



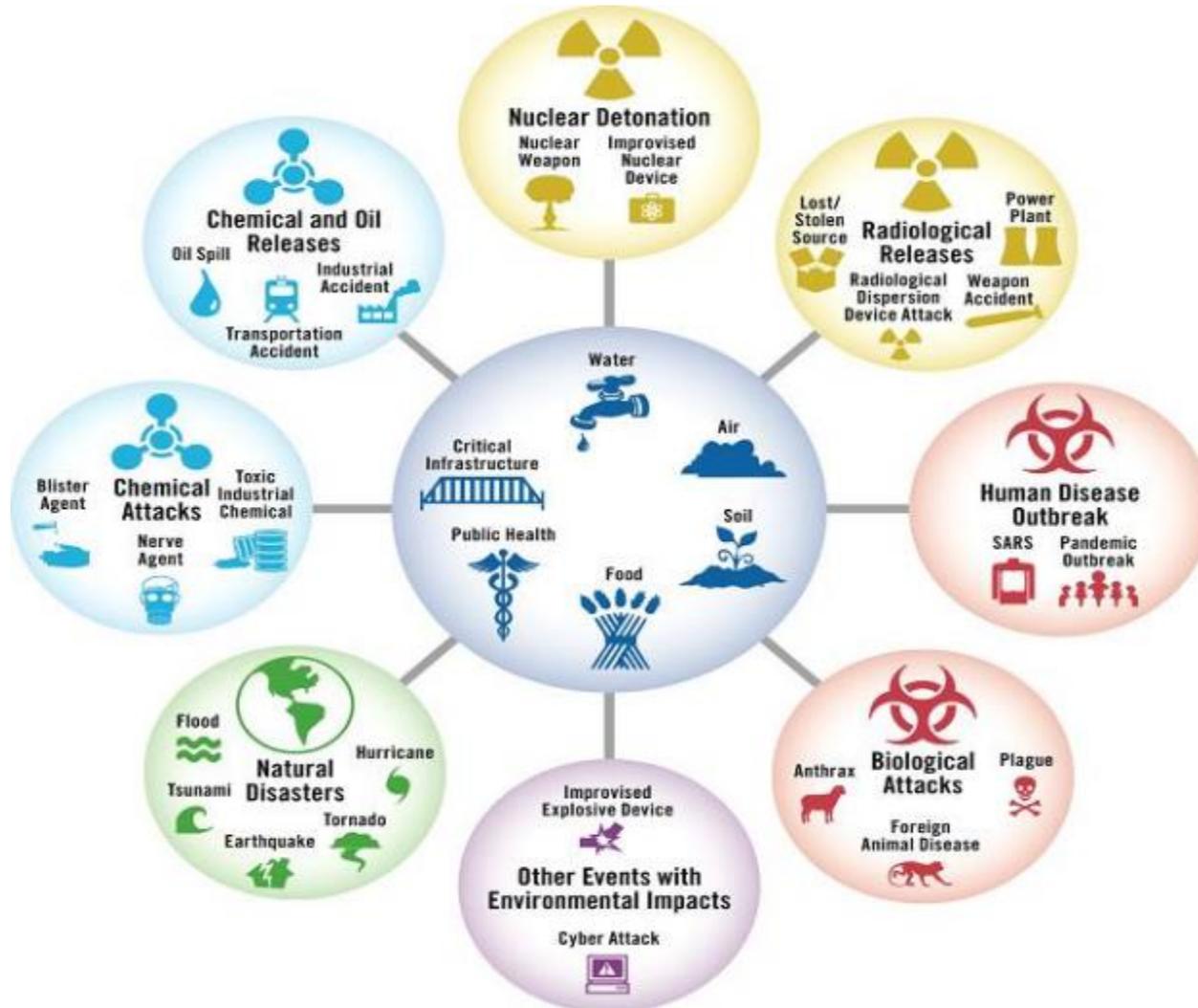
EPA Tools & Resources Training Webinar: Incident Waste Decision Support Tool (I-WASTE)

Paul Lemieux

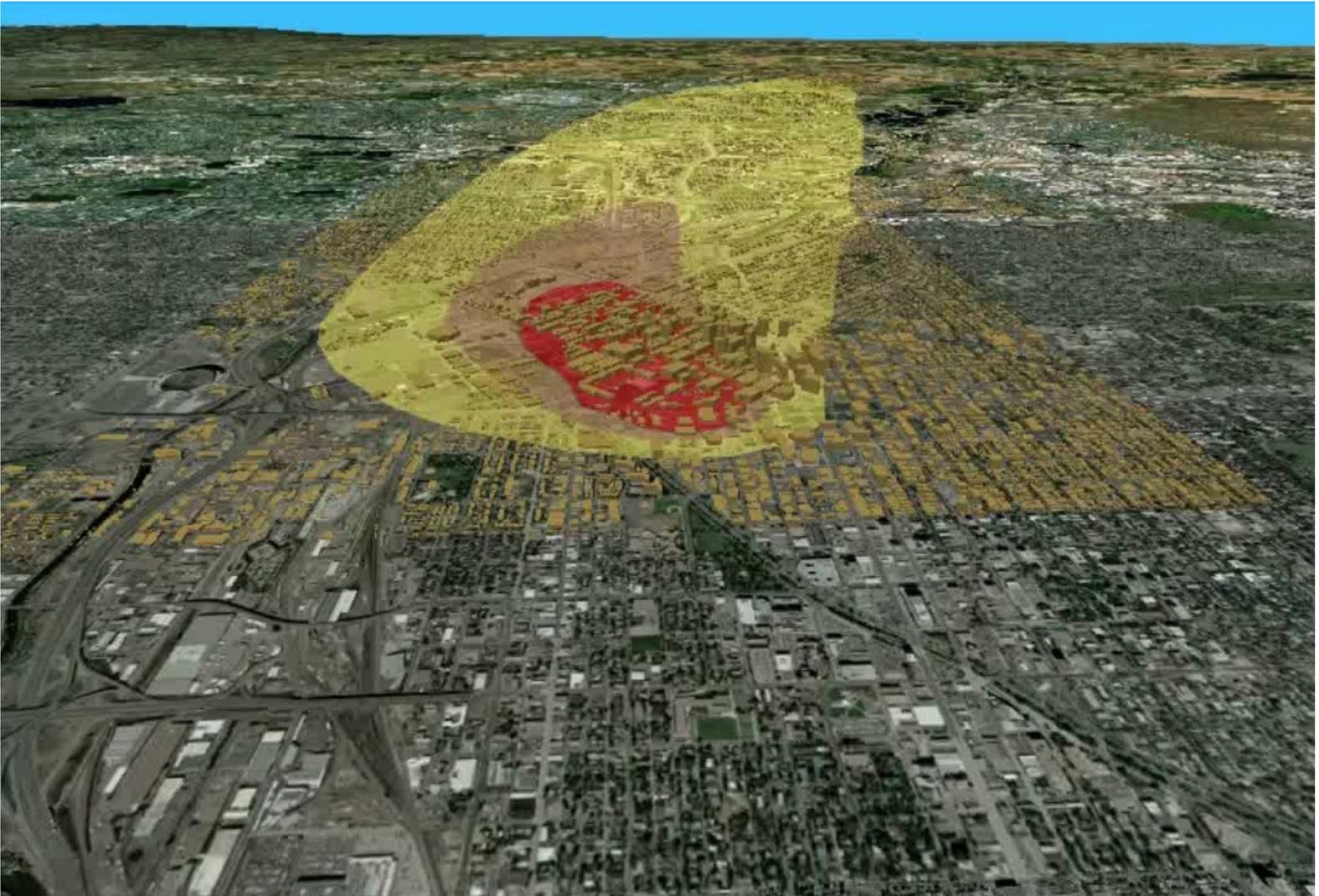
US EPA Office of Research and Development

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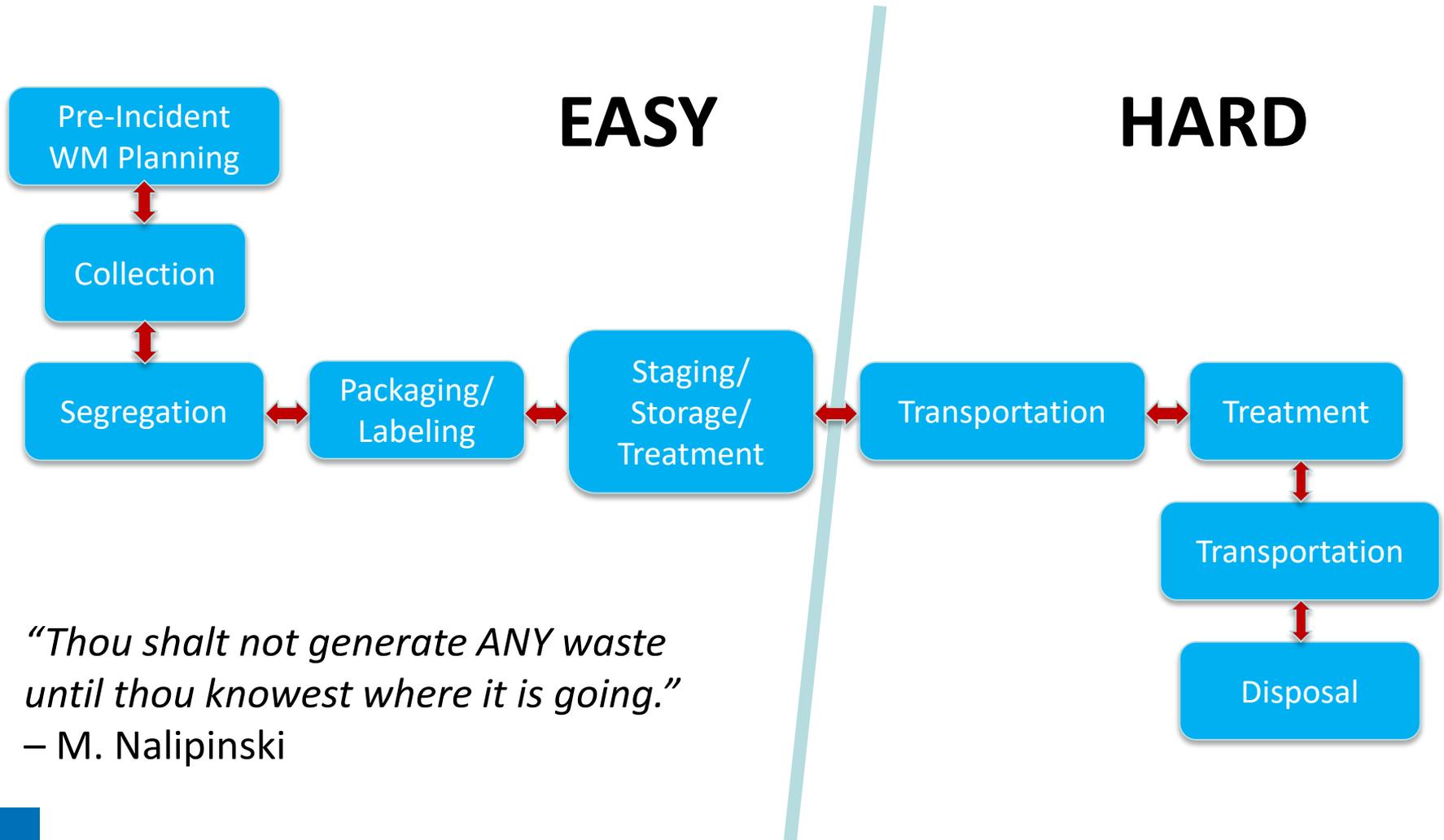
All-Hazards Planning



Example Wide-Area Contamination Scenario



Example: Bio-Waste Management Process



"Thou shalt not generate ANY waste until thou knowest where it is going."
– M. Nalipinski

Decision-Making Information Needs for Waste Management

- Waste quantity and characteristics
 - Sampling and analysis of waste
- Relevant regulatory requirements (local, state, federal levels)
- Potential treatment/disposal facilities
- Waste Acceptance Criteria
- Potential transportation issues/routes
- Impact of remediation/decontamination decisions on waste management and vice-versa

What Problem/Gap Does This Tool Address?

- Management of waste from all-hazards incidents is tightly coupled with other aspects of the response (i.e., system of systems)
- Decisions on waste management issues are made at the local/state/federal level and include private sector
- Chemical/Biological/Radiological/Nuclear (CBRN) waste is not explicitly addressed in many regulations
- Waste management decisions for CBRN-generated waste are closely tied to decontamination decisions
- Need for easy access to information to make informed decisions

Potential Applications

- Training, Planning and Exercise Tool
 - Supports State & Local Homeland Security (HS) Planning IAW National Planning Scenarios (National Response Framework, 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 and recovery
- During an Environmental Response
 - Starting point for cleanup
 - Quick reference
 - Reach back resource for planners & responders

Past Applications

- Highly Pathogenic Avian Influenza (HPAI) carcass disposal
- Idaho disposal options for floods and fires
- Ebola response
- National Level Exercises
- New York City bioremediation planning
- Incorporated into other tools



I-WASTE Overview – Current Features

- Web-based tool with restricted access
- Series of inputs defining scenario
- Calculators available to estimate mass & volume of disaster-generated waste and debris (offices, schools, theaters, shopping malls, residences, hotels, hospitals)
- Database of treatment/disposal facilities (location, technical information, permits, geolocation)
- Access to contaminant and decontaminant information
- Guidance for worker safety, packaging and storage, and transportation

I-WASTE Caveats

- 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

Target Audience

- EPA Responders
 - On-Scene Coordinators/Removal Managers
 - EPA Special Teams
 - Technical Working Group (TWG)
- State and Local Agencies
 - Emergency Planners
 - Public Health
 - Environmental Protection
 - Transportation
- Treatment/Disposal Facility Operators
 - Combustors/incinerators
 - Landfills
 - Building owners/managers
 - Water infrastructure
 - Radiological waste disposal facilities
 - Agricultural facilities

Collaborators and Partners

- EPA
 - Office of Land and Emergency Management (OLEM)
 - Office of Research and Development
 - Office of Air and Radiation
 - Office of Water
- State Agencies (DE, MD, NY, PA, VA)
- Other Federal Agencies
 - Department of Homeland Security
 - Department of Energy
 - Department of Transportation
 - Federal Emergency Management Agency
 - US Army Corps of Engineers
 - US Department of Agriculture
- Waste Industry Groups
 - International Solid Waste Association (IWSA)
 - National Solid Wastes Management Association (NSWMA)
 - Solid Waste Association of North America (SWANA)
- Water Industry Groups
 - American Water Works Association (AWWA)
- Facility item databases populated via discussions with respective industry representatives (e.g., hotel chains, school systems, theater chains, etc.)
- Eastern Research Group (ERG) is primary contractor

I-WASTE Login Page

Incident Waste Decision Support Tool (I-WASTE DST)

 [Provide feedback](#)

Welcome to EPA's Incident Waste Decision Support Tool, a decision support tool that organizes large amounts of information related to managing waste resulting from incidents of national significance (e.g., contaminated buildings and natural disasters). The tool can be used by individuals (i.e., emergency response authorities and property owners; tribal, state, and local permitting agencies; treatment and disposal managers; and/or planners) responsible for making disposal decisions. The tool provides access to technical information, regulations, and guidance to work through important waste management issues to assure safe and efficient removal, transport and management of waste materials. Specifically, the tool allows users to:

- Create an incident planning and/or response record;
- Access a waste material estimator;
- Access treatment and disposal facility databases; and/or
- Access guidance and documents.

It is important to understand that the information provided here does not override existing regulatory or legal requirements that apply to the disposal of waste. This information should be used as a starting point for understanding some of the options available for disposal of these materials.

A UserID and password are required to access the tool. [Request a UserID and Password](#) or enter your UserID and Password to get started. View the [Overview Tutorial](#) to learn more about I-WASTE.

UserID:

Password:

Login

Although information in I-WASTE is not sensitive, having user-based access allows sharing of user-defined scenarios with collaborators.

Key Functions

Incident Waste Decision Support Tool (I-WASTE DST)

[Provide feedback](#)

Planners, emergency responders, and other individuals responsible for making disposal decisions can access technical information, regulations, and guidance to work through important disposal issues to assure safe and efficient removal, transport, treatment and/or disposal of debris and waste materials. Guidance and information contained in EPA's Incident Waste Decision Support Tool is accessible from this home page. You can navigate through applicable guidance and information presented in a logical framework, quickly produce an order of magnitude waste estimate, and access the treatment and disposal facility database and/or other guidance and information.

Access the [Quick Start Guide](#) or the [Overview Tutorial](#) for a brief overview of key functionality. Access the [Waste Materials Estimator Tutorial](#) for detailed demonstration of key features of the WME. More detailed instructions for using the tool are contained in the [Help System](#). If you are a first-time user, or would like information on the Background, Status and Future Plans of the tool, and a discussion of the Design Philosophy and Technical Approach we have applied to the development of the tool, you may want to read [Before You Begin](#).

Incident Planning & Response

Create a record of incident planning exercises or incident response decisions. Navigate through applicable guidance and information presented at each step in the decision process. Records may be saved and retrieved for future reference.

Waste Materials Estimator

Use the **Waste Materials Estimator** to produce an order of magnitude estimate for the weight and volume of materials that may require disposal. Base estimates on default values contained in the tool, or refine estimates based on more specific user-defined values.

Treatment & Disposal Facilities

Locate treatment and disposal facilities. Choose one or more filter criteria to generate a list of treatment and disposal facilities. Note: The facilities presented in the tool are not endorsed by EPA, nor have any facility owners agreed to accept any material. A facility's ability to accept incident waste is case specific and determined by the facility and its regulators. Facility contact information is provided to facilitate the initiation of treatment and disposal discussions.

Guidance & Information

Access guidance and information compiled to assist with disposal decisions. View guidance, reports, and websites organized by events or topics, view contact information, and access other useful tools.

The 4 main functions of the tool are accessed from the main page.

It is important to understand that the information provided here does not override existing regulatory or legal requirements that apply to the disposal of waste materials. This information should be used as a starting point for understanding some of the options available for disposal of these materials.

***Note that you will be required to re-login after 30 minutes of inactivity.**

Waste Quantity Estimator

Incident Waste Decision Support Tool (I-WASTE DST) ✉ Provide feedback

You are here: [Home](#) » [Waste Materials Estimator](#)

The Waste Materials Estimator will generate order of magnitude estimates for the types and quantities of materials that may require decontamination and/or disposal. Estimates can be generated for one or more structure types and combination of structure types. Estimates can be based on default parameter values, or on user-specified values. Additionally, several structure types can be used to generate estimates for other types of structures that are not currently included in the tool, but that have similar characteristics. Click the hyperlinked structure name to view the potential applicability of the existing structure types.

Additional details on the data and methodology used to generate estimates for each structure type can be accessed via the links in the More Information box below. Click Generate Estimates to generate estimates using the default parameter values, or click Modify Default Parameters to view or modify the default parameter values before generating an estimate.

For a detailed demonstration of key functionality and features, view the Waste Materials Estimator Tutorial.

Specify Area and Structures:

Open Space

Total affected area (square miles)

Movie Theaters

Qty:

Offices

Qty: Small Office

Qty: Medium Office

Qty: Large Office

Schools

Qty: Elementary School

Qty: Middle School

Qty: High School

Hospitals

Qty: Medium Hospital

Qty: Large Hospital

Shopping Malls

Qty: Small Shopping Mall

Qty: Medium Shopping Mall

Qty: Large Shopping Mall

Hotels

Qty: Small Hotel

Qty: Medium Hotel

Qty: Large Hotel

Single-Family Residences

Qty:

✎ Modify Default Parameters | 🔄 Clear Quantities | ➡ Generate Estimates

Incident Planning & Response | Waste Materials Estimator | Treatment & Disposal Facilities | Guidance

- More Information**

 - Waste Materials Estimator Tutorial
 - Default Parameter Values for Structures
 - Modeling Other Structure Types
 - Non-Structural/Interior Waste Materials
 - Structural Waste Materials
 - Waste Materials Estimator and HAZUS-MH

A “quick and dirty” waste estimate can be generated for a variety of buildings with minimal user input.

Waste Quantity Estimator Results

Incident Waste Decision Support Tool (I-WASTE DST) [Provide feedback](#)

You are here: Home » Waste Materials Estimator » Estimated Waste Materials

Waste material estimates for the selected structure type(s) are presented below. Several options are available for visualizing the results using the tabs to the right of the "Table" tab at the top of the data table. Note: The information provided here represents an order-of-magnitude estimate based on limited data and information. The results presented here should be considered as a reasoned judgment and not a precise estimate. The difference between the estimated mass and volume of items and materials and actual values will vary considerably, given the wide range of building designs and layouts.

More Information

- Non-Structural/Interior Waste Materials
- Structural Waste Materials
- Radioactive Waste Classification Guidance

[Table](#) | [Bar Chart](#) | [Bubble Chart](#) | [Pie Chart](#) | [Estimate Criteria](#)

Hover your mouse pointer over any data bar to view an attribute bubble containing the value. Click the chart legend to enable or disable which data series are shown on the chart (i.e., choose to view the results in terms of mass or volume, or both). Using your mouse pointer, drag out a rectangle in the chart. The chart adjusts to zoom into the selected area. Click "Reset zoom" to return to the default chart view. Lastly, Click the "hamburger" icon in the upper right side of the chart to download a copy of the current view of the chart.

Waste Category Quantities and Distributions

| Waste Category | Quantity (Tons) | Quantity (Cubic Yards) |
|---|-----------------|------------------------|
| Brick, Wood, and Other Structural Building Mat... | 16,000 | |
| Reinforced Concrete and Steel | 45,000 | |
| Total Non-Structural Building Materials | 24,000 | |
| Electronic Equipment | | 4,700 |
| Furniture | 6,400 | |
| Bathroom and Kitchen Materials | | |
| Paper and Office Supplies | | 3,400 |
| Gym and Sports Equipment | 290 | |
| Art and Music Equipment | | |
| Food | 270 | |
| Linens | | 5,200 |
| Dishware | 9.1 | |
| Personal Effects | | |
| Other Items and Equipment | | 1,800 |

[Modify Default Parameters](#) | [Revise Estimate](#) | [Make a New Estimate](#)

[Incident Planning & Response](#) | [Waste Materials Estimator](#) | [Treatment & Disposal Facilities](#) | [Guidance & Information](#)

The results of the waste estimate can be viewed in table form or in a variety of graphical forms. They can be exported as an Excel file.

I-WASTE Facility Databases

- Landfills
 - Municipal Solid Waste
 - Construction & Demolition Debris
 - Hazardous Waste
- Combustion Facilities
 - Municipal Waste Combustors (Waste-to-Energy)
 - Hazardous Waste
 - Medical/Biohazardous Waste
 - Industrial Combustion Facilities (e.g., boilers, smelters, etc.)
- Decontamination Wastewater Disposal Facilities
 - Publicly-Owned Treatment Works (POTWs)
 - Federally-Owned Treatment Works (FOTWs)
 - Liquid Hazardous Waste Combustion Facilities
- Other Disposal Facilities
 - Centralized Waste Treatment (CWT) Facilities
 - Commercial Medical Waste Autoclaves
 - Commercial and Federal Radioactive Waste Disposal Facilities

Facility Database Query

Incident Waste Decision Support Tool (I-WASTE DST) [Provide feedback](#)

You are here: [Home](#) » [Treatment & Disposal Facilities](#)

You may customize the list of treatment and disposal facilities generated by applying one or more of the following filter criteria. To view all facilities, leave the selection boxes blank. Click View List of Facilities to generate a list of facilities that meet all of the specified criteria. Click the links in the More Information box to learn more about the facility data included in I-WASTE and the ability to map data external to I-WASTE.

Note: The facilities presented in the tool are not endorsed by EPA, nor have any facility owners agreed to accept any material. A facility's ability to accept incident waste is case specific and determined by the facility and its regulators. Facility contact information is provided to facilitate the initiation of treatment and waste management discussions.

Filter Criteria

Facility types:
Hold down the CTRL key to select multiple facility types
 Sort list box alphabetically Sort list box by facility grouping (e.g., landfills, incinerators, other)

- Centralized Waste Treatment (CWT) Facilities
- Commercial Autoclaves
- Commercial Radioactive Waste Disposal Facilities
- Electric Arc Furnaces
- Federal Radioactive Waste Disposal Facilities
- Federally Owned Treatment Works (FOTW)
- Government-Owned Land/Facilities
- Hazardous Waste Combustion Facilities
- Industrial Waste Landfills
- Inert or Construction and Demolition (C&D) Landfills

More Information

- Universe of Facilities
- Other Waste Management Facilities
- Map Facilities

State:
Hold down the CTRL key to select multiple states

- AK - ALASKA
- AL - ALABAMA
- AR - ARKANSAS
- AZ - ARIZONA

EPA Region:
Hold down the CTRL key to select multiple EPA regions

- Region 1 (CT, ME, MA, NH, RI, VT)
- Region 2 (NJ, NY)
- Region 3 (DE, MD, PA, VA, WV, DC)
- Region 4 (AL, FL, GA, KY, MS, NC, SC, TN)

[View List of Facilities](#)

[Incident Planning & Response](#) [Waste Materials Estimator](#) [Treatment & Disposal Facilities](#) [Guidance & Information](#)

The facility databases can be queried by facility type, state, or EPA region.

Facility Database Results

Incident Waste Decision Support Tool (I-WASTE DST)

You are here: [Home](#) » [Treatment & Disposal Facilities](#) » Facility Search Results

The list of facilities matching your criteria are listed below. For your reference, the criteria used to conduct this search are also listed below.

Note: The facilities presented in the tool are not endorsed by EPA, nor have any facility owners agreed to accept any material. Whether or not a facility accept incident waste is case specific and determined by the facility and its regulators. Facility contact information is provided for the initiation of treatment and disposal discussions.

Filter Criteria:

Municipal Solid Waste (MSW) Landfills

State(s): MT - MONTANA

Your search results contain 7 facilities.

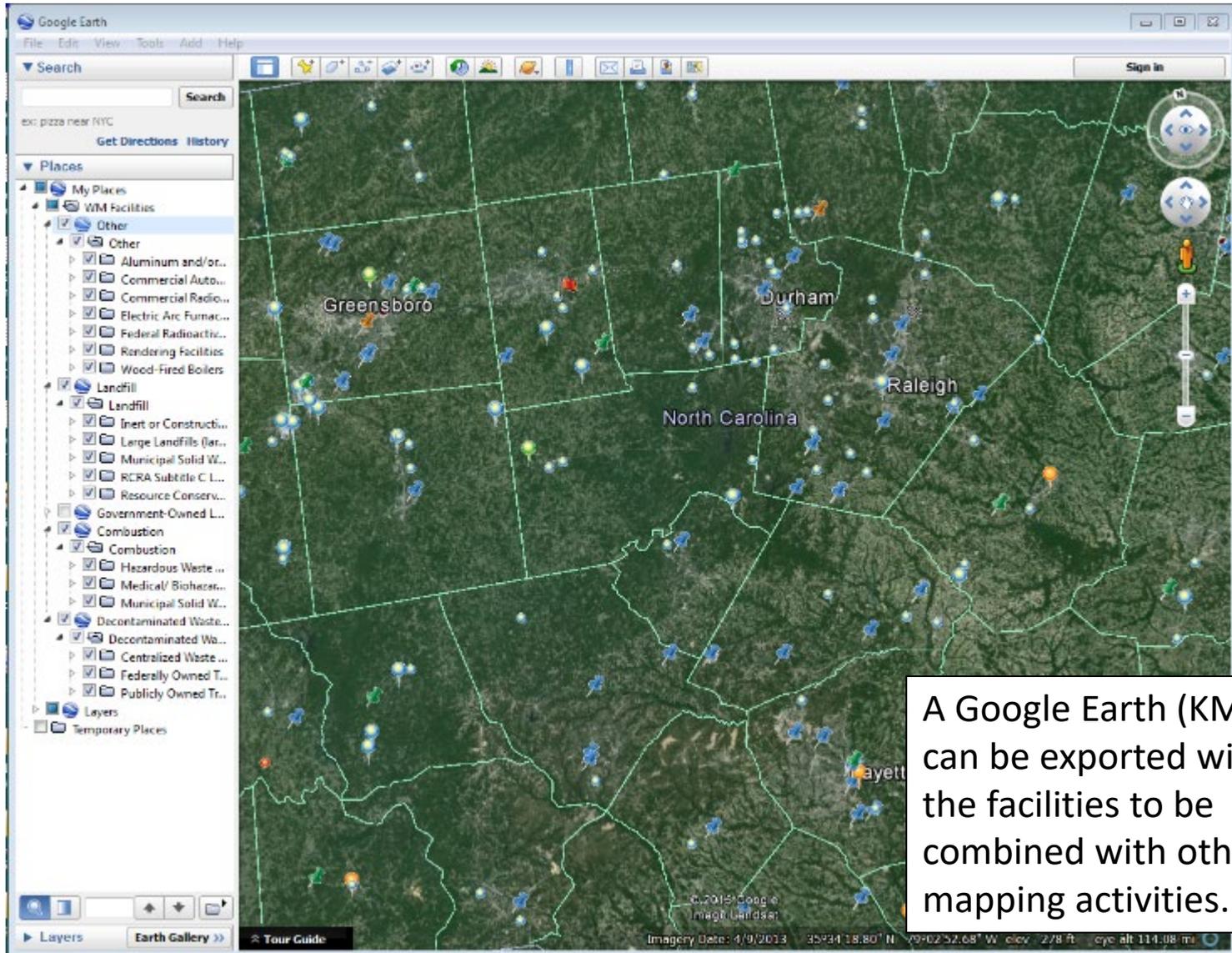
Database query results have hyperlinks to facility info and permits (if online). Results can be exported to an Excel file.

- Universe of Facilities
- Map Facilities

 Save List to File
 Print Facilities

| Select All On Page | Name | Address | State | EPA Region | Contact Information |
|--------------------------|--|--|-------|------------|----------------------------------|
| <input type="checkbox"/> | BILLINGS CITY LANDFILL | 5240 JELLISON ROAD 4 1/2 MI S., BILLINGS | MT | 8 | Barbara Butler 406-247-8633 |
| <input type="checkbox"/> | FLATHEAD COUNTY LANDFILL | 4098 Hwy 93 North, Kalispell | MT | 8 | David Prunty 406-758-5910 |
| <input type="checkbox"/> | GALLATIN COUNTY LOGAN LANDFILL | 10585 Two Dog Road, MANHATTAN | MT | 8 | Martin Bey 406-582-2492 |
| <input type="checkbox"/> | Lewis & Clark County Landfill | 4075 Deal Lane, Helena | MT | 8 | Sherrel Rhys 406-457-8521 |
| <input type="checkbox"/> | Missoula Landfill | 3737 Coal Mine Road, Missoula | MT | 8 | Niki Wuestenberg 563-285-1404 |
| <input type="checkbox"/> | MONTANA WASTE SYSTEMS - HIGHPLAINS SANITARY LANDFILL | 142 POWERLINE ROAD, FLOWEREE | MT | 8 | Greg Wennerberg 406-452-3143 |
| <input type="checkbox"/> | Valley View Landfill | 300 Highway 518, East Helena | MT | 8 | Dave Duffy 406-227-3600 |

Geocoded Facility Databases



Relevant Guidance

Incident Waste Decision Support Tool (I-WASTE DST) ✉ Provide feedback

You are here: [Home](#) » [Guidance & Information](#)

Guidance and information contained in the Incident Waste Decision Support Tool is accessible from this page. You can access features and information that is tailored to specific categories of events. Other guidance and information that is broadly applicable to more than one event is accessible via the quick links on the right.

[Expand all descriptions](#)

Chemical/Biological ▾

- [Basic Information](#)
- [Chem/Bio & Decon Agent Information](#)
- [Create Building Waste Inventory](#)
- [View Saved Building Waste Inventories](#)
- [View Building Waste Characteristics](#)

Radiological/Nuclear ▾

- [Basic Information](#)
- [Incident Response & Cleanup Information](#)
- [Radiological Dispersal Device \(RDD\) Information](#)
- [Low-Level Radioactive Waste Compacts](#)
- [Radionuclide Information](#)
- [Radioactive Materials & Waste Regulations](#)

Natural Disaster ▾

- [Basic Information](#)
- [Waste & Debris Fact Sheets](#)
- [Debris Management Equipment](#)
- [Planning Documents](#)

Critical Infrastructure ▾

- [Basic Information](#)
- [Water Systems \(Chem/Bio Contamination\)](#)
 - [Drinking Water Treatment Plant Decon Disposal](#)
 - [Water Supply Distribution System Decon Disposal](#)
 - [Drinking Water System End User Items Disposal](#)
 - [Wastewater Treatment Plant Decon Disposal](#)

Agricultural Incidents & Foreign Animal Disease ▾

- [Basic Information](#)
- [Disposal Guidance](#)
- [Case Studies](#)
- [Pathogen Information](#)
- [Training Modules](#)

Incident Planning & Response
Waste Materials Estimator
Treatment & Disposal Facilities
Guidance & Information

Quick Links

- [Treatment & Disposal Facilities](#)
- [Disposal Guidance](#)
- [Size Reduction Guidance](#)
- [Packaging/Container Guidance](#)
- [Hazardous Waste Transportation Regulations](#)
- [Waste Transportation Guidance](#)

Browse Documents and Reports

Select an event

Then select a topic

[Go](#)

Browse Guidance

Select an event

Then select a topic

[Go](#)

Other Resources

- [Key Terminology](#)
- [Response Management Jurisdictional Boundaries](#)
- [Regional, State, and Local Contacts](#)
- [Other Planning & Response Tools](#)
- [Laboratory Information](#)

We have gathered relevant guidance for easy access.

Radiological/Nuclear Basic Information Page

Incident Waste Decision Support Tool (I-WASTE DST)

[Provide feedback](#)

You are here: [Home](#) » [Guidance & Information](#) » [Radiological/Nuclear](#) » [Basic Information](#)

Basic Information

Incident Response & Cleanup Information

Radiological Dispersal Device (RDD) Information

Low-Level Radioactive Waste Compacts

Radionuclide Information

Radioactive Materials & Waste Regulations

Radiological/Nuclear

Additional guidance and functionality specific to radiological/nuclear events can be accessed using the following left navigation menu items or accessing the quick links below:

- Incident Response & Cleanup Information - Access information related to Radiological Dispersal Device (RDD) incident response and cleanup.
- Radiological Dispersal Device (RDD) Information - Access information describing an RDD and descriptions and common uses of the radioisotopes/radionuclides of greatest concern for potential use in an RDD.
- Low-Level Radioactive Waste Compacts - Access a brief discussion of the Radioactive Waste Policy Act and view member states, host states, and associated disposal facilities for low-level radioactive waste compacts.
- Radionuclide Information - Access available radionuclide data, including: half-life, specific activity, decay mode, and radiation energies.
- Radioactive Materials & Waste Regulations - Access information describing radioactive materials and waste regulations by topic and/or governing agency.

Radiological Incidents

- Radiological Dispersal Device (RDD)
- Orphan Sources
- Nuclear Power Plant Accidents
- Transportation Accidents
- Satellites and Rockets

Radioactive Waste

- Categories
 - High-Level Radioactive Waste (HLW) and Spent Nuclear Fuel
 - Transuranic Waste (TRU)
 - Low-Level Radioactive Waste (LLRW)
 - 11.e.(2) Byproduct Material
 - Mixed Wastes (MHLW, MTRU, MLLW)
- Other Waste Types
 - Orphan Sources
 - Naturally-Occurring Radioactive Materials (NORM)
 - Low Activity Radioactive Waste
- Transportation
- Treatment
- Brokers and Processors [\[EXIT Disclaimer\]](#)
- Storage
 - Government-Owned Land/Facilities
- Waste Classification
- Disposal
 - Federal Facilities
 - Commercial Facilities

Nuclear Materials

- Source Material
- Special Nuclear Material
- Byproduct Material

Access [Incident Planning & Response](#) to create an incident record for a radiological/nuclear event, or return to the guidance home and documents and reports.

[Radioactive Materials Estimator](#)

[Treatment & Disposal Facilities](#)

[Guidance & Information](#)

We have gathered relevant guidance for easy access.

Chemical/Biological Basic Information Page

Incident Waste Decision Support Tool (I-WASTE DST) ✉ Provide feedback

You are here: [Home](#) » [Guidance & Information](#) » [Chemical/Biological](#) » Basic Information

Chemical/Biological

Additional guidance and functionality specific to chemical/biological events can be accessed using the following left navigation menu items or accessing the quick links below:

- [Chem/Bio & Decon Agent Information](#) - View detailed information available for chemical agents, biotoxins, biological agents, or decontamination agents. Hyperlinks to Material Safety Data Sheets (MSDS), Centers for Disease Control and Prevention (CDC) Fact Sheets, and Personal Protective Equipment (PPE) guidance provide users access to additional information.
- [Create Building Waste Inventory](#) - Create an inventory (i.e., shopping cart) of items that may require treatment or disposal. Inventories can be saved and retrieved for later use by you or other users of the tool.
- [View Saved Building Waste Inventories](#) - Access saved building waste inventories.
- [View Building Waste Characteristics](#) - Access characteristics of building waste for over 900 items. Default values for weight, volume and dimensions can be viewed.

Access [Incident Planning & Response](#) to create an incident record for a chemical/biological event, or return to the guidance home page to access other relevant guidance and documents and reports.

[Incident Planning & Response](#) [Waste Materials Estimator](#) [Treatment & Disposal Facilities](#) [Guidance & Information](#)

We have gathered relevant guidance for easy access.

Natural Disaster Basic Information Page

Incident Waste Decision Support Tool (I-WASTE DST)

[Provide feedback](#)

You are here: [Home](#) » [Guidance & Information](#) » [Natural Disaster](#) » [Waste & Debris Fact Sheets](#) » [Basic Information](#)

Natural Disaster

Additional guidance and functionality specific to natural disaster events can be accessed using the following left navigation menu items or accessing the quick links below:

- [Waste & Debris Fact Sheets](#) - Access over twenty fact sheets that address disposal issues related to special considerations waste.
- [Debris Management Equipment](#) - Access an inventory of Federal Emergency Management Agency (FEMA) debris removal equipment.
- [Planning Documents](#) - Access a library of natural disaster case studies, preparedness guidance documents, and planning documents.

Case Studies by Natural Disaster Event Type

- Earthquake
- Flooding
- Hurricane
- Tornado
- Wildfire

Regulations, Guidance, and Facilities

| <u>Hazardous</u> | <u>Non-Hazardous</u> |
|--|--|
| <ul style="list-style-type: none"> Transportation Regulations Other Disposal Guidance Hazardous Waste Disposal Facilities | <ul style="list-style-type: none"> Disposal Guidance Disposal Facilities Recycling Guidance Recycling Facilities |

Types of Waste

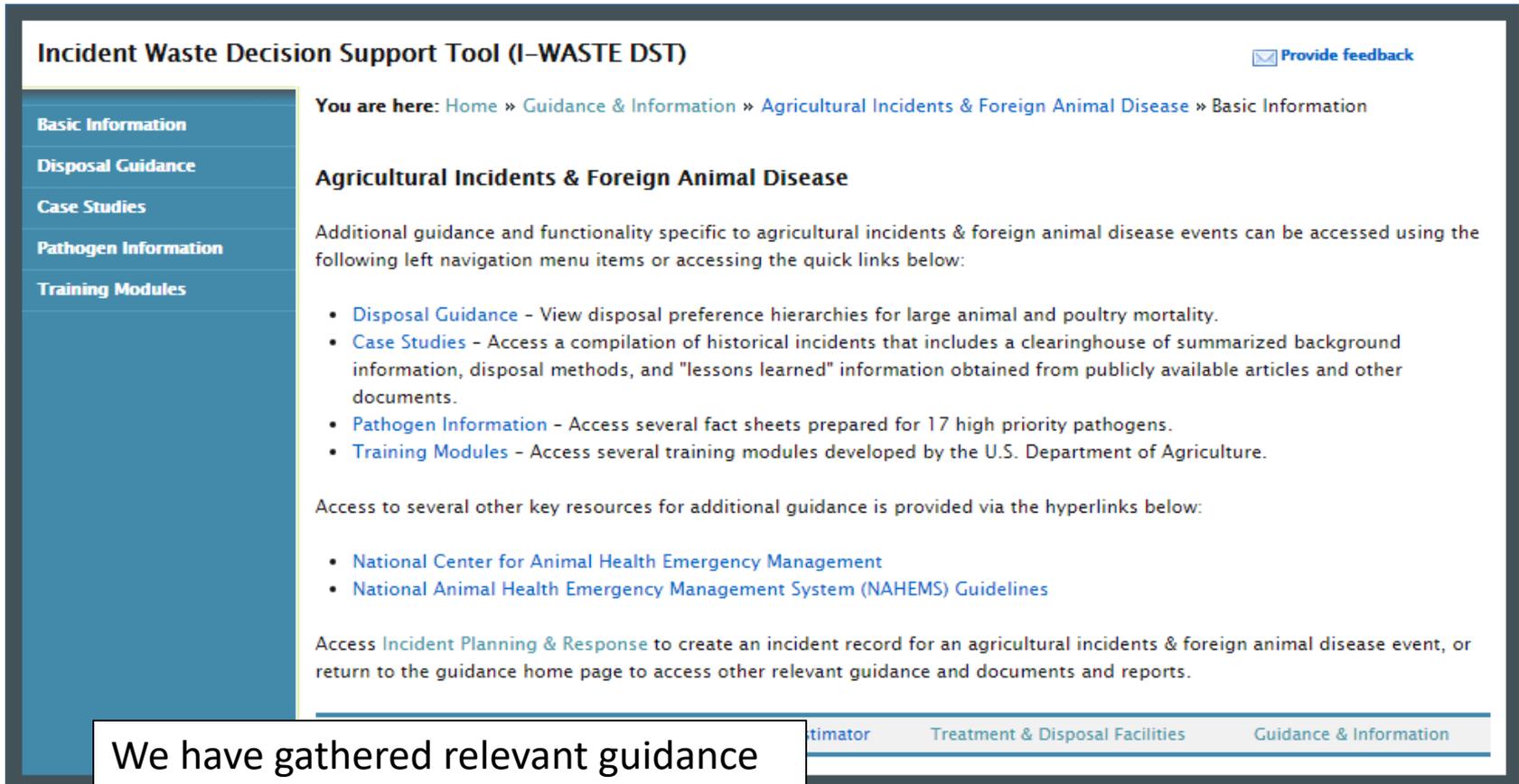
| <u>Mass Waste</u> | <u>Special Considerations Waste</u> |
|---|---|
| <ul style="list-style-type: none"> Construction and Demolition Green Waste Soils and Sediments | <ul style="list-style-type: none"> Ammunition and Explosives Animal Carcasses Asbestos-containing Materials Auto Batteries Biohazard Waste CCA-treated Wood Computer, TVs, and Electronics Construction and Demolition Cylinders and Tanks Fluorescent Lamps Food Wastes (putrescibles) Green Waste Household Hazardous Waste Mercury-containing Products Methamphetamine Labs Orphan Containers Petroleum Products Pharmaceuticals Polychlorinated Biphenyls (PCBs) Pool Chemicals Radiological Orphan Sources School Biological Labs School Chemistry Labs Small Engines Soils and Sediments Underground Storage Tanks Vehicles and Boats White Goods |

Access [Incident Planning & Response](#) to create an incident record for a natural disaster event, or return to the guidance home and documents and reports.

[Waste Materials Estimator](#)
[Treatment & Disposal Facilities](#)
[Guidance & Information](#)

We have gathered relevant guidance for easy access.

Agricultural/Foreign Animal Disease Basic Information Page



Incident Waste Decision Support Tool (I-WASTE DST) [Provide feedback](#)

You are here: [Home](#) » [Guidance & Information](#) » [Agricultural Incidents & Foreign Animal Disease](#) » [Basic Information](#)

Agricultural Incidents & Foreign Animal Disease

Additional guidance and functionality specific to agricultural incidents & foreign animal disease events can be accessed using the following left navigation menu items or accessing the quick links below:

- [Disposal Guidance](#) - View disposal preference hierarchies for large animal and poultry mortality.
- [Case Studies](#) - Access a compilation of historical incidents that includes a clearinghouse of summarized background information, disposal methods, and "lessons learned" information obtained from publicly available articles and other documents.
- [Pathogen Information](#) - Access several fact sheets prepared for 17 high priority pathogens.
- [Training Modules](#) - Access several training modules developed by the U.S. Department of Agriculture.

Access to several other key resources for additional guidance is provided via the hyperlinks below:

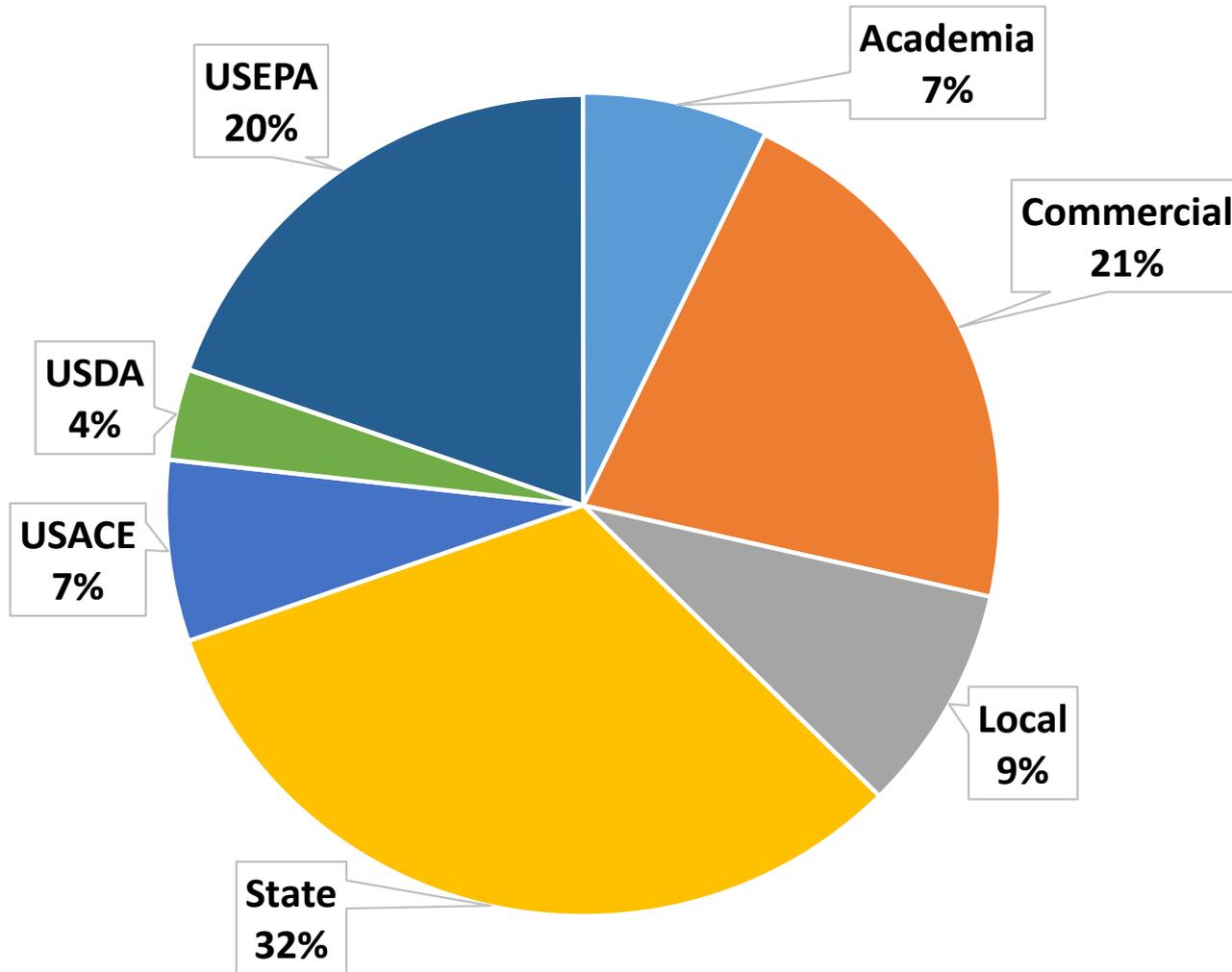
- [National Center for Animal Health Emergency Management](#)
- [National Animal Health Emergency Management System \(NAHEMS\) Guidelines](#)

Access [Incident Planning & Response](#) to create an incident record for an agricultural incidents & foreign animal disease event, or return to the guidance home page to access other relevant guidance and documents and reports.

[Estimator](#) [Treatment & Disposal Facilities](#) [Guidance & Information](#)

We have gathered relevant guidance for easy access. We also have linked directly to USDA/Animal and Plant Health Inspection Service training modules.

Distribution of Users



Future Enhancements

- Incorporation of geospatial data and facility information into EPA GeoPlatform
- Migration to cloud.gov
- Addition of per- and polyfluoroalkyl substances (PFAS) treatment/disposal facilities
- Integration of several EPA waste management tools into dashboard to allow easy user access to all features
 - I-WASTE
 - Waste Storage & Staging Tool
 - Waste Logistics Tool
 - Disaster Debris Recovery Tool (Region 5)
 - Waste Management Planning Tool (OLEM)

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
- When your request is approved, your login ID and initial password will be emailed to you



Bottom Line

- Waste management is a critical component of responding to wide-area disasters, whether they are man-made or naturally occurring.
- Decisions are made at the local, state, tribal, and federal level and include the waste management facilities themselves.
- Pre-incident planning for waste management is a key element of enhancing resiliency of communities to these types of incidents.
- I-WASTE is intended to support pre-incident planning as well as decision-making during an incident.



Contact

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