



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

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ORD Tools Cafe  
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## Background:

- I-WASTE grew from EPA's research on disposal of debris resulting from natural or intentional disasters and preparedness planning
- Further versions have been developed in support of National Homeland Security Planning Scenarios

## Collaborators and Partners:

- ERG is Primary Contractor
- EPA
  - Office of Emergency Management
  - Office of Resource Conservation and Recovery
  - Office of Homeland Security
  - National Homeland Security Research Center
  - Consequence Management Advisory Team
  - Environmental Response Team
  - Office of Water
  - Office of Radiation and Indoor Air
  - Regions 4 and 5
- 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

## 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:

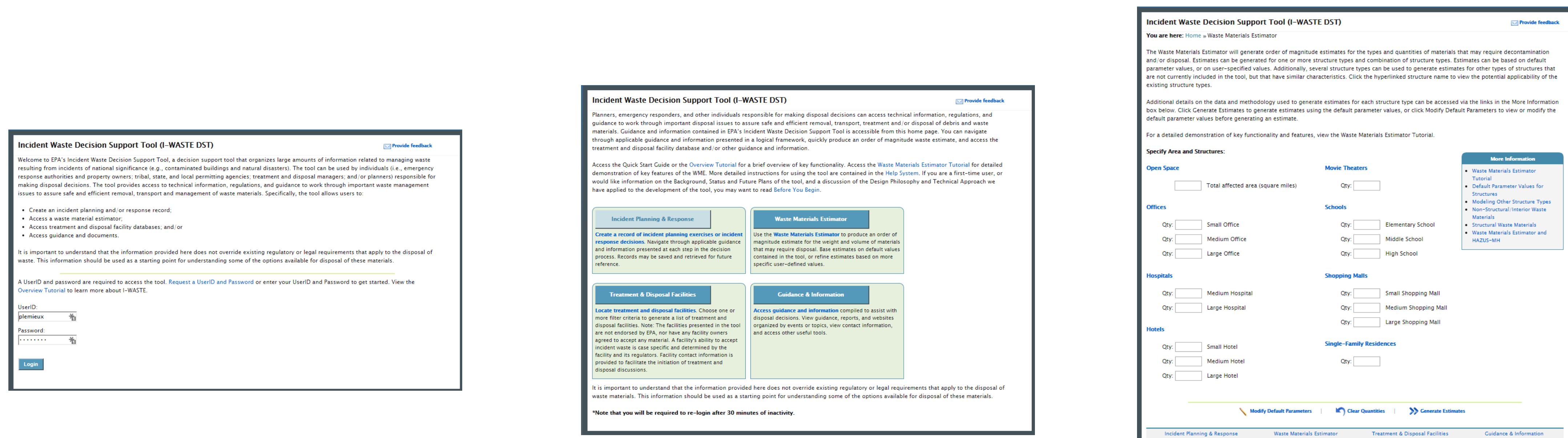
- Incorporation of geospatial data and facility information into EPA GeoPlatform

## 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.

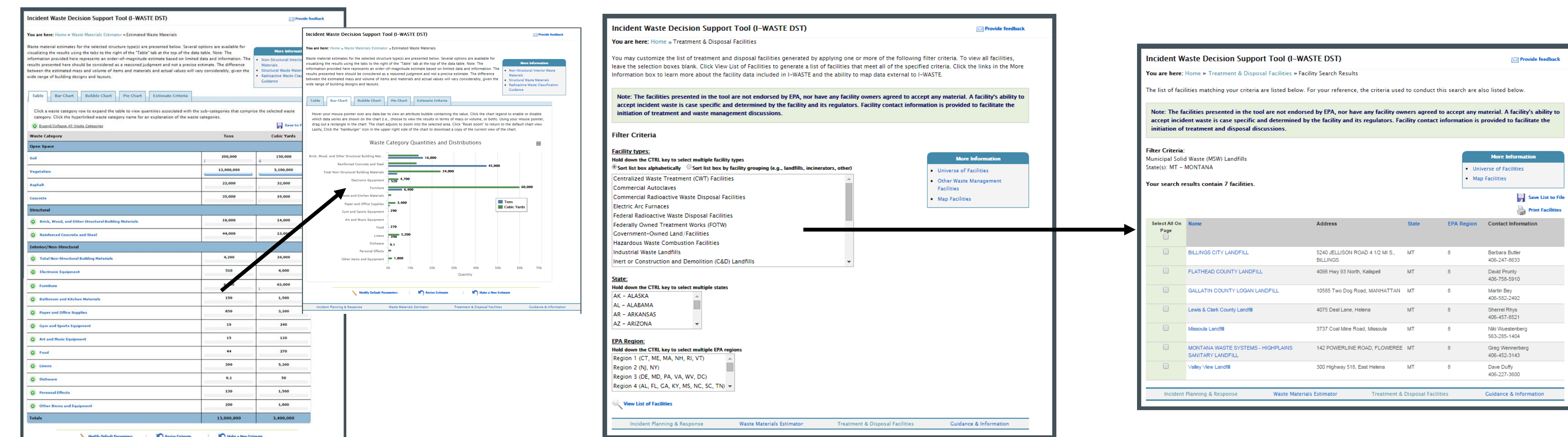
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Decision Support Tool Login Page

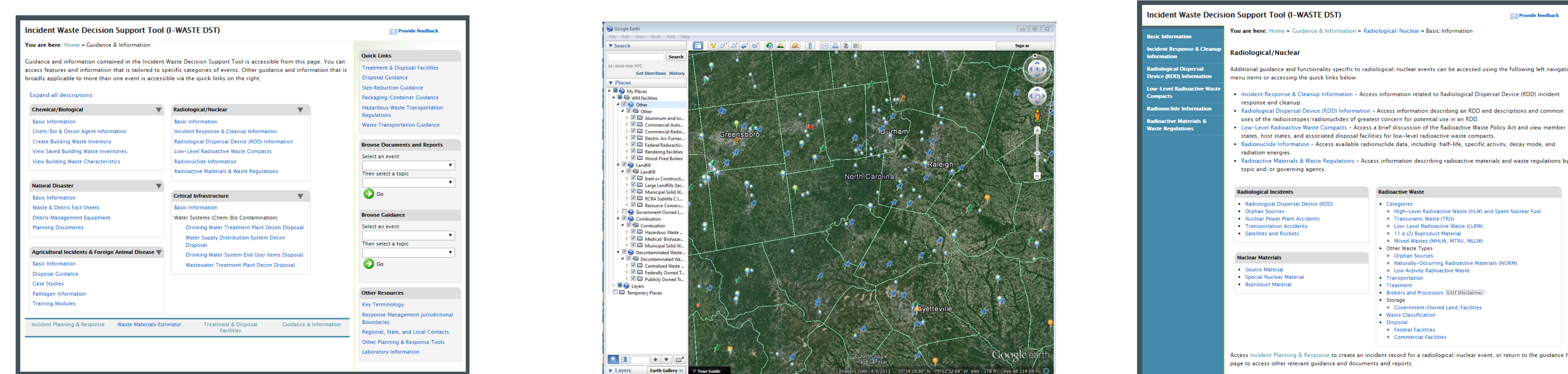
I-WASTE Home Page

Waste Materials Estimator Page



Example of Estimated Waste Materials

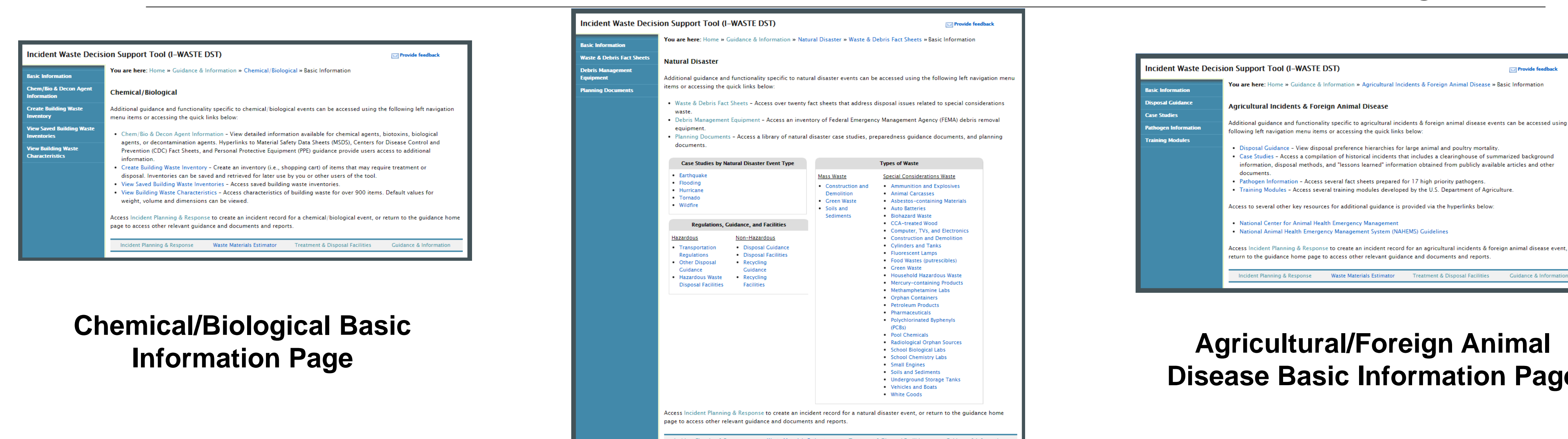
Selection of Disposal Facilities



Guidance and Information Page

Geocoded Waste Management Facility Databases

Radiological/Nuclear Basic Information Page



Chemical/Biological Basic Information Page

Agricultural/Foreign Animal Disease Basic Information Page

Natural Disaster Basic Information Page