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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



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Restoration Guidance

–Restoration Guidance & Checklist for Major Airports after a Bioterrorist Attack

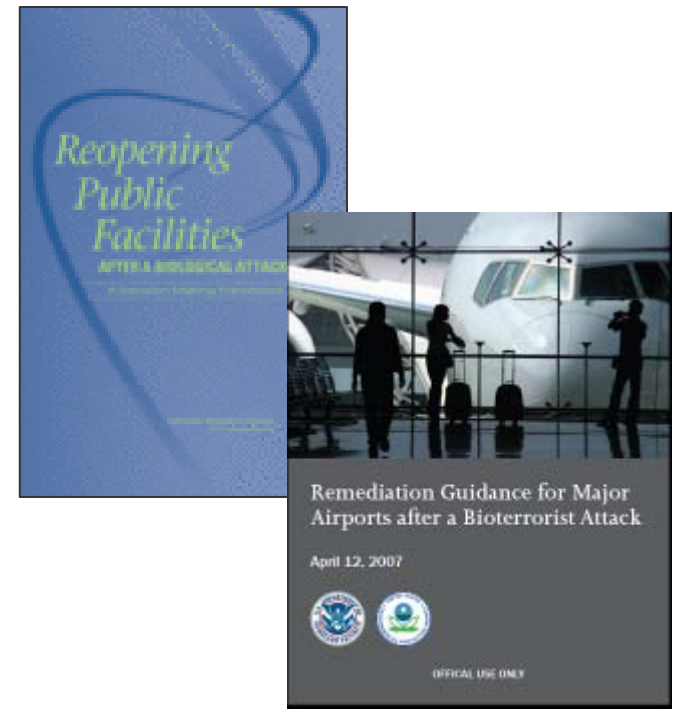
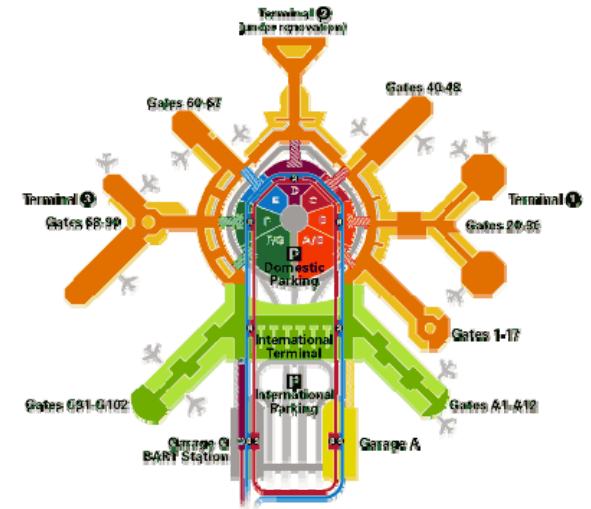
- NAS Study: *Reopening Public Facilities after a Biological Attack: A Decision Making Framework*
- “Pre-reviewed” Protocols & Plans

–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



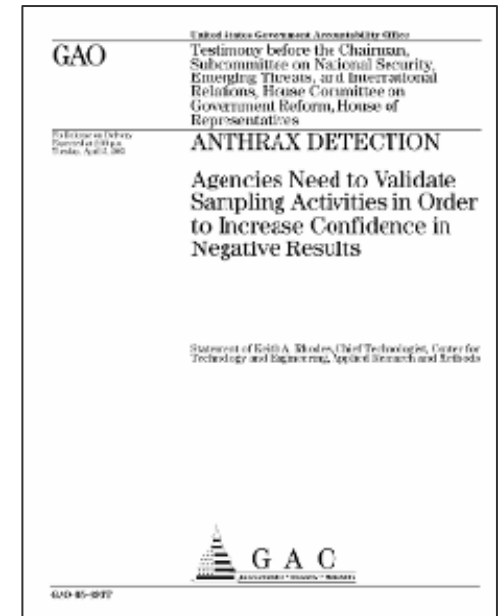
Evaluation of Sampling Methods and Strategies in an Operational Environment

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



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Interagency Biological Restoration Demonstration

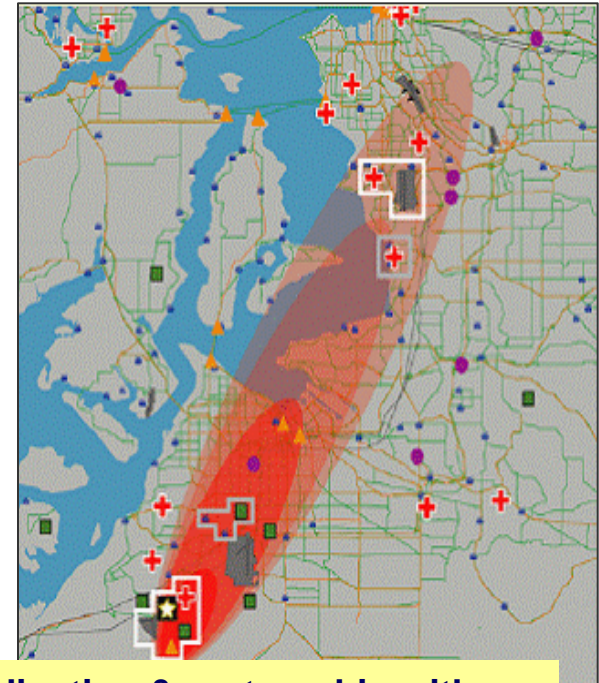
(Wide Area Restoration)

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



**DOD (DTRA) & DHS (S&T)
co-sponsored program**



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



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