



OKLAHOMA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Emergency Response
and Preparedness
for Disasters

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Executive Director

Oklahoma Department of Environmental Quality





DISASTERS



Natural Disasters

- Types of Disasters in Oklahoma
 - Droughts
 - Wildfires
 - Floods
 - Tropical Storms & Hurricanes
 - Ice Storms
 - Tornadoes
 - Man-made



DEQ's Role in Disaster Response

- Primary Responsibilities – State EOP
 - Hazardous Materials
 - Water & Sanitation
 - Debris Management



Hazardous Chemical Facilities

- Identify Impacted Facilities
 - Local field staff
 - Mapping tools
- Technical Assistance
- Follow-up to ensure proper sampling & disposal
- Coordinate with Local, State, & Federal Agencies



Water Supplies



Cracked ground is found where water
should be at Lake Hefner (PWS Lake)
- Southern Plains Drought 2011-2015

Impacted Public & Private Water Supplies

- What are the Impacts to Water Supplies in Disasters?
 - Water Shortage - rationing
 - Damage
 - Loss of Pressure
 - Contamination
- DEQ,
 - Assists Communities in Recovery
 - Note damages and follow progress
 - Provide technical assistance as needed
 - Ensure Safe Drinking Water
 - Precautionary or Mandatory Boil Orders
 - Provide private water well sampling to citizens at a free or reduced rate



Impacted Wastewater Facilities

- DEQ,
 - Provide Technical Assistance
 - Document Damage
 - Share Information



Technical Assistance & Fact Sheets

- DEQ provides Technical Assistance and Fact Sheets regarding Disasters
- Fact sheets: well disinfection, polluted water, & debris management are available to the public on our website

DEQ

May 2015

Coming Home: Steps to Stay Safe as You Return Home

Prepare for your return: Bring the right supplies and drive carefully.
Do a home safety inspection and make a cleanup plan.
Know common cleanup dangers and be aware of other dangers.



Debris Management

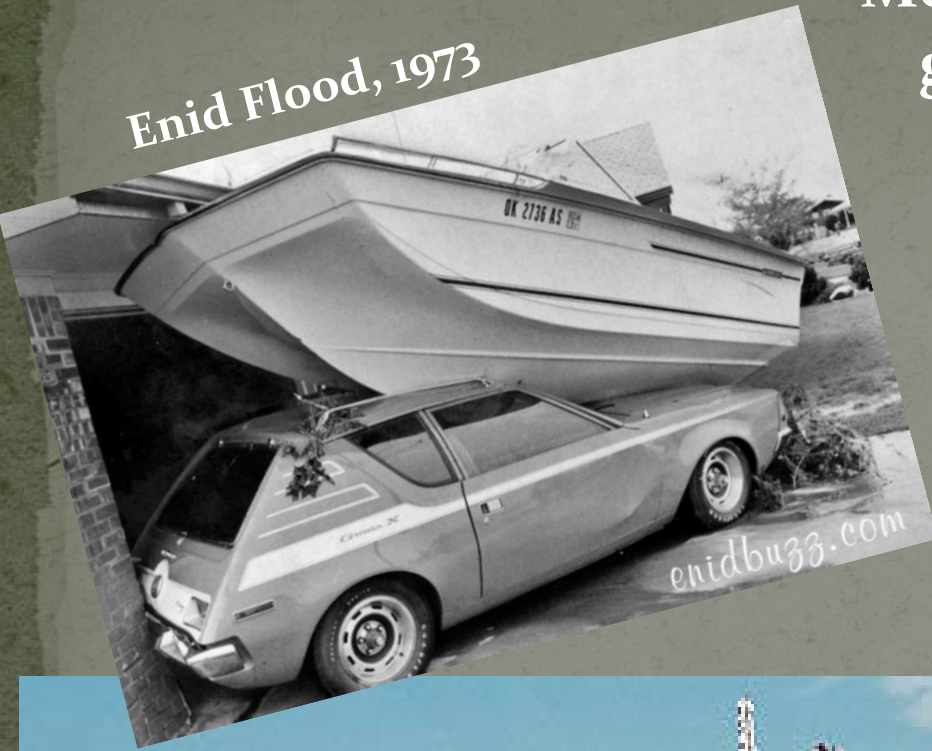


Tree Limb/Brush and
Wood Chip Pile
Tulsa 2007



Most natural/manmade disasters generate some form of debris

Enid Flood, 1973



Ice Storms

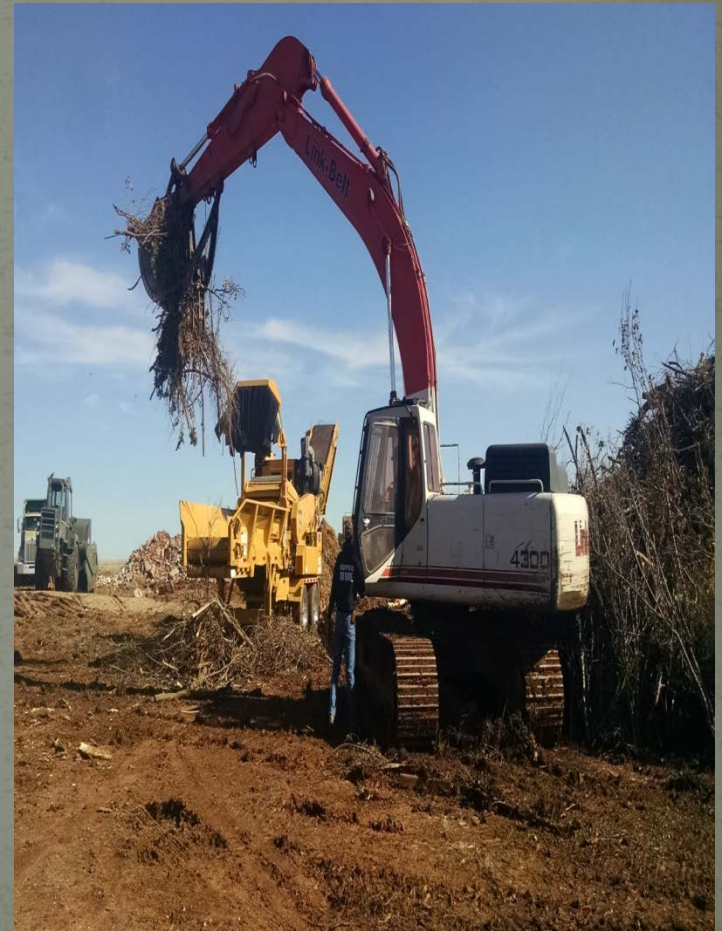


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Tornados

Debris Management & Disposal

- Debris Management
 - Debris Separation
 - Designated Stockpile Location
 - Final Disposal
- Debris Site Registration
 - Compliance with federal laws
 - FEMA reimbursement



Debris Separation

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

Tornado vs. Ice Storm vs. Flooding Debris

- Ice Storms
 - Tree limbs and brush
- Flooding
 - Mostly tree limbs and brush
 - Some mixed debris
- Tornado Debris
 - Extremely mixed debris
 - – difficult to separate
 - Cannot burn mixed debris
 - Landfill disposal common



Household Hazardous Waste & White Goods Moore, OK



Debris Staging/Stockpiling



EMERGENCY DISPOSAL SITE EVALUATION AND REGISTRY FORM

EMERGENCY DISPOSAL SITE EVALUATION AND REGISTRY

Oklahoma Department of Environment Quality
Environmental Complaints and Local Services Division
1(800)522-0206 or (405)702-6100
Fax: (405)702-6226

2015 MAY 5-JUNE 4 STORM EVENTS
Severe Storms, Tornadoes, Straight-line Winds, and Flooding (DR-4222)

REQUESTING REGISTRATION AS A:

Check all that apply: Staging/Stockpiling Site Emergency Burial Site Emergency Burn Site
Wood Chipping Site

CITY/TOWN APPLYING:

Name: _____
Address: _____ City: _____
Zip Code: _____ Telephone: _____ Fax: _____
County: _____

LEGAL DESCRIPTION AND LAT/LONG OF EMERGENCY SITE:

Township: _____ Range: _____ Section: _____ Quarter-section: _____
Latitude: _____ Longitude: _____

SITE OWNER (City or Town must control the site through either ownership or a legal access agreement):

Name: _____

**Emergency Disposal must be completed in accordance with this registry.
It is required to contact DEQ for emergency disposal deadlines and extensions.**

For sites approved for staging and chipping of tree limbs, ultimate disposal of the chips will be by the following DEQ approved method:

Check all that apply: Landscaping (less than 6" depth) Beneficial Reuse Plan
Permitted Landfill Emergency Burial Site

I have read and agree to comply with the Guidelines and Discovery Clause on page 2:

Applicants Signature: _____ Date Signed: _____

FOR OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE USE ONLY

Site Status Previously Registered Site New Site

Site visit confirms compliance with the current guidelines established for debris management as of the date signed by DEQ.

DEQ ES Signature: _____ Date Signed: _____

Name: _____

GUIDELINES FOR EMERGENCY BURNING, BURIAL AND/OR STOCKPILING OF SOLID WASTE

The following requirements must be met unless a variance is granted. Any variance granted must be attached.

Debris Disposal Deadline for this event: 90 days from date signed _____

The site is located above the 100 - year floodplain and outside of known wetlands. (The floodplain map used for locating the site shall be an original Flood Insurance Rate Map prepared by the Federal Emergency Management Agency, a copy of the Flood Prone Area Map prepared by the US Geological Survey, or an equivalently constructed map that depicts the limits and elevations of any 100-year floodplain on or adjacent to the proposed site).

The site is located at least 1/4 mile from a public or private water supply (surface or ground). If the site will be used only for the stockpiling, burning, chipping or disposal of tree limbs and brush, the distance may be reduced from 1/4 mile to 300 feet.

If the site will receive any putrescible waste that may attract birds, it must be located at least 5,000 feet (1,524 meters) from any airport runway used only by piston engine aircraft, or within 10,000 feet (3,048 meters) of any airport runway used by turbojet aircraft, except as may be approved by the US Federal Aviation Administration.

Provisions are in place to ensure that hazardous waste, radioactive waste, regulated polychlorinated biphenyls (PCB waste) or regulated infectious wastes are excluded.

Public official understands that the burial site must be properly closed and covered with 3 feet of soil within 90 days.

All burning of solid waste will be located at least 500 feet (preferably 1/2 mile) from an occupied residence and in accordance with all local and county ordinances including burn bans.

Provisions are in place to exclude the burning of rubber, plastics, asbestos, upholstery, carpeting and other similar material that produce unreasonable amounts of air contaminants.

Public official understands that burning must be controlled so that the smoke does not create a traffic hazard.

Open burning inside a Metropolitan Statistical Area (MSA) shall be conducted using an air curtain incinerator in counties or areas that are or have been designated postannexment, or in the two MSAs with a population of greater than nine hundred thousand. The Oklahoma City MSA consists of Canadian, Cleveland, Grady, Lincoln, Logan, McClain, and Oklahoma Counties. The Tulsa MSA consists of Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner Counties.

Discovery Clause -- In the event that archeological deposits (soils, features, artifacts, other remnants of human activity) are uncovered in urban or rural areas, or if archeological deposits are found in tree root balls during removal, the project shall be halted and the applicant shall stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the find. The applicant will inform OEM immediately, will secure all archeological findings and restrict access to the area. OEM shall notify FEMA and FEMA will consult with SHPO or THPO or Tribal representatives. Work in sensitive areas cannot resume until consultations are completed or until an archeologist who meets SOI Professional Qualifications determines the extent of the discovery. Work may not resume at or around the delineated archeological deposit until the applicant is notified by OEM. In the event that an unmarked grave, indications of burial or human remains are present, compliance with the Oklahoma Burial Law (Title 21.1168.4) is required. The applicant will immediately stop all work, secure all the findings, restrict access to the area and call local law enforcement officials and OEM. OEM shall notify FEMA and FEMA will consult with law enforcement officials, and SHPO or THPO or Tribal representatives if the remains are Native American. Work cannot resume at or near the site until the Applicant is notified by OEM.

Oklahoma Archeological Survey, 111 E Chesapeake, Norman, OK 73019-0575, (405)325-7211, FAX: (405)325-7604

We certify that Is not located on any archeological site or historic property
the above Is located on an archeological site and an alternate area must be considered
referenced site:

OAS Signature: _____ Date: _____

SHPO Signature: _____ Date: _____

Debris Disposal



DEBRIS DISPOSAL OPTIONS


- Initial Options:
 - Staging/Stockpiling
 - Chipping
 - Emergency Burn
 - Emergency Burial
- Ultimate Disposal
 - Permitted Landfill
 - Landscaping – 6 “ deep
 - Burial
 - Beneficial Reuse Plan



Disaster Planning

- DEQ works closely with Local, State, & Federal Entities
 - Local DEQ Field Staff encouraged to attend their Local Emergency Planning Committee (LEPC) Meetings
 - Plan & Exercise frequently
 - Contribute and provide feedback for new/updated Statewide Emergency Operation Plans





**REMEMBER:
WHEN DISASTER
STRIKES, THE
TIME TO PREPARE
HAS PASSED.**

**STEPHEN
CYROS**

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