



Malevolent Act Resources

Resources to aid water utility preparation and response to malevolent acts including tampering, vandalism, and terrorism events

This document provides a list of resources and tools to help water utility systems prepare for and respond to, malevolent acts including vandalism, tampering, violent acts, cybersecurity attacks, and terrorism attacks, that pose a threat to water/wastewater utilities.

Notes on the use of this document:

- To help find the topic you are interested in, please use the search function on your computer by typing Control+F and search for keywords.
- Some pdfs have bookmarks. These can help to navigate the document by topics or sections. To open bookmarks:
 - Download the document using your PDF reader.
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 - If you do not see the bookmark icon on the side of your screen click: View -> Show/Hide -> Navigation panes and select the bookmark icon.

Resource or tool	Notes on use and helpful tips
Templates and guidelines	
American Society of Civil Engineers (ASCE) - Guidelines for the Physical Security of Water Utilities https://nepis.epa.gov/Exe/ZyPDF.cgi/60000RBW.PDF?Dockey=60000RBW.PDF	- The guidelines detail physical security measures water utilities can take to secure their facilities and assets. - The guidelines also looks at the various elements of physical protection systems: - Deterrence. - Detection. - Delay. - Response.
Environmental Protection Agency (EPA) - Guidance for Building Field Capabilities to Respond to Drinking Water Contamination https://www.epa.gov/sites/production/files/2017-01/documents/field_capabilities_guidance_january2017.pdf	Development of field capabilities, using rapid sampling and analysis techniques, is crucial to respond to possible or credible threat drinking water contamination events. The guidance will assist in developing these crucial capabilities for your system.
EPA - Water Quality Surveillance and Response System: For Distribution System Monitoring and Management	Surveillance and Response Systems (SRS) are designed to help drinking water facilities monitor and manage water quality in the distribution system.

https://www.epa.gov/sites/production/files/2015-06/documents/srs_fact_sheet.pdf	• The tool will create better detection of a potential contamination event by helping design an SRS that meets the needs of individual drinking water systems.
EPA - Drinking Water and Wastewater Utility Response Protocol Toolbox https://www.epa.gov/waterutilityresponse/drinking-water-and-wastewater-utility-response-protocol-toolbox#DWRPTB	• The two toolboxes help drinking water and wastewater utilities address contamination events at the utility and within the distribution and collection systems. • Each toolbox contains modules that provide guidance for: ◦ Contamination threat management. ◦ Site characterization and sampling ◦ Analytical practices. ◦ Public health/ environmental impact response. ◦ Remediation and recovery.
EPA - Criminal Provisions of the Safe Drinking Water Act https://www.epa.gov/enforcement/criminal-provisions-safe-drinking-water-act-sdwa	• The website provides a general description of the criminal provisions under the Safe Drinking Water Act (SDWA) include those for: ◦ Tampering with Public Water Systems. ◦ Willful Violations of Underground Injection Control (UIC) Program. • The definitions may help in deterring and holding accountable any potential actors.
EPA - Criminal Provisions of Water Pollution https://www.epa.gov/enforcement/criminal-provisions-water-pollution#endangerment	• General descriptions of the criminal provisions related to water pollution. The definitions may help in deterring and holding accountable any potential actors.
EPA - Incident Action Checklists for Water Utilities https://www.epa.gov/waterutilityresponse/incident-action-checklists-water-utilities	• The action-oriented checklists help utilities to prepare, respond, and recover to many emergency events including: • Power outage. • Cybersecurity threat. • Pandemic.
CISA - Insider Threat Mitigation https://www.cisa.gov/insider-threat-mitigation	• The website provides helpful resources and education about insider threats and how to protect your facility against them.
Mutual aid and assistance	

Colorado's Water/Wastewater Agency Response Network (CoWARN) website http://www.cowarn.org/	• CoWARN provides water and wastewater utilities with the platform and resources to help other utilities in times of emergency events. It includes: • A Mutual Aid Agreement and process for sharing emergency resources among water and wastewater agencies statewide. • The resources to respond and recover more quickly from a natural or human caused disaster. • A mutual assistance program consistent with other statewide mutual aid and assistance programs and the National Incident Management System. • A forum for developing and maintaining emergency contacts and relationships.
EPA - Mutual Aid and Assistance for Drinking Water and Wastewater Utilities website https://www.epa.gov/waterutilityresponse/mutual-aid-and-assistance-drinking-water-and-wastewater-utilities	• Water and Wastewater Agency Networks (WARNs) are networks of “utilities helping utilities.” The website contains resources to assist your utility to access WARN resources and training tools from across the country.
Colorado Special Districts Property and Liability Pool https://csdpool.org/	• Member-owned and member-focused, this insurer helps special districts of Colorado understand their coverage, manage the claims process, and advance their safety goals.
Colorado Intergovernmental Risk Sharing Agency (CIRSA) https://www.cirsa.org/	• CIRSA offers a variety of activities, including risk management, insurance coverages, claims, legal and financial issues.
Training	
Federal Emergency Management Institute (FEMA) - Critical infrastructure security and resilience free courses https://training.fema.gov/is/cisr.aspx	• The Department of Homeland Security (DHS) Office of Infrastructure Protection (IP) developed the following courses to train and educate the critical infrastructure community. • Courses offered are broken into three categories:

	• Foundational courses. • Security awareness courses. • Sector specific courses.
EPA - Water quality surveillance and response system free webinars https://www.epa.gov/waterqualitysurveillance/water-quality-surveillance-and-response-system-webinars	• The website provides free webinars designed to build SRS capabilities in drinking water systems by looking at the following areas: ○ Online water quality monitoring. ○ Physical security monitoring. ○ Customer complaint surveillance. ○ Public health surveillance. ○ Sampling and analysis. ○ Consequence management.