

WATER INFRASTRUCTURE SECURITY:

VULNERABILITY ASSESSMENTS AND EMERGENCY RESPONSE PLANS

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (www.epa.gov/safewater/security/security_act.pdf) amends the Safe Drinking Water Act (www.epa.gov/safewater/sdwa/sdwa.html) and specifies actions community water systems and the U.S. Environmental Protection Agency (EPA) must take to improve the safety and security of the nation's drinking water infrastructure.

Information for this newsletter is from EPA's website, www.epa.gov/safewater/security/index.html, most recently updated on March 17, 2003.

Security Improvement Requirements

The Act requires every community water system that serves more than 3,300 persons to:

1. Conduct a vulnerability assessment (VA) that will
 - characterize the water system, including its mission and objectives;
 - identify and prioritize adverse consequences to avoid;
 - determine critical assets that might be subject to malevolent acts that could result in undesired consequences;
 - assess the likelihood (qualitative probability) of such malevolent acts from adversaries;
 - evaluate existing countermeasures; and analyze current risk and develop a prioritized plan for risk reduction.

2. Certify and submit a copy of the assessment to EPA.
3. Prepare or revise an emergency response plan that incorporates the results of the vulnerability assessment.
4. Certify to EPA, within 6 months of completing the vulnerability assessment, that the system has completed or updated the emergency response plan.

Water utilities serving more than 3,300 people must assess the vulnerability of the infrastructure to intentional threats and natural disasters, improve security and prepare an emergency response plan, and submit these to EPA.

Training

Security Planning for Drinking Water Systems: An Operational Approach - The American Water Works Association (AWWA) hosts this online water security course designed to help water systems evaluate and prepare appropriate security measures. Hypothetical hazardous situations are addressed, and step-by-step checklists are offered to keep utilities, and their customers, safe from possible harm. Contact AWWA's online program at online@awwa.org for further information and registration instructions.

Emergency Response Planning: Counter Terrorism and Security in the Water Industry - This is a web-cast training presentation that emphasizes identifying and contacting resources available to support a utility's security efforts. The Power Point presentations are available at www.greenworks.tv/events/awwawebcast.htm.

Security Risk Assessment for Water Utilities - This satellite teleconference, available at www.greenworks.tv/events/watersecuritywebcast112701.htm, details what constitutes an effective vulnerability assessment for water utilities. Videotapes are available through AWWA for \$40, Catalog No. 65233: www.awwa.org/communications/offer/secureresources.cfm

Vulnerability Assessment Tools

EPA's Vulnerability Assessment Fact Sheet describes the purpose and six basic elements of vulnerability assessments to help water systems evaluate potential threats and identify corrective actions to prepare for and respond to an attack. See www.epa.gov/safewater/security/va_fact_sheet_12-19.pdf.

The Association of Metropolitan Sewerage Agencies (AMSA), in cooperation with EPA, developed and released two Vulnerability Self

Assessment Tools (VSAT™), one for joint water/wastewater utilities and another for small-medium sized water utilities. VSAT™ water/wastewater provides online vulnerability assessment capabilities to utilities providing both wastewater treatment and water supply services. A new VSAT™ water, for both public and private systems, is available. These software tools provide a user-friendly approach to evaluate, prioritize and remediate vulnerabilities based upon five critical utility assets – physical plant, information technology, knowledge base, employees and customers. To order these software tools, visit the VSAT™ user site at www.vsatusers.net. To learn more about the VSAT™ initiative, visit AMSA's web site at www.amsacleanwater.org and click on the Security icon.

The Awwa Research Foundation (AwwaRF) has just released the second edition of Risk Assessment Methodology for Water Utilities (RAM-W), a methodology for conducting vulnerability assessment programs for drinking water utilities. The methodology is only available to relevant stakeholders in the water supply community and is subject to strict nondisclosure requirements. Relevant stakeholders include personnel at drinking water utilities, consulting engineers working for drinking water utilities, EPA,

state drinking water program regulatory personnel, and others providing security for drinking water utilities. AwwaRF is providing copies of the methodology free of charge to its subscribers. All other relevant stakeholders may obtain a copy from the American Water Works Association (product number 20529) for \$85 plus shipping and handling. To request ordering information, contact Eric Lovick at (303) 734-3441.

A vulnerability assessment guide for community drinking water systems serving between 3,300 and 10,000 people, available at www.asdwa.org/, is designed to help these systems complete vulnerability assessments required under the Act. The updated guide was developed by the Association of State Drinking Water Administrators (ASDWA) and the National Rural Water Association (NRWA) to meet the basic requirements of a vulnerability assessment and will help small drinking water systems assess their critical components and identify security measures that should be implemented. The Security Vulnerability Self-Assessment Guide for drinking water systems serving fewer than 3,300 remains available on the same Web site. Small drinking water systems serving populations of fewer than 3,300 people are not required to complete vulnerability assessments and can continue to use this guide.

Compliance Instructions

EPA's document, www.epa.gov/safewater/security/util-inst.pdf, describes what a water system must do to comply with the Act, the deadlines based on system size, how to determine system size, how to certify and submit the package to EPA, and whom to contact for more information. Compliance deadlines are listed below.

Further Information

For further information to prepare and to comply with these requirements, contact CET:

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email: astabile@cet-inc.com

ONLOT SYSTEM MANAGEMENT GUIDELINES

EPA has developed a guidance document to enhance the performance and reliability of decentralized and onlot wastewater treatment systems through improved management. Suggested local management programs include homeowner awareness, maintenance contracts, operating permits, operation and maintenance, and management ownership. The Onlot Management Guidelines are available at www.epa.gov/owm/onsite.

WATER INFRASTRUCTURE SECURITY: COMPLIANCE DEADLINES

Systems serving populations of:	Certify and submit Vulnerability Assessment (VA) by:	Certify Emergency Response Plan within 6 months of VA but no later than:
100,000 or greater	March 31, 2003	September 30, 2003
50,000 - 99,999	December 31, 2003	June 30, 2004
3,301 - 49,999	June 30, 2004	December 31, 2004

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