



RDPO

Regional Disaster Preparedness Organization

Unified. Prepared. Resilient.

Workshop 2

Household Hazardous Waste

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What is HHW?

- Household items that contain one or more of the following characteristics:
 - Ignitability
 - Corrosivity
 - Reactivity
 - Toxicity



What is HHW?

- **Examples include:**
 - Motor Oil
 - Batteries
 - Paints
 - Solvents
 - Cleaners
 - Drain Openers
 - Propane tanks



HHW Handling

- **Should be segregated for special handling**
 - Specific collection location/event
 - Specific days for curbside pickup
- **Residents should be advised not to comingle HHW with other waste**
 - Pre-disaster notification?
 - Post-disaster notification?

HHW Collection vs. Sites

- **Collection**

- **Mixed Debris Collection**

- Most convenient for public
 - Prolongs recycling and reduction efforts

- **Source-Segregated Collection**

- Residents sort debris prior to collection
 - Trucks pick up and deliver to appropriate site
 - Requires more trucks
 - Most effective for HHW



HHW Collection vs. Sites

■ Sites

- Involves having residents bring debris to a common location
- Utilizes large, roll off bins
- Ensure staff develops proper ingress, egress and exchanges
- Liability issues?



HHW Collection

- **HHW mixed with other debris makes it all HHW**
- **Check zoning regulations for special rules**
- **Is your jurisdiction already collecting HHW?**
- **Pre-planning**
 - **Contracts?**
 - **Scopes of Work?**

HHW Collection Sites

- **Consider safety and evacuation measures**
 - **Make sure all staff knows what to do in an emergency**
 - **Make sure all staff knows what direction to go**
- **Consider air monitoring**
- **Ensure clear flow and direction, so materials are not accidentally mixed**

HHW Collection Site Entry

- **Administrative Trailers**
 - **Command Post**
 - **Emergency/Response Trailer**
- **Visitor Entrance**
 - **Ensure all visitors/employees sign in and out**
- **Entry control point**
 - **Hard hat/visibility vest area**
 - **Debris equipment**

HHW Collection Site

- **Collection pads can include the following:**
 - **Fire Extinguishers**
 - **Scrap Salvage**
 - **Ammunition/Weapons**
 - **Batteries**
 - **Gas tanks**
 - **Special Refrigeration**
 - **Tank/Cylinders**



Other HHW

- **White goods**
 - Household appliances
 - Refrigerators
 - Washing Machines
- **Brown goods**
 - Furniture
 - Couches
 - Mattresses



Best Practices

- **Any older building materials can contain HHW**
- **Keep food waste separate**
- **Water contamination**
 - Materials can weigh more
 - Water drainage
- **Use of barges/rail cars**



Lessons Learned

- **Escambia County, FL (Hurricane Ivan)**
 - Initial response slowed by lack of pre-qualified contractors
 - Selection of finalization took 12 days
 - Communication with public should be ongoing
 - Residents should be aware of debris management policies/procedures



Lessons Learned

- **Los Angeles, CA (Northridge Earthquake)**
 - Efforts were forced to be reactive due to lack of comprehensive debris management plan
 - Debris stream increased from 150 tons/day to 10,000 tons/day following earthquake
 - City officials utilized an existing list of approved contractors
 - City inspectors oversaw all debris removal
 - All mixed debris went to four facilities, and after processing recycled 80% of the materials collected

Public Communication

- **Begin making communications plans as soon as watches/warnings are issued**
- **Educate residents on the importance of segregating any disaster related debris**
- **Methods**
 - **Media/TV**
 - **Social Media**
 - **Debris hotline?**



Separating Your Debris

Debris should be placed curbside, without blocking the roadway or storm drains.

NO PICKUP ZONE

Any debris placed from the sidewalk toward your property will not be picked up.

DEBRIS SEPARATION

Separate debris into the six categories shown below.

DO NOT STACK OR LEAN

Placing debris near or on trees, poles, or other structures makes removal difficult. This includes fire hydrants and meters.

UNSURE WHERE TO PLACE DEBRIS?

If you don't have a sidewalk, ditch, or utility line in front of your house, place debris at the edge of your property before the curb.



Normal Household Trash

Normal household trash and bagged debris of any kind will not be picked up with disaster debris. You should continue to follow your normal garbage removal schedule.



VEGETATIVE DEBRIS

- Leaves (do not put in bags)
- Logs
- Plants
- Tree branches



CONSTRUCTION & DEMOLITION DEBRIS

- Building materials
- Carpet
- Drywall
- Furniture
- Lumber
- Mattresses
- Plumbing



APPLIANCES & WHITE GOODS

- Air conditioners
- Dishwashers
- Freezers
- Refrigerators
- Stoves
- Washers, dryers
- Water heaters



ELECTRONICS

- Computers
- Radios
- Stereos
- Televisions
- Other devices with a cord



HOUSEHOLD HAZARDOUS WASTE

- Cleaning supplies
- Batteries
- Lawn chemicals
- Oils
- Oil-based paints and stains
- Pesticides

HURRICANE RESPONSE



St. Tammany Parish

HOUSEHOLD HAZARDOUS WASTE DROP-OFF

Final Dates for Drop-off at EPA Sites - Now through DECEMBER 20

- **CLEANERS** (such as bleach and ammonia)
- **ROACH & OTHER PEST KILLERS**
- **PAINT & WORKSHOP SUPPLIES**
- **AUTOMOTIVE PRODUCTS**
- **FLAMMABLE PRODUCTS** (such as oil, gas and propane)
- **LAWN & GARDEN PRODUCTS**
- **OTHER HOUSEHOLD CHEMICALS**
- **FLUORESCENT LIGHTS**
- **THERMOMETERS**
- **BATTERIES**
- *Televisions, computers and other electronics will also be collected.*

DROP-OFF LOCATIONS AND SCHEDULE:

Western St. Tammany Parish

Open 8 am to 4 pm Monday through Friday (last day for drop-off December 20)

Mandeville High School – To access the site, take the West Causeway Approach to Mandeville High Boulevard. Take Mandeville High Boulevard to the circle at the end of the road – look for yellow signs.

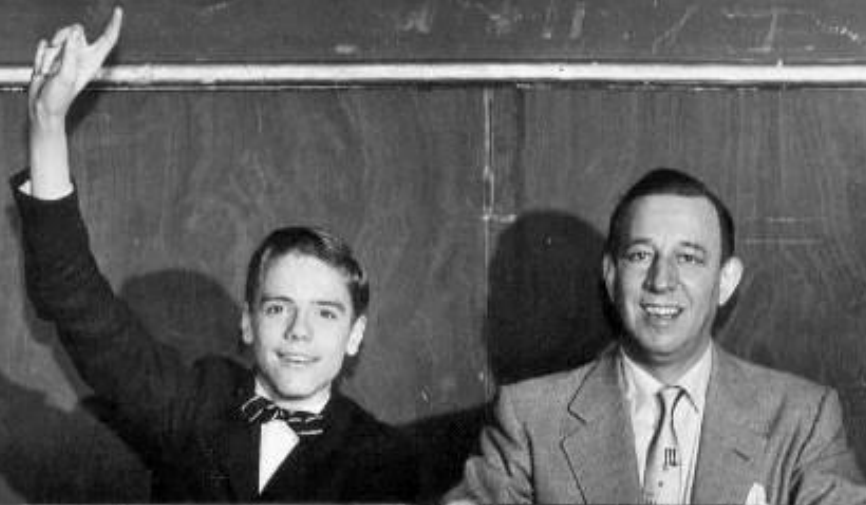
Northern St. Tammany Parish

Open 8 am to 4 pm Saturday, Sunday and Wednesday (last day for drop-off December 18)

Near Parish Jail in Covington – To access the site, take Columbia St. to Champagne St. and follow signage.

TWENTY QUESTIONS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



DICK

HERB



VAN



FLORENCE



ALDO RAY