EPA Roles in Homeland Security

(1) hazardous materials emergency response

(2) protecting water infrastructure

(3) clean up following chemical or biological attack

(4) reducing vulnerability of the chemical & hazardous materials sector

(5) research to protect water infrastructure & buildings
Research and Development at EPA

- 1,950 employees
- $700 million budget
- $100 million extramural research grant program
- 13 lab or research facilities across the U.S.
- Credible, relevant and timely research results and technical support that inform EPA policy decisions
EPA Homeland Security Research

- National Homeland Security Research Center
- 3 years, $50m FY'03
- Chemical/biological terror attack
- Buildings and water infrastructure
- User guidance on protection & response
- Collaboration
Program Components

- Characterization/Detection
- Prevention/Containment
- Decontamination/Mitigation
- Residue Disposal
- Risk Assessment
- Technology Verification
- Technical Assistance
Research Program Scope

♦ Biological & chemical contaminants
  ▪ Pathogenic bacteria, viruses, bacterial toxins
  ▪ Chemical warfare agents
  ▪ Toxic industrial chemicals

♦ Radiologic contamination (water)
Role of Standard-Setting Organizations

- integrate user/provider expectations
- consensus measures of performance
- establish measurement protocols
- coordination among numerous relevant standards organizations
Challenges Related to Homeland Security

- matching equipment and operational standards to public health and cost-effectiveness endpoints

- broad array of equipment/systems/interoperability needs
e.g. detectors, personnel protection, filtration, alarms, decontamination, treatment, disposal communication . . . . .
Challenges Related to Homeland Security (continued)

- complexity of contaminants & contamination scenarios
- credible standards vs. time urgency for decisions
- coordination among standards organizations and with government
- coordination among Federal standards setting organizations
- performance verification/certification
Questions for Participants

• How to move ahead?
  - quickly, but appropriately

• Who needs to be involved?

• What areas/activities are most important/first?

• Other perspectives?