S&T Stakeholders Conference

Biological Response and Restoration

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PARTNERING FOR A SAFER NATION
DHS S&T Response & Restoration Program

**GOAL:** Generates capabilities for rapid return of a *biological*- or *chemical*-contaminated site to a normal condition. Areas of *primary* support include:

- Development of technologies and guidelines for remediation/cleanup

- Strategies, capabilities and tools for the analysis of contaminated areas before and after a decontamination process
Restoration Guidance

- Restoration Guidance & Checklist for Major Airports after a Bioterrorist Attack
  - NAS Study: *Reopening Public Facilities after a Biological Attack: A Decision Making Framework*
  - “Pre-reviewed” Protocols & Plans

- Airport Preparedness Workshop
  - Co-sponsored with EPA/CDC
  - Eastern Airports (Port Authority of NY & NJ, Washington Metropolitan Authority, & Chicago Dept. of Aviation)

- Restoration Guidance for Transit Systems
  - Partners (WMATA, MTA)
  - Builds off of Restoration Guidance for Airports

Homeland Security
Evaluation of Sampling Methods and Strategies in an Operational Environment

Validated Sampling Plan Working Group:
- Established in response to GAO report “GAO-05-493T” regarding response to Anthrax attacks of 2001
- VSP WG members:
  - Chaired by DHS S&T
  - DoD, EPA, CDC, FBI, and NIST
- Group mission:
  - Validation of sampling strategies and plans

Objectives of INL Tests:
- Compare sampling strategies (judgmental and probabilistic) against concentration gradient to characterize and clear a building
- Gather on efficiency of sample collection methods in operational environment
- Gather baseline data on rapid detection methods using operational samples
- Apply test data to assist in validation of different dispersal and sampling models
Evaluation of Sampling Methods and Strategies in an Operational Environment

Background:
- Idaho National Laboratory (INL) Test Site
- Funded by DHS S&T and JPEO-CBD
- Experimental design/sample collection plans created by EPA, NIST, and PNNL
- Onsite sample analysis conducted by the 9th Area Medical Laboratory using a JPM Guardian mobile laboratory, operations managed by JHU APL
- Sample collection conducted by:
  - National Guard Bureau Civil Support Teams
  - EPA Emergency Response personnel
  - HazMat responders from Miami Dade County, Florida
Goal/Objectives

• **Goal**: This program is focused on providing a coordinated, systems approach to the recovery and restoration of wide urban areas, to include DOD infrastructures and high traffic areas following the aerosol release of a biological agent.

• **Objectives**:
  - Study the social, econ, & ops interdependencies
  - Develop strategic restoration plans for DOD & DHS
  - Id & demo technologies that support restoration
  - Exercise restoration activities & technology solutions

Coordination & partnership with Interagency (EPA/CDC/etc), urban area, and other identified partners