Active and Effective Emergency Preparedness and Water Security Programs

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Outline

- Authorities/Responsibilities
- Features of an Active and Effective Emergency Preparedness and Security Program
- EWQSK
- Table-top Exercise Design
- CERC

Emergency Preparedness and Water Security Authorities and Responsibilities

- *California Government Code Section 8607.2 – Public Water System Plans -* "*All public water systems,… with 10,000 or more service connections shall review and revise their disaster preparedness plans in conjunction with related agencies, including but not limited to, local fire departments…*"

- Public Health Security and Bioterrorism Preparedness and Response Act of 2002 - Title IV (HR 3448) – "*All community water systems serving more than 3,300 population (1,000 service connections) shall prepare or revise an Emergency Response Plan that incorporates the results of vulnerability assessments (VA) that have been completed. The updated Emergency Response Plan shall be certified to EPA within 6 months of completing the vulnerability assessment.*"

- California Health and Safety Code, Sections 116460, 116555 and 116750 - *One of the operational requirements for a public water system is to "provide a reliable and adequate supply of pure, wholesome, healthful and potable water" (CA Health & Safety Code, Section 116555). Emergency Response Planning for both terrorist activities and natural disasters is an essential part of ensuring customers receive a reliable and adequate supply of potable water.*

Emergency Preparedness and Water Security Authorities and Responsibilities

- Homeland Security Presidential Directive 5: Management of Domestic Incidents

- Homeland Security Presidential Directive 7: Critical Infrastructure Identification, Prioritization, and Protection

- Homeland Security Presidential Directive 8: National Preparedness Goal

- Homeland Security Presidential Directive 9: Defense of United States Agriculture and Food

- Homeland Security Presidential Directive 10: Decontamination

Emergency Preparedness and Water Security Program Drivers

■ Terrorists or others seek to compromise water systems through physical destruction, contamination, and cyber intrusion

■ Vulnerability to natural disasters – earthquakes, fires, floods

■ The water sector lacks certain tools and information that are necessary for adopting effective countermeasures

■ The perception by some individuals that water security is a low priority

■ Some entities in the water sector may lack the resources (technical, personnel) to implement security measures

Emergency Preparedness and Water Security: Current Status

- Evolving…
  - From risk identification to risk reduction
  - From a statutory basis to voluntary adoption of measures
  - From support to waning interest (anecdotal)
  - From assisting the motivated to reaching the unmotivated
  - From discrete security programs to multiple benefits

- Challenges
  - VA/ERP one-time requirement, if at all
  - No statutory mandate for follow-up
  - Promoting adoption of a emergency preparedness and security program
  - Identification of incentives to motivate <u>all</u> utilities
  - Information sensitivity issues
  - Burgeoning structure (EPA, DHS, CDHS, EPO, TEW, LEPC, ISAC/HSIN…)
  - Roles and expectations

Five Pillars of Emergency Preparedness and Water Security Planning

PREVENTION
- Active & Effective Security Programs
- Physical Protection
- Backflow Prevention
- Cyber Security
- Vulnerability Assess. Tools
- Baseline Threat Document

DETECTION
- Information Tools: Lab Compendium
- Modeling
- WaterSentinel
- Method Validation
- Water Lab Alliance

Utilities

Utilities

Risk Reduction

Utilities

Utilities

RECOVERY
- Alternative Treatment
- Mobile Treatment Units
- Mutual Aid Compacts
- Decontamination Strategy

OVERARCHING
- Knowledge sources (WCIT), communications, active/effective security programs

RESPONSE
- Contaminant Response Training
- Response Plan Guidance
- Exercises/Drills
- Response Protocol Toolbox
- Interdependencies Research
- First Responder Training

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Features of an Active and Effective Emergency Preparedness and Security Program

Organizational

- Explicit Commitment to Security
- Promote Security Awareness
- Defined Security Roles and Employee Expectations

Operational

- Vulnerability Assessment Up to Date
- Security Resources and Implementation Priorities
- Contamination Detection
- Threat-level Based Protocols
- Emergency Response Plan tested and Up to Date
- Utility-specific Measures and Self Assessment

Infrastructure

- Intrusion Detection and Access Control
- Information Protection and Continuity
- Design and Construction Standards

Collaborative

- Communications
- Partnerships

WATER SECURITY

Organizational

- **Explicit Commitment to Security** (include in mission and vision statements; policies)

- **Promote Security Awareness** (training, routine, culture, job descriptions)

- **Defined Security Roles and Employee Expectations** (roles, duties, designated persons)

Operational

- **Vulnerability Assessment Up to Date** (review and update periodically, prioritize)
- **Security Resources and Implementation Priorities** (capital outlay, funding, grants)
  - Prop 50, SRF
- **Contamination Detection** (water quality parameters, technology)
- **Threat-level Based Protocols** (TEWG, WaterISAC, law enforcement)
- **Emergency Response Plan tested and Up to Date** (periodic review, table-top exercises, NIMS/SEMS/ICS)
  - EWQSK training
  - CERC training – EPO
  - NIMS/SEMS/ICS training
  - ERP reviews and Table Top exercises
  - Tabletop Exercise Design course – CSTI contract
- **Utility-specific Measures and Self Assessment** (tracking progress)

Infrastructure

- **Intrusion Detection and Access Control** (fencing, lighting, sensors, law and fire)

- **Information Protection and Continuity** (back up, redundancy, fire walls)

- **Design and Construction Standards** (security considerations)
    - Water Infrastructure Security Enhancements (WISE)

Collaborative

- **Communications** (awareness, involvement)
  - CAHAN development
- **Partnerships** (mutual aid, agreements, coordination)
  - ERNIE/IMARC/WEROC/BASIC – others being formed

Benefits of Mutual Aid Agreements

- Avoid Bureaucracy
- Increased planning and coordination
- Better Response and Recovery Resilience
- Emergency contact list
- Enhanced access to specialized resources
- Expedited arrival of aid
  - FEMA is muscular and provides support, but is not agile
- Reduced administrative conflict
  - Signed agreement in place
  - Workman's Comp, Indemnification, etc. identified

The Bottom Line

- All emergencies are local and require a local response capability

- A mutual aid agreement is a low or no cost action that helps ensure the continuity of operations of the water infrastructure vital to the well being of every community

- A signed mutual aid agreement will enhance your utilities' preparedness and overall resiliency against any disaster

EWQSK

- Emergency response tool after the EPA Response Protocol toolbox.

- Hazmat to sample

- System to have samples analyzed by State lab in Richmond

Table-top Exercise Design Course

- How to design a table-top exercise
- Primer on SEMS/NIMS/ICS
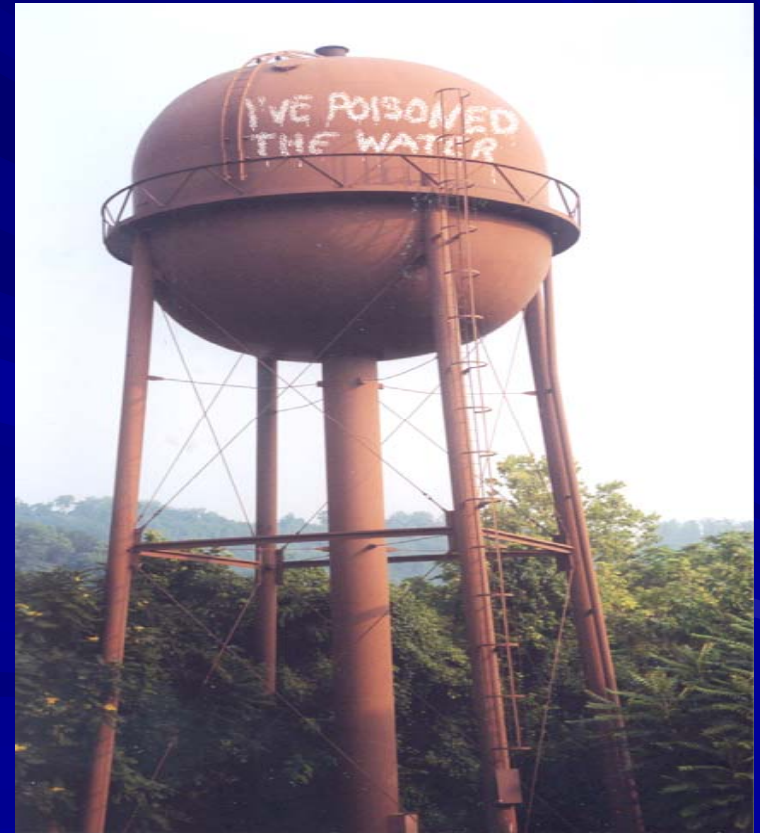- Design an exercise
- Test out your ERP

Crisis and Emergency Risk Communication (CERC)

- Workbook for Local Community Water Systems
- Communications with public and media
- Tool kit

Why CERC?
Tool Kit History
Workbook Overview

Why Crisis and Emergency Risk Communication?

- How will you Respond?

Respond: Crisis Emergency Risk Communication (CERC)

- During a crisis, you are going to communicate with the public!
- EPA National Water Security Risk Communication Symposium – May 2004
- CDC Crisis Emergency Risk Communication
  - **CA Bioterrorism Grant**
  - **CDHS EPO - CERC Tool Kit for LHD**
  - **CDHS DDWEM/EPO – CERC for Public Water Systems**

History of Workbook

- PWS Group Formed August 2005
  - **LWS, EPA, SWS, CRWA, ACWA, AWWA**
- Modify CERC Tool Kit for PWS – Sept 05
- First Revision – Two Documents Dec 05
  - **PWS Tool Kit**
  - **SWS Workbook**
- February 2006 – Final Draft CERC Workbook/ Beta Test

CERC for PWS

- Final Workbook Documents April 2006
- Tool Kit for LWS Sept. 2006
- Distribution and Training May 2006
  - **CRWA Annual Conference**
  - **CA-NV AWWA Fall 2006**
  - **ACWA Winter Conference**
  - **Others to be Scheduled**

Expected Outcomes

- Workshops
  - **Half Day Training with Exercises**
  - **Walk away with wanting to include a Crisis Communication Plan in water system ERP**
  - **Better understanding of how to communicate with the press and public in a crisis**
- Next Crisis
  - **Better prepared**
  - **Better communications**

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Overview of the Workbook & Tool Kit

Overview of the Tool Kit

- Introduction
  - **Essential resource materials for crisis communication**
- Crisis Communication Plan
- Messages and Spokespersons
- Media Outreach
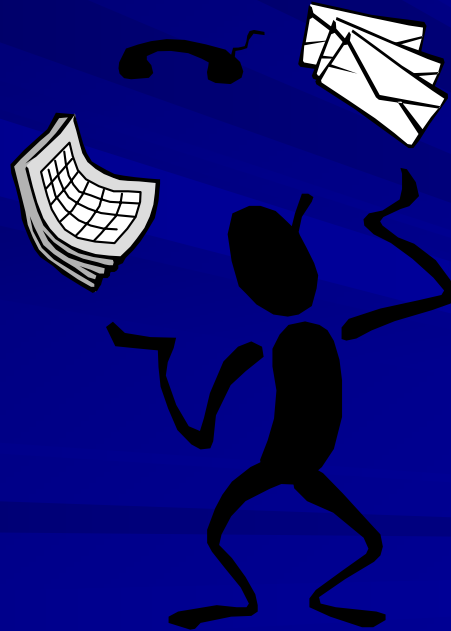- Partner Communications

Overview of the Tool Kit

- Direct Public Outreach

- Standardized Emergency Management System (SEMS/NIMS)

Crisis Communication Plan

Crisis Communication Plan

- Developing CERC Plan

- Crisis Communication Team & Roles

- Resources for a Crisis

- Joint Information Center (JIC)

- Crisis Communication Protocol

Crisis Communication Plan

- Worksheets
  - **Assembling your Crisis Team**
  - **Organizing your Resources**
  - **Persons Authorized to Sign Releases ***
  - **Information Release Authorization Form ***
  - **Identifying Local JIC**
  - **Emergency Phone Tree**

  * Included in the Tool Kit only

Messages and Spokespersons

Messages and Spokespersons

Sample Key Messages

1. **Situation**
   - **Empathy, Scope, Your Organization's Actions**

2. **Risk**
   - **What is the risk to residents?**

3. **Action**
   - **"Be Alert" "Seek Medical Treatment" "For More Information"**

Messages and Spokespersons

What is a Message Map?

A way to create effective risk communication messages for dissemination to the media, the public and all other affected groups.

Messages and Spokespersons

Identify questions that may be received from the media and public:

- What happened?

- What are the effects on the public?

- How will I know if I am effected?

- Who is responsible for this?

- What is being done to fix the problem?

- Is the water safe to drink and use?

Messages and Spokespersons

Identify Key Messages and Supporting Facts

<u>Situation</u>
- Confirm knowledge of the incident
- Express empathy
- Provide scope of the incident
- State actions being taken by your organization

<u>Risk</u>
- Let the public know of the risks involved

<u>Action</u>
- Let the public know they can play a key role
- Encourage people to seek appropriate treatment
- State who to contact for more information

Messages and Spokespersons

Key Message 1	Key Message 2	Key Message 3
Situation	**Risk**	**Action**
There has been an intentional contamination of the Zenith City water system that we believe has been contained. The area of that contamination is the Elizabeth neighborhood.	Shigella was released into the system. It causes gastrointestinal symptoms and is generally not life threatening except for small children, elderly, and immuno-compromised persons. Anyone who consumed water in that neighborhood could be affected, particularly special populations.	The public should not consume water in the affected area. We will provide additional information at 6:00 p.m.

Messages and Spokespersons

Supporting Fact 1-1	*Supporting Fact 2-1*	*Supporting Fact 3-1*
Law enforcement, public health, and water utility authorities are responding to the event. Suspects have been identified.	Symptoms of Shigella include….. Fact sheets and information are available on the public health website or at 888-555-1212	Visual map showing system and indicating affected area. We have taken steps to isolate the part of the system that has been affected.

Messages and Spokespersons

- The Role of Your Media Spokesperson
  - **Reduce illness and death**
  - **Describe the risk, magnitude, and what's being done**
  - **Possess well-honed communications skills**

Messages and Spokespersons

- Worksheet: Identifying Your Media Spokesperson
  - **Different crises need different spokespersons**
    - Water system emergency related to public health
    - Natural disaster
    - Source water quality control
    - Water quality/distribution system
    - Terrorism
    - Ethnic spokespersons and special populations

Media Outreach

Media Outreach

- Organizing your emergency and risk communication response
- Contacting the media
- Tips to Remember When Developing Media Materials
  - Prepare media kits in advance
  - Use the sample documents in the Tool Kit
  - Expect your materials to be used by reporters
  - Be careful to get all the facts right

Identifying and Working with Partners and Stakeholders

Partners and Stakeholders

- How do we distinguish between a Partner and a Stakeholder?
  - **<u>Partners</u> are those with a direct role of aiding your agency in an emergency response**
  - **<u>Stakeholders</u> have a special interest in:**
    - **Your agency function and response preparation**
    - **Your agency involvement in an emergency**
    - **The communities your agency serves**
    - **May NOT have a role in a crisis event**

Partners and Stakeholders

- Building Successful Partner Relationships
  - **Include them in your communication protocol**
  - **Identify your partners in advance**
  - **Core partners carry a high interest**
- Essential to establish pre-event relationships

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Direct Public Outreach

Direct Public Outreach

- Face-to-Face Briefings

- Public/Town Hall Meetings

- Presentations

- General and Ethnic Media

- Community Mailings

Direct Public Outreach

- Informational Resources
- Crisis hotlines
  - **Emergency response web pages**
    - ** Consider Local Health Department Coordin*

- Special Populations
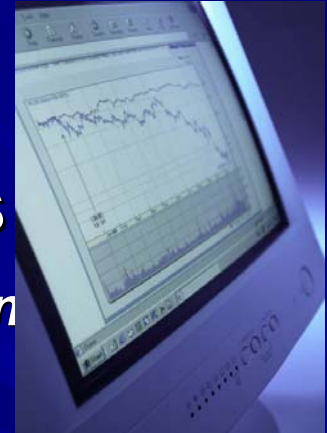
Standardized Emergency Management System (SEMS)

National Incident Management System (NIMS)

SEMS/NIMS

- ALL RESPONSES ARE LOCAL RESPONSES!

- SEMS/NIMS was developed to improve:
    - **Flow of information**
    - **Coordination between responding agencies**
    - **Rapid mobilization, deployment and resource tracking**

SEMS/NIMS
Multi-Agency Coordination

- Water system personnel that will interface with first response agency personnel should understand their role in the ICS/Incident Management structure.

- These roles should be established, through the planning process, not at the incident.

- This would include the dissemination of information and the possible formation of a Joint Information Center

CERC For
Water Systems

BE FIRST.
BE RIGHT.
BE CREDIBLE.

Are We Prepared for the Next Natural Disaster or Terrorist Attack?

Questions and Comments

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