

**21. STRATEGIES for CRITICAL INFRASTRUCTURE
PROTECTION**

Presenter

Dr. Steve Clark, USEPA

STRATEGIES for CRITICAL INFRASTRUCTURE PROTECTION

Steve Clark
USEPA
Washington, DC

TERRORISM and WATER SUPPLY

- The fear of contamination is likely worse than the reality
- Low probability, but high impact event
- 1991 Gulf War; Presidential Decision Directive --- 63 (May 22, 1998)

GOALS OF PDD -- 63

- Partnership with industry; focus on large metropolitan systems (economic concern)
- Work with other federal agencies (energy, defense, health, FBI, etc.)
- Characterize threat and develop tools
- Implement Information Sharing and Analysis Center (industry based)

SINCE 9-11-01

- EPA'S role expanded
- All systems are now receiving some financial assistance (360 to 55,000)
- EPA and associations provide training, tools, and federal grants/loans
- EPA research capability increased

THREATS to WATER SUPPLIES

- Historic concerns
- Nuclear, biological, chemical contaminants
- Physical damage
- Cyber Attacks (SCADA, supervisory control and data acquisition)

TODAY'S THREATS

- US as sole remaining superpower
- 9-11 had huge economic impact (stock market, airlines, etc)
- Intelligence warning still unlikely
- Enemy extremists with substantial resources

PROVIDING SECURITY

- Vulnerability assessment methodology
- Emergency response guidance
- River flow and pipeline models
- Information Sharing and Analysis Center
- Analytical methods
- Other research (disinfection, stability, treatment,etc)

CONCLUSION

- Increased awareness and need for security since 9-11-01
- Federal Government providing information, tools, R+D, and some money
- First step is to assess vulnerabilities against a reasonable threat
- Solutions must be cost-effective