

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



## **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 widespread.
- 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

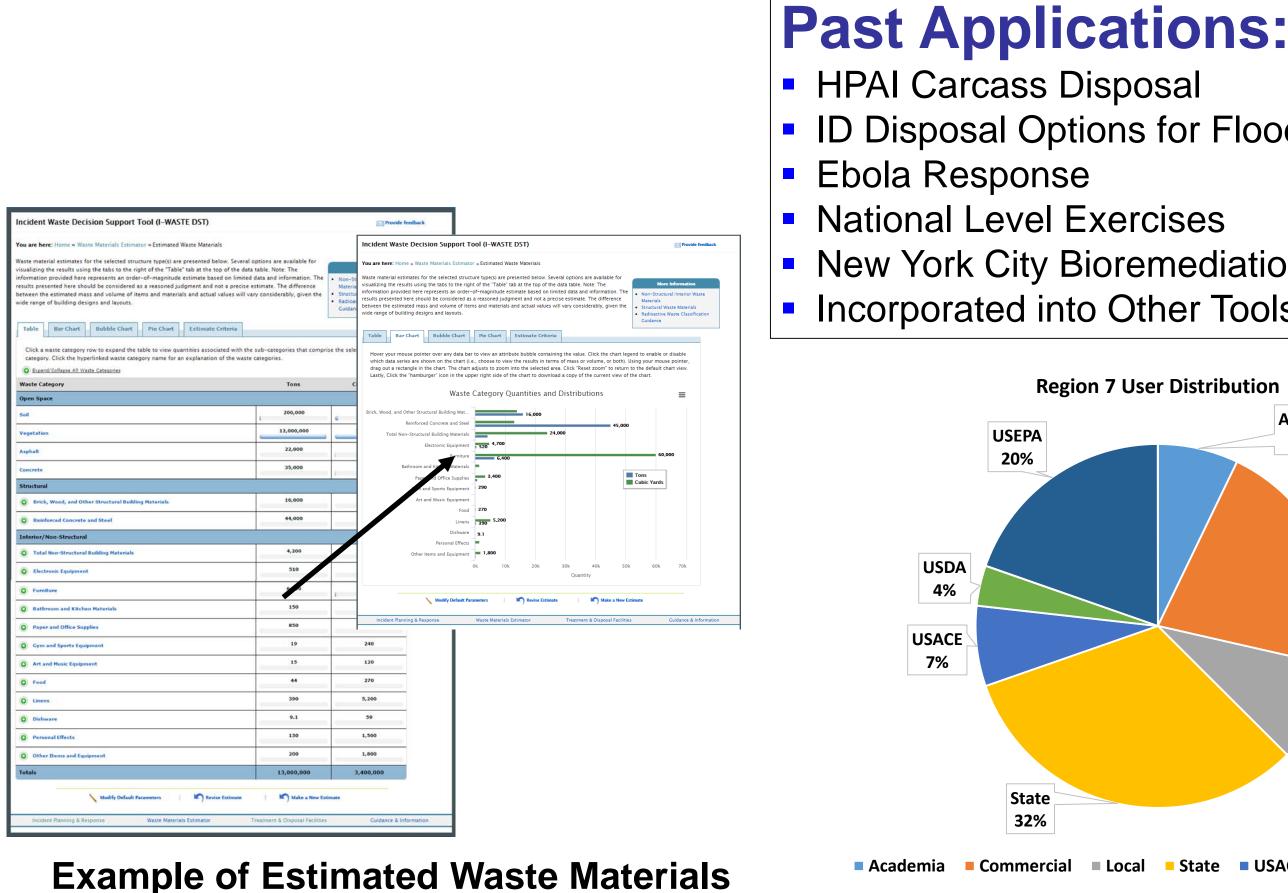
### **Collaborators and Partners**:

- 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

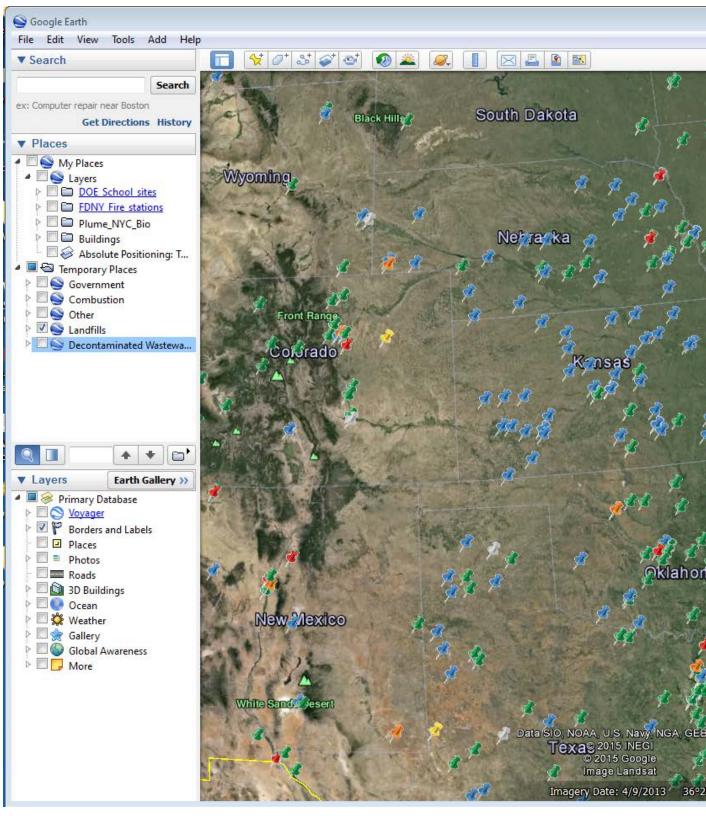
<b>Potential Applications:</b>
Training, Planning & Exercise Tool
Supports State & Local Homeland Security (HS)
Planning IAW National Planning Scenarios (NRF, 2008)
Allows multiple scenarios to be examined
Encourages discussions with facilities prior to event
For use in design or evaluation of HS Exercises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



P. Lemieux\*, S. Thorneloe\*, M. R \*USEPA Office of Research and Development, Revenue of Research and Revenue of Reve \*\*Eastern Research Group (ERG), Inc

> ident Waste Decision Support Tool (I–WASTE DST Provide feedbac accept incident waste is case specific and determined by the facility and its regulators. Facility contact information is provided to facilitate th ilter Criteria acility types: lold down the CTRL key to select multiple facility type Sort list box alphabetically Sort list box by facility grouping (e.g., landfills, incinerators Universe of Facilities entralized Waste Treatment (CWT) Facilit Other Waste Managemen ommercial Autoclave Facilities ommercial Radioactive Waste Disposal Facilit Map Facilities ectric Arc Furnace deral Radioactive Waste derally Owned Treatment Works (FOTW overnment-Owned Land/Facilities azardous Waste Combustion Facilit dustrial Waste Landfills ert or Construction and Demolition (C&D) Landfil lold down the CTRL key to se K - ALASKA L - ALABAMA R - ARKANSAS Z - ARIZONA PA Region: lold down the CTRL key to select multiple EPA re egion 1 (CT, ME, MA, NH, RI, VT) egion 2 (NJ, NY) egion 3 (DE, MD, PA, VA, WV, DC) egion 4 (AL, FL, GA, KY, MS, NC, SC, TN) 🔻 View List of Facilities Waste Materials Estimator Treatment & Disposal Facilities Guidance & Information Incident Planning & Response

Selection of Dispo **Facilities** 



**Geocoded Waste Man Facility Databas** 

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search	Triangle Park, NC	
Chanti	IIV, VA	
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and Fires		
	Incident Waste Decision Support Tool (I–WASTE DST)	de feedback
lanning	The Waste Materials Estimator will generate order of magnitude estimates for the types and quantities of materials that may require decontami and/or disposal. Estimates can be generated for one or more structure types and combination of structure types. Estimates can be based on de parameter values, or on user-specified values. Additionally, several structure types can be used to generate estimates for other types of structur are not currently included in the tool, but that have similar characteristics. Click the hyperlinked structure name to view the potential applicabil existing structure types.	nation efault ures that
	Additional details on the data and methodology used to generate estimates for each structure type can be accessed via the links in the More In box below. Click Generate Estimates to generate estimates using the default parameter values, or click Modify Default Parameters to view or m default parameter values before generating an estimate.	odify the
nia	For a detailed demonstration of key functionality and features, view the Waste Materials Estimator Tutorial.  Specify Area and Structures: Open Space Movie Theaters Waste Materials Estimator Tutorial	
Commercial	Total affected area (square miles)     Qty:     • Default Parameter Value Structures       Offices     Schools     • Modeling Other Structure • Non-Structural/Interior 1 Materials       Qty:     Small Office     Qty:     Elementary School	e Types Waste
21%	Qty:     Medium Office     Qty:     Middle School       Qty:     Large Office     Qty:     High School	-
	Hospitals     Shopping Malls       Qty:     Medium Hospital     Qty:     Small Shopping Mall       Qty:     Large Hospital     Qty:     Medium Shopping Mall	
	Ottels     Cty:     Large Shopping Mall       Qty:     Small Hotel     Single-Family Residences       Qty:     Medium Hotel     Qty:	•
.ocal 9%	Qty: Large Hotel	
	Modify Default Parameters   Clear Quantities   Scenerate Estimates Incident Planning & Response Waste Materials Estimator Treatment & Disposal Facilities Guidance & Information	
USDA 🔳 USEPA	Waste Materials Estimator Pa	
		F
		•
Incident Waste Decision Support Too You are here: Home » Treatment & Disposal Facilit		
	below. For your reference, the criteria used to conduct this search are also listed below. endorsed by EPA, nor have any facility owners agreed to accept any material. A facility's ability to	
initiation of treatment and disposal discussions		
Municipal Solid Waste (MSW) Landfills State(s): MT - MONTANA <b>Your search results contain 7 facilities.</b>	More Information     Universe of Facilities     Map Facilities	
Select All On Name Page	Address State EPA Region Contact Information	
	5240 JELLISON ROAD 4 1/2 MI S., MT 8 Barbara Butler BILLINGS 406-247-8633 4098 Hwy 93 North, Kalispell MT 8 David Prunty	
GALLATIN COUNTY LOGAN LANDFILL	406-758-5910 10585 Two Dog Road, MANHATTAN MT 8 Martin Bey 406-582-2492	•
Lewis & Clark County Landfill  Missoula Landfill  MONTANA WASTE SYSTEMS - HIGHPLA	406-457-8521 3737 Coal Mine Road, Missoula MT 8 Niki Wuestenberg 563-285-1404	
SANITARY LANDFILL Valley View Landfill	NS 142 POWERLINE ROAD, FLOWEREE MT 8 Greg Wennerberg 406-452-3143 300 Highway 518, East Helena MT 8 Dave Duffy 406-227-3600	
Incident Planning & Response Was	e Materials Estimator Treatment & Disposal Facilities Guidance & Information	•
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ORD Tools Café for Region 7 Lenexa, KS December 9, 2015

#### **bortant Reminders:**

ASTE is not an expert system (i.e., I-WASTE does not the user what to do), but rather presents information to sider during the decision-making or planning process ASTE assumes the decision to treat/dispose has been

ASTE does not present massive quantities of rmation to the user, but rather tries to distill information le maintaining links to more detailed information

#### **ictionality**:

vigate a framework for planning and response decisionking

- imate quantities and characteristics of waste ess waste management guidance for a variety of
- dent types
- ntify potential treatment/disposal facilities
- ess targeted guidance/fact sheets
- ess other planning and response tools

# ility Databases:

- *Iunicipal Solid Waste*
- **Construction & Demolition Debris**
- ndustrial Waste Landfills
- lazardous Waste
- nbustion Facilities
- *Iunicipal Waste Combustors (Waste-to-Energy)*
- lazardous Waste
- *Aedical/biohazardous Waste*
- ndustrial combustion facilities (boilers, smelters, etc) Leous Waste Disposal Facilities
- Publicly-Owned Treatment Works (POTWs)
- ederally-Owned Treatment Works (FOTWs)
- Centralized Waste Treatment (CWT) Facilities er Facilities
- **Commercial Medical Waste Autoclaves** Enderal Radioactive Waste Disposal Facilities Commercial Radioactive Waste Disposal Facilities Rendering Facilities

#### ure Enhancements:

progration of geospatial data and facility information into A GeoPlatform

#### Cess: /www2.ergweb.com/bdrtool/login.asp

st-time users will need to request a user ID and ssword – the link above has directions for making the one request

our request is approved, your login ID and initial ssword will be emailed to you.

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