

Useful Sources of Homeland Security Information

ISAWWA Safety & Emergency Planning Committee



Introduction

- This session will provide key sources of information related to water sector security policies and implementation
- Key Legal Requirements and Policies
- Technical Requirements
- Security Systems Information sources



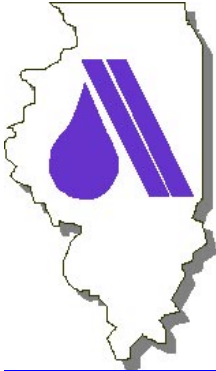
Agenda

- Key legal requirements
 - Federal, State and Local
- Federal, state and local sources of information
- Technical resources for security systems implementation



Vocabulary

- ISAC – Information sharing and analysis center
- VA – Water system security vulnerability assessment
- ERP – Water system emergency response plan
- FEMA – Federal Emergency Management Agency
- LEPC – Local emergency planning committee
- NIPC - National Infrastructure Protection Center



Legal Requirements Prior to 9/11

- Presidential Decision Directive 63 - 1998

- <http://www.fas.org/irp/offdocs/pdd/pdd-63.htm>



Current Legal Requirements

- Public Health Security and Bioterrorism Preparedness and Response Act of 2002.
 - The Bioterrorism Act is divided into five titles:
 - Title I - National Preparedness for Bioterrorism and Other Public Health Emergencies
 - Title II - Enhancing Controls on Dangerous Biological Agents and Toxins
 - Title III - Protecting Safety and Security of Food and Drug Supply
 - **Title IV - Drinking Water Security and Safety**
 - Title V - Additional Provisions
 - <http://www.fda.gov/oc/bioterrorism/bioact.html>



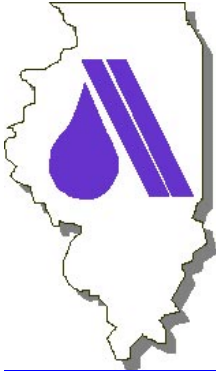
Legal Requirements

● **Bioterrorism Act of 2002.**

TITLE IV--DRINKING WATER SECURITY AND SAFETY

- Sec. 401. Terrorist and other intentional acts.
- Sec. 402. Other Safe Drinking Water Act amendments.
- Sec. 403. Miscellaneous and technical amendments.
- <http://www.fda.gov/oc/bioterrorism/PL107-188.html#title4>

Legal Requirements

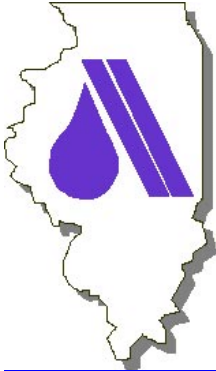


- **Bioterrorism Act of 2002.**

Sec. 401. Terrorist and other intentional acts.

- **Vulnerability Assessment Certification Deadlines:**
 - (A) **March 31, 2003, systems serving a population of 100,000 or more.**
 - (B) **December 31, 2003, systems serving a population of 50,000 or more but less than 100,000.**
 - (C) **June 30, 2004, in the case of systems serving a population greater than 3,300 but less than 50,000.**

Legal Requirements



- **Bioterrorism Act of 2002.**

Sec. 401. Terrorist and other intentional acts.

- **Emergency Response Plan (ERP)** Each water system serving > 3,300 shall prepare or revise an ERP that incorporates the results of VA
- **ERP Certification Deadline. Not later than 6 months after the completion of the VA**
 - (A) = or > 100,000 **Sept 30, 2003**
 - (B) = or > 50,000 but < 100,000 **June 30, 2004**
 - (C) > 3,300 but < 50,000 **December 31, 2004**



Legal Requirements

- **Bioterrorism Act of 2002.**

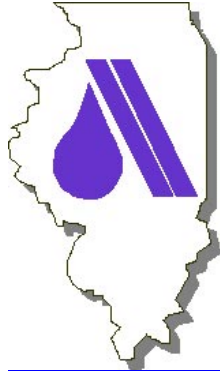
What if your utility used to served less than 3,300 and now is serving more than 3,300?

Do you have to have a VA and ERP?



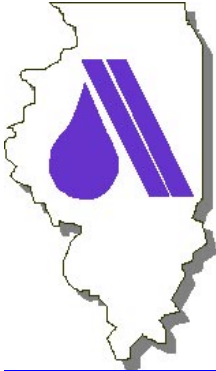
VA INFORMATION SOURCES

- **VSAT – Vulnerability Self Assessment Tools - AMSA**
- **Guide for Small wastewater systems – NETCSC**
- **Video: Security Vulnerability Assessment for Water Systems –NESHTA**
- **Self Assessment Guide for Very Small <3,300 Systems**
 - ASDW and NRWA
- **RAM-W Risk Assessment Methodology for Water Utilities**
 - AwwRF



VA INFORMATION SOURCES – CONTINUED

- **Self Assessment Guide for Small Drinking Water Systems**
 - ASDW and NRWA
- **SEMS - Security and Emergency Management Systems**
 - NRWA
- **ASSET – Automated Security Survey & Evaluation Tool**
- <http://cfpub.epa.gov/safewater/watersecurity/>



ERP INFORMATION

- **ERP Table Top CD – EPA-817-C-05-001**
 - EPA
- **Wastewater ERP Guidance**
 - WERF (703) 684-2470
- **ERP Outline: Guidance in Complying with Bioterrorism Act**
 - EPA
- <http://cfpub.epa.gov/safewater/watersecurity/>



ERP INFORMATION - Continued

- **Instructions to Comply with the Bioterrorism Act**
 - EPA
- **Response Protocol Toolbox: Response Guidelines**
 - EPA
- **Response Protocol Toolbox for Planning and Responding to Contamination Threads and Incidents**
 - EPA
- **ERP Guidance for Small and Medium Systems**
 - EPA
- <http://cfpub.epa.gov/safewater/watersecurity/>



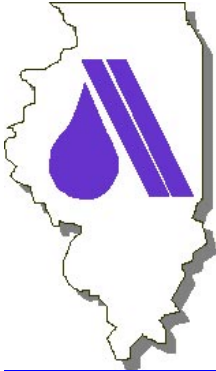
ERP INFORMATION - Continued

- **Emergency Planning Guide for Small Utilities Workbook and CD - ISAWWA & Midwest Technology Assistance Center.**
- **EPA Lab Compendium**
 - EPA
- **Top Ten List for Small Groundwater Suppliers**
 - EPA Region 1
- **PipelineNet – Integrated Water Quality Security System**
 - SAIC, FEMA, TSWG, EPA
- **<http://cfpub.epa.gov/safewater/watersecurity/index.cfm>**



ISAWWA – isawwa.org

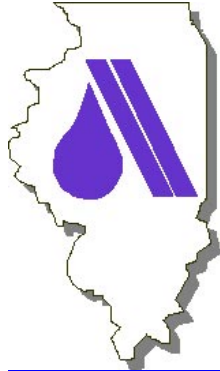
- **Seminars and training Courses on VA, ERP and Security Systems**
 - Aug 9 This Seminar
 - Aug 23 How to Conduct an Emergency Response Plan Tabletop Exercise - West Chicago, IL
 - Nov 9 Illinois Utility Safety Expo - Countryside, IL
- **Web site (Safety Tips, updated links and information)**



Security Systems

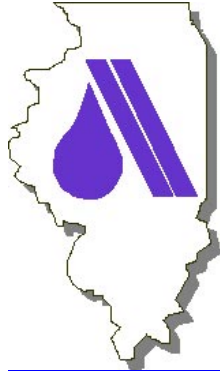
- **Communication/Integration**
 - Electronic Controllers
 - Supervisory Control and Data Acquisition (SCADA)
 - Wireless Data Communications
- **Cyber Protection Products**
 - Anti Virus and Pest Eradication Software
 - Firewalls
 - Network Intrusion Hardware/Software

<http://www.epa.gov/safewater/watersecurity/guide/index.html>



Security Systems - Continued

- **Physical Asset Monitoring and Control Products**
 - Alarms, Visual Surveillance Monitoring
 - Backflow Prevention Devices
 - Biometric Security Systems
 - Biometric Hand and Finger Geometry Recognition
 - Card Identification/Access Systems
 - Exterior Intrusion Buried-sensors
 - Fences, Locks, Manhole Intrusion sensors and Locks
 - Fire Hydrant Locks, Valve Lockout Devices
 - Ladder Access Control,
 - Reservoir Covers



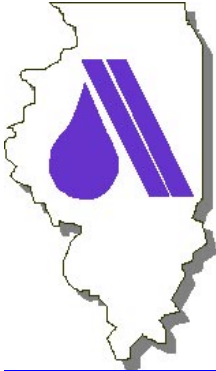
Security Systems - Continued

- **Water Monitoring Products**
 - Biological Sensors for Toxicity
 - Chemical Sensors – Arsenic, Chlorine, TOC
 - Adapted BOD analyzer
 - Sensor for monitoring Chemical, Biological and Radiological Contamination
 - Toxicity Monitoring
 - Radiation Detection Equipment
 - SCADA
- **<http://www.epa.gov/safewater/watersecurity/guide/tableofcontents.html>**



Funding

- Drinking Water State Revolving Fund
 - <http://www.epa.gov/safewater/dwsrf/security-fs.pdf>
- Clean Water Act Wastewater State Revolving Fund
 - <http://www.epa.gov/owm/cwfinance/cwsrf/security.pdf>
- Financing Security Hardware at Your Utility - August 10, 2005
 - <http://www.awwa.org/advocacy/learn/security/>



Summary

- Homeland Security Legal Requirements
- VA and ERP Information Sources
- Security Systems Information Sources
 - Communication / Integration
 - Cyber Protection Products
 - Physical Asset Monitoring and Control
 - Water Monitoring Products
- Funding



More Updated Information?

- Department of Homeland Security - <http://www.dhs.gov/dhspublic/>
- Water ISAC - <http://www.waterisac.org/>
- ISAWWA – www.isawwa.org
- AWWA – www.awwa.org
- AMWA - <http://www.amwa.net/security/>
- AWWA Research Foundation (AwwaRF) - www.awwarf.com
- Environmental Protection Agency (EPA) - www.epa.gov/safewater/security
- Centers for Disease Control & Prevention - www.bt.cdc.gov
- American Society of Industrial Security(ASIS) - www.asisonline.org



QUESTIONS?