

Tabletop Exercise

Public Water Supply Emergency Event

**Douglas County, KS
August 22, 2006**

Introductions

Federal Requirements

Bioterrorism Act of 2002

- Systems Larger than 3300
- Wastewater not included

State Requirements

K.A.R 28-15-18

- All PWS
- Wastewater

What Is an Emergency?

Unanticipated event that calls
for an immediate response

- Natural
 - Tornado
 - Flood
 - Ice Storm
- Manmade
 - Vandalism
 - Sabotage
 - Terrorism

Emergency Management

- Mitigation – Prevent or Reduce impact of emergency
- Preparedness – Planning
- Response – Act
- Recovery – Return to normal

What is an Emergency Response Plan?

An ERP is a documented plan that describes the actions that a system will take in response to major emergency events.

Pre-Emergency Plan

- Emergency Organization
- Vulnerability Assessment
- Assets
- Physical Protection System
- Emergency Water Requirements
- Communications
- Personnel Safety
- Action Plans
- Training, Testing and Updating

Post-Emergency Plan

- Threat Level
- Threat Warning Evaluation
- Activate the Emergency Response Team
- Safety
- Damage Assessment and Contact for Services
- Initiate Action Plans

Training, Testing and Updating

- Exercises
- Annual Review

Types of Emergency Response Exercises

- Orientation seminar
- Drill
- Tabletop exercise
- Functional exercise
- Full-scale exercise

Community Requirements

- Customers
- Priority
- Quality
- Quantity

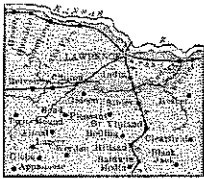
Four Stages of Recovery

1. Survival
2. General Sanitation
3. Fire Protection
4. Near Normal

Today's Objectives:

- Test how public officials work together in a water security incident
- Determine methods for the recovery and remediation of a public water system emergency event
- Practice using emergency response guidelines, ERP's and Action Plans.
- NIMS/ICS Compliant

Douglas County, Kansas



- Located in Tornado Alley
- -20° F winter/100+° F summer
- 100,000+ county population
- Historic agricultural manufacturing and educational center

Douglas County, Kansas



- The Lawrence-Douglas County Health Department offers county-wide health promotion, disease investigation and environmental services

Lawrence, KS



- Largest city 80,000+ population
- County seat

Lawrence, KS



- Acute care and emergency room services are provided by the Lawrence Memorial Hospital

Lawrence, KS



- EMS and HAZMAT provided by Lawrence Douglas County Fire and Rescue



Lawrence , KS



- Surface water: Kansas River and Clinton Lake
- Treatment includes softening, clarifying and filtering
- Chlorination provides microbial protection in the distribution system

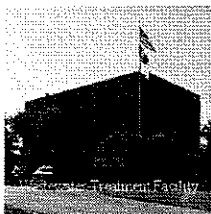
Lawrence, KS

- Elevated storage capacity is approximately 5.4 M gallons
- 2005 Average was 7.1MGD
- The distribution system has 31,646 service connections
- A backflow/cross contamination prevention program has been implemented

Purchasers of Lawrence Water

- Douglas County RWD #1
- Douglas County RWD #2
- Douglas County RWD #4
- Douglas County RWD #5
- Douglas County RWD #6
- Baldwin City
- KTA

Lawrence, KS



- Wastewater services are provided by a city-owned and operated treatment plant.
- Activated sludge treatment and Chlorination
- Discharges to the Kansas River

Late Summer



- The students are back
- Another heat wave is in the Heartland
- Threat Advisory Level: Elevated
- Terrorists have been active overseas

Practical Applications

- Tornado
- Flood
- Ice storm
- Vandalism
- Accident

Hotwash

- Expectations – What were they? Were they met?
- Outcomes – What do you need to do now?
- Issues – What needs clarification, improvement, further discussion?

Simple Security Measures

- Employee background checks
- Talk to police
- Place bars or grates on windows
- Use *tamperproof* padlocks

Simple Security Measures

- Talk to residents near facilities
- Post signs
- Limit remote SCADA system access

Simple Security Measures

- Work with chemical suppliers
- Keep security plans secure

Have
a good
day.

Additional Resources

American Water Works Association, www.awwd.org.

Agency for Toxic Substances and Disease Registry (ATSDR): www.atsdr.cdc.gov.

AOAC. 2003b. "Rapid Test Kits Test Kit Database"
<http://www.aoac.org/testkits/TKDATA2.HTM>.

CDC Emergency Preparedness and Response: www.bt.cdc.gov.

CDC. 2003f. "List of Select Biological Agents"
<http://www.cdc.gov/od/sap/docs/salist.pdf>.

CWC. 2003b. "The Chemical Weapons Convention – A Quick Guide, CWC-002"
http://www.cwc.gov/Industry_Outreach/Publications/002/cwc-b0001.html.

FEMA, Hazardous Materials Guide for First Responders.
<http://www.usfa.fema.gov/fire-service/hmgfr3.cfm>.

Kansas Department of Health and Environment, <http://www.kdhe.state.ks.us/>.

Kansas Rural Water Association, www.krwa.org.

National Rural Water Association, www.nrwa.org.

Physician Preparedness for Acts of Water Terrorism:
www.waterhealthconnection.org/bt/index.asp.

Recognizing Waterborne Disease and the Health Effects of Water Pollution: A
Physician On-line Reference Guide: www.waterhealthconnection.org.

Registry of Toxic Effects of Chemical Substances (RTECS):
www.cdc.gov/niosh/rtecs.html.

Risk Assessment Information System (RAIS), which contains information taken
from the US EPA Integrated Risk Information System (IRIS), the *Health Effects
Assessment Summary Tables* (HEAST-rad HEAST-nonrad), US EPA Peer
Reviewed Toxicity Values (PRTVs) Database, and other information sources:
<http://risk.lsd.ornl.gov/index.shtml>.

US Army Medical Research Institute of Infectious Diseases (USAMRIID)
Medical Management of Biological Casualties Handbook:
<http://www.usamriid.army.mil/education/bluebook.html>.

FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FIRST	Federal Incident Response Support Team
FMC	Federal Mobilization Center
FNS	Food and Nutrition Service
FOC	FEMA Operations Center
FOG	Field Operations Guide
FRC	Federal Resource Coordinator
FRERP	Federal Radiological Emergency Response Plan
FRP	Federal Response Plan
GAR	Governor's Authorized Representative
GIS	Geographical Information System
GPCD	Gallons Per Capita Per Day
GPS	Global Positioning System
GSA	General Services Administration
HHS	Department of Health and Human Services
HQ	Headquarters
HSAS	Homeland Security Advisory System
HSC	Homeland Security Council
HSOC	Homeland Security Operations Center
HSPD	Homeland Security Presidential Directive
HAZMAT	Hazardous Material
IAIP	Information Analysis and Infrastructure Protection
IC	Incident Command or incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IIMG	Interagency Incident Management Group
IMT	Incident Management Team
IOF	Interim Operating Facility
ISAO	Information-Sharing and Analysis Organization
JFO	Joint Field Office
JIC	Joint Information Center
JIS	Joint Information System
JOC	Joint Operations Center
JTF	Joint Task Force
JTTF	Joint Terrorism Task Force
KDEM	Kansas Division of Emergency Management
KDHE	Kansas Department of Health and Environment
KHP	Kansas Highway Patrol
MAC Entity	Multiagency Coordinating Entity
MACC	Multiagency Command Center
MERS	Mobile Emergency Response Support
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NAHERC	National Animal Health Emergency Response Corps
NSA	National Security Agency
NASA	National Aeronautics and Space Administration
NAWAS	National Warning System
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NCS	National Communications System

NCTC	National Counterterrorism Center
NDMS	National Disaster Medical System
NEP	National Exercise Program
NGO	Nongovernmental Organization
NICC	National Infrastructure Coordination Center
NICC	National Interagency Coordinating Center
NIMS	National Incident Management System
NIPP	National Infrastructure Protection Plan
NIRT	Nuclear Incident Response Team
NJTTF	National Joint Terrorism Task Force
NMRT	National Medical Response Team
NOAA	National Oceanic and Atmospheric Administration
NRC	Nuclear Regulatory Commission
NRCC	National Response Coordination Center
NRCS	Natural Resources Conservation Service
NRP	National Response Plan
NRT	National Response Team
NSC	National Security Council
NSP	National Search and Rescue Plan
NSSE	National Special Security Event
NVOAD	National Voluntary Organizations Active in Disaster
NWCG	National Wildland Coordinating Group
NWS	National Weather Service
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSLGCP	Office of State and Local Government Coordination and Preparedness
PCC	Policy Coordination Committee
PDA	Preliminary Damage Assessment
PDD	Presidential Decision Directive
PFO	Principal Federal Official
PIO	Public Information Officer
PPE	Personal Protective Equipment
POC	Point of Contact
PVO	Private Voluntary Organization
RA	Reimbursable Agreement
RACES	Radio Amateur Civil Emergency Services
RAMP	Remedial Action Management Program
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
REPLO	Regional Emergency Preparedness Liaison Officer
RFI	Request for Information
RG	Response Guide
RISC	Regional Interagency Steering Committee
RRCC	Regional Response Coordination Center
RRT	Regional Response Team
ROC	Regional Operations Center
SAC	Special Agent-in-Charge
SAR	Search and Rescue
SCC	Secretary's Command Center (HHS)
SCO	State Coordinating Officer
SFLEO	Senior Federal Law Enforcement Official

SFO	Senior Federal Official
SIOC	Strategic Information and Operations Center
SNP	Strategic National Stockpile (pharmaceutical)
SO	Safety Officer
SOG	Standard Operating Guideline
SOP	Standard Operating Procedure
START	Scientific and Technical Advisory and Response Team
TSA	Transportation Security Administration
TSC	Terrorist Screening Center
TTIC	Terrorism Threat Integration Center
UC	Unified Command
US&R	Urban Search and Rescue
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USSS	U.S. Secret Service
WISAC	Water ISAC
VMAT	Veterinarian Medical Assistance Team
WAWAS	Washington Area Warning System
WMD	Weapons of Mass Destruction
WQCC	Water Quality Commission