs

• No method or tool “guarantees” compliance with AWIA
  o The CWS must ensure it complies with all AWIA requirements
  o Alternate methods cannot be used in place of AWIA requirements
# EPA Risk Assessment and ERP Products for AWIA Compliance (1)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Availability (projected)</th>
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<tbody>
<tr>
<td>Federal Register Notice</td>
<td>• AWIA requirements and EPA implementation planning</td>
<td>Mar 31, 2019</td>
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<tr>
<td>Compliance Fact Sheet</td>
<td>• User-friendly version of requirements, EPA compliance planning and tools</td>
<td>April 15, 2019</td>
</tr>
<tr>
<td>Technical Assistance Primer</td>
<td>• Information on certification reporting, FAQs, and compliance support and tools</td>
<td>June 1, 2019</td>
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<tr>
<td>Baseline Threat Information</td>
<td>• Baseline information on malevolent acts relevant to CWSs</td>
<td>August 1, 2019</td>
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### EPA Risk Assessment and ERP Products for AWIA Compliance (2)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Availability (projected)</th>
</tr>
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<tbody>
<tr>
<td>VSAT 2.0 and ERP Tool</td>
<td>• Assist with development of AWIA compliant risk assessment and ERP</td>
<td>Aug 1, 2019</td>
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<tr>
<td>Webinars</td>
<td>• Training on AWIA compliance, certification procedures, EPA tools</td>
<td>Aug 1, 2019</td>
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<tr>
<td>Guidance to Small Water Systems</td>
<td>• Guidance on risk assessment and ERP for water systems under 3,300 people</td>
<td>Oct 1, 2019</td>
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<tr>
<td>Videos</td>
<td>• Overview of compliance requirements and procedures, 5-year review cycle</td>
<td>Oct 1, 2019</td>
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<tr>
<td>Ongoing Outreach</td>
<td>• Engage states, associations, and private sector on implementation</td>
<td>Ongoing</td>
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<td></td>
<td>• Updated informational website</td>
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<td>• Conference presentations, social media</td>
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Stay Tuned For Updates!


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 includes 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.

EPA’s Water Security Division is currently working to develop the tools, resources and procedures that water systems need to comply with Section 1433 of the AWIA. This site will be updated with new information as that work progresses.
Contact Us

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America’s Water Infrastructure Act of 2018: Understanding New Risk & Resiliency Requirements

Kevin Morley
Manager of Federal Relations
AWWA
§2013 Community Water System Risk & Resilience

<table>
<thead>
<tr>
<th>BT Act 2002</th>
<th>AWIA 2018</th>
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<tbody>
<tr>
<td>Vulnerability Assessment (VA)</td>
<td>Risk &amp; Resilience Assessment</td>
</tr>
<tr>
<td>Terrorism or Intentional Act</td>
<td>All-Hazard</td>
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<tr>
<td>Submit VA to EPA</td>
<td>Submit letter to EPA</td>
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<tr>
<td>Emergency Response Plan</td>
<td>Prepare/Update &amp; Submit letter to EPA</td>
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<td>⭐ Directs EPA to recognize voluntary consensus standards</td>
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<td>⭐ Directs EPA to provide baseline threat info</td>
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AWWA Risk & Resilience Resource Suite

AWWA Standard
- ANSI/AWWA J100-10 (R13) Risk & Resilience Management
- M19 Emergency Planning for Water and Wastewater Utilities
- ANSI/AWWA G300 Source Water Protection
- Operational Guide to AWWA Standard G300

Guidance Resources
- Planning for an Emergency Drinking Water Supply (EPA/AWWA)
- Selecting Disinfectants in a Security-Conscious Environment
- Cybersecurity Guidance & Use-Case Tool
- Emergency Power Source Planning for Water and Wastewater
- Emergency Water Supply Planning Guide (CDC/AWWA)
Current Applications of J100

- DC Water
- Washington Suburban Sanitary Commission
- City of Richmond (VA)
- Gwinnett County (GA)
- City of Chicago, Dept of Water Management
- Long Beach Water Department
- American Water - Delran System (NJ)
- Minneapolis
- Sacramento
- Nashville
- City of Westminster (CO)
## §2018 Source Water

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<tr>
<th>Timeframe</th>
<th>Key Implications</th>
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<tr>
<td>Effective</td>
<td>State must promptly notify a community water system of a release impacting source waters</td>
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<tr>
<td>Immediately</td>
<td>Access to EPCRA Tier II data from any facility within a delineated source water area</td>
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Additional Supporting Resources

- EPA: United States Environmental Protection Agency
- WATER ISAC
- WARN: Water/Wastewater Agency Response Network
- FEMA
- ICS-CERT: Industrial Control Systems Cyber Emergency Response Team

Local Emergency Management
Local/State Law Enforcement
State Primacy Agency
Questions

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www.awwa.org/risk
www.awwa.org/resilience
www.awwa.org/cybersecurity
www.NationalWARN.org
WaterISAC Resources

• WaterISAC AWIA page (work in progress)
  – waterisac.org/awia
  – Links to information about AWIA, RRAs & ERPs
• Future webinars on development of assessments and ERPs
• Threat information (members only)
• 15 Fundamental Cybersecurity Measures for Water and Wastewater Systems (May 2019)
DHS Programs

• On-site cybersecurity assessments
• Cyber Security Evaluation Tool (CSET)
• Cyber Resilience Review
What resources do you use?

• Email WaterISAC the resources you turn to for guidance on developing risk assessments and emergency response plans.
How to Ask a Question

Type and send

[Enter a question for staff]
Contact info

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