



I-WASTE: EPA's Suite of Homeland Security Decision Support Tools for Waste and Disaster Debris Management and Disposal

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Background:

- I-WASTE is a location-specific decision support tool that can be used for a range of applications such as (1) carcass disposal, (2) waste and debris management from earthquakes, fires and floods, and (3) intentional disasters that can be localized or wide-spread.
- I-WASTE is also widely used in emergency preparedness training through the Department of Homeland Security.
- Updates have been made in response to user feedback and in support of National Homeland Security Planning Scenarios

Collaborators and Partners:

- ERG is Primary Contractor
- EPA
 - Multiple Program Offices, Regional Offices, Special Team
- Other Federal Agencies
 - Department of Homeland Security
 - U.S. Department of Agriculture
 - U.S. Army Corps of Engineers
 - U.S. Department of Energy
 - U.S. Department of Transportation
 - Federal Emergency Management Agency
 - National Institute of Standards and Technology
- State Agencies
- Waste and Water Industry Groups
- Professional Organizations

Target Audience:

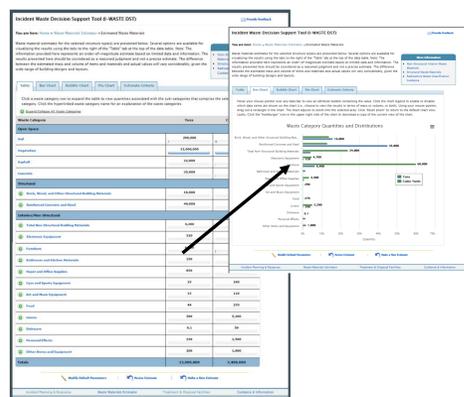
- EPA Response Community
 - On-scene Coordinators and Removal Managers
 - Environmental Response Team
 - Consequence Management Advisory Team
- State and Local Agencies
 - Emergency Planners
 - Public Health
 - Environmental Protection
 - Transportation
- Facilities
 - Combustors/incinerators
 - Landfills
 - Building owners/managers
 - Water infrastructure

Potential Applications:

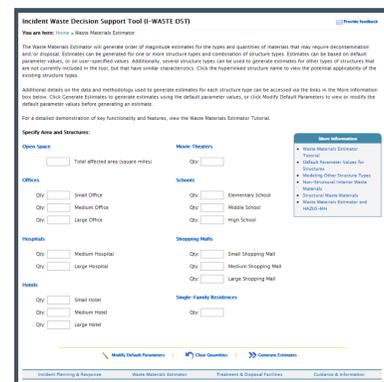
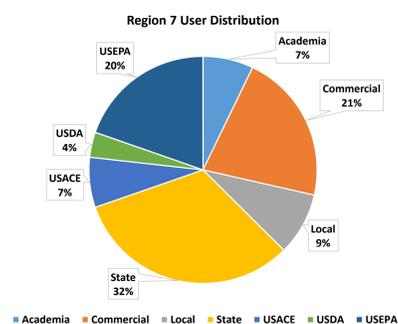
- Training, Planning & Exercise Tool
 - Supports State & Local Homeland Security (HS) Planning IAW National Planning Scenarios (NRF, 2008)
 - Allows multiple scenarios to be examined
 - Encourages discussions with facilities prior to event
 - For use in design or evaluation of HS Exercises involving disposal & recovery
- Starting point for clean-up
 - Quick reference
 - Reach back resource for planners & responders

Past Applications:

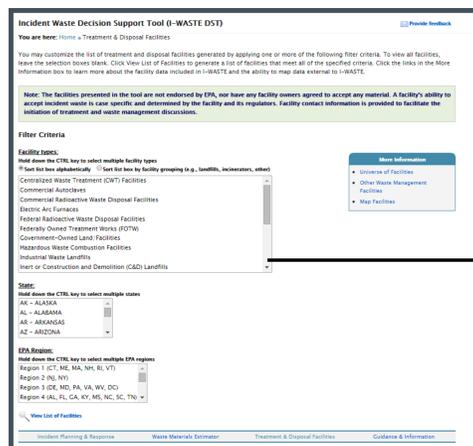
- H5N1 Carcass Disposal
- ID Disposal Options for Floods and Fires
- Ebola Response
- National Level Exercises
- New York City Bioremediation Planning
- Incorporated into Other Tools



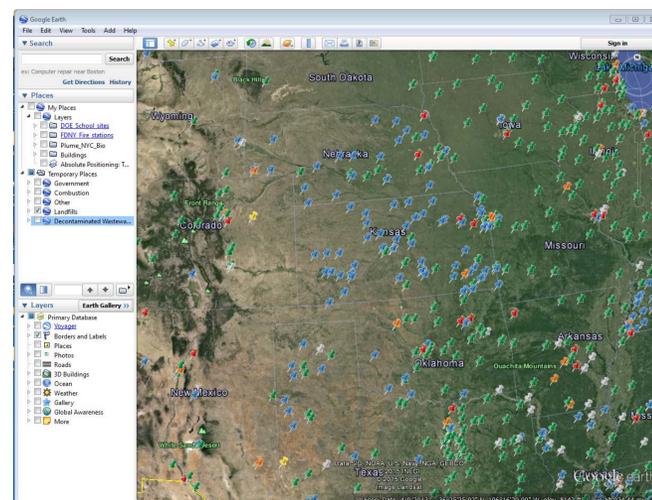
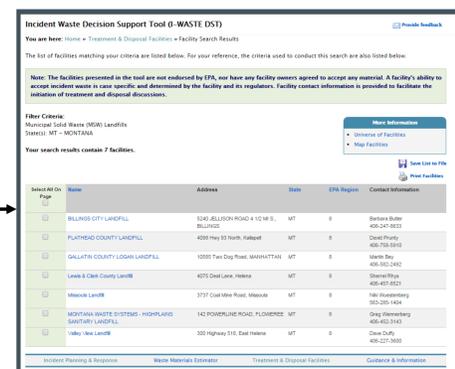
Example of Estimated Waste Materials



Waste Materials Estimator Page



Selection of Disposal Facilities



Geocoded Waste Management Facility Databases

Important Reminders:

- I-WASTE is not an expert system (i.e., I-WASTE does not tell the user what to do), but rather presents information to consider during the decision-making or planning process
- I-WASTE assumes the decision to treat/dispose has been made
- I-WASTE does not present massive quantities of information to the user, but rather tries to distill information while maintaining links to more detailed information

Functionality:

- Navigate a framework for planning and response decision-making
- Estimate quantities and characteristics of waste
- Access waste management guidance for a variety of incident types
- Identify potential treatment/disposal facilities
- Access targeted guidance/fact sheets
- Access other planning and response tools

Facility Databases:

- Landfills
 - Municipal Solid Waste
 - Construction & Demolition Debris
 - Industrial Waste Landfills
 - Hazardous Waste
- Combustion Facilities
 - Municipal Waste Combustors (Waste-to-Energy)
 - Hazardous Waste
 - Medical/biohazardous Waste
 - Industrial combustion facilities (boilers, smelters, etc)
- Aqueous Waste Disposal Facilities
 - Publicly-Owned Treatment Works (POTWs)
 - Federally-Owned Treatment Works (FOTWs)
 - Centralized Waste Treatment (CWT) Facilities
- Other Facilities
 - Commercial Medical Waste Autoclaves
 - Federal Radioactive Waste Disposal Facilities
 - Commercial Radioactive Waste Disposal Facilities
 - Rendering Facilities

Future Enhancements:

- Incorporation of geospatial data and facility information into EPA GeoPlatform

Access:

<http://www2.ergweb.com/bdrtool/login.asp>

- First-time users will need to request a user ID and password – the link above has directions for making the on-line request
- If your request is approved, your login ID and initial password will be emailed to you.

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