



Managing Debris from Declared Disasters

Disposing of Debris

Large volumes of debris are generated following natural or human-caused disasters such as hurricanes, floods, tornados, fires or explosions, etc. The Texas Commission on Environmental Quality has developed the following guide for managing and disposing of debris associated with the cleanup of areas affected by these events.

If the debris was the result of a fire, see *Managing Debris from Texas Wildfires* at <www.tceq.texas.gov/goto/wildfire-debris>.

Debris may include:

- trees, brush, and other vegetative matter
- construction or demolition waste, such as drywall, lumber, roof shingles, treated wood, plastics, etc.
- furnishings and appliances
- other municipal solid waste, including putrescible waste (waste that can cause foul odors as it decomposes), and animal carcasses
- hazardous waste, such as cleaning supplies, automotive products, paints and solvents, etc.

Applicability

If You Are Not a Local Government or Authorized Municipal Solid Waste Handler:

Your city, county, or other local authorities will offer specific instructions on what to do with debris and other waste. If you have received no instructions and you cannot reach local authorities, follow the guidelines below until you hear from them.

As much as possible, separate debris into different piles—for example:

- branches, leaves, and other vegetative materials that can go into a wood chipper
- metal and related materials suitable for recycling

- glass (gather glass carefully; before you set it out, double bag it to avoid accidents)
- lumber, insulation, bricks, siding, and other debris from buildings
- furniture and other large items
- appliances (use duct tape to hold refrigerators and freezers closed)
- ruined clothing and furnishings

Set the piles as close to the road as possible:

- If you have a curb near your home, put them on top of the curb, not in the road.
- If you have a ditch and no curb near your home, put them in the grassy area between the ditch and the road. Be sure not to block the ditch or the road.

Note: Do not include any containers of chemicals that might be classified as household hazardous waste, such as pesticides, gasoline, etc. Refer to the section on household hazardous waste (page 5) for guidelines about how to deal with these materials.

See this additional graphic example of how to segregate debris:
<www.tceq.texas.gov/goto/debris>

If you have questions, contact your TCEQ regional office. Find the regional office that serves you at <www.tceq.texas.gov/goto/region> or call the TCEQ Customer Service and After-Hours Answering Service Line at 888-777-3186 to help you reach your local authority.

If You Are a Local Government or Authorized Municipal Solid Waste Handler:

The rest of this guidance will help you understand relevant environmental rules and decide on a reasonable course of action to follow. Contact your TCEQ regional office if you have questions. Find the regional office that serves you at <www.tceq.texas.gov/goto/region>.

Disaster Declarations

Sites of significant disasters are often declared disaster areas either by the governor or the president. Among other considerations, the declaration will be specific to certain counties and may enable them to receive additional financial and technical assistance for managing the debris.

Be sure to learn what requirements you need to fulfill to obtain your funding. To qualify for assistance, refer to the Federal Emergency Management Agency website at <www.fema.gov>, or call 800-621-FEMA (3362) (TTY: 800-462-7585).

Sorting and Stockpiling Debris before Disposal or Burning

State and federal regulations apply to the storage, transportation, processing and disposal of specific types of debris. The TCEQ recognizes that, under the difficult conditions after a disaster, full compliance with these regulations may significantly delay the removal of debris from affected areas. TCEQ takes all available steps to quickly approve appropriate temporary debris-management sites (TDMS) so recovery activities can begin.

Sort debris as much as possible. You may only burn vegetation and clean, untreated wood and only if your county allows it. Sorting and stockpiling waste prior to burning is addressed in the general conditions section of the temporary debris management form (see next section in this document).

Note: Do not burn debris that was generated by a wildfire because environmental conditions may promote additional wildfires. Do not burn debris without special county authorization, if your county is under a burn ban. Options for disposal of segregated debris that should not be burned are discussed in later sections of this document.

Temporary Debris-Management Sites

Request approval for each site or property where you plan to temporarily stockpile debris that has been collected. **Do not stockpile debris or conduct burning without an approved TDMS application.** The forms you must use are available at <www.tceq.texas.gov/goto/temp-debris-form>. **Your local facility may not be eligible for FEMA reimbursement without receiving this temporary authorization.**

Options for Burning

Outdoor Burning

The TCEQ authorizes certain types of outdoor burning in Title 30, Texas Administrative Code, Chapter 111, Subchapter B. For more information see *Outdoor Burning in Texas* (TCEQ publication RG-049) at <www.tceq.texas.gov/goto/rg-049>.

Note: If your county is under a burn ban, do not burn debris without special county approval. Check with your county emergency management office or county judge.

In response to declared disasters, the TCEQ may broaden the authority of county and municipal governments to allow burning of some debris. Contact your TCEQ regional office if you have questions. Find the regional office that serves you at <www.tceq.texas.gov/goto/region>.

Anyone wishing to file a complaint about inappropriate burning may call the TCEQ Environmental Complaints Hot Line at 888-777-3186 or send an e-mail to <cmplaint@tceq.texas.gov>.

Burning Debris in Air-Curtain Incinerators

The TCEQ allows the use of ACIs in the disposal of debris during emergency cleanup operations such as the removal and disposal of debris from a declared disaster. ACIs are used when debris is burned in a trench dug in the ground, or with a containment box or chamber made for this purpose.

ACIs established at temporary sites must meet the general conditions on the temporary debris management site form, (TCEQ-form 20660) at <www.tceq.texas.gov/goto/temp-debris-form>. See the Code of Federal Regulations for details on using ACIs at <www.tceq.texas.gov/goto/incinerator>.

Only trees, brush, and other vegetative matter, and clean lumber (not including wood that has been painted, stained, or pressure treated with chemicals) may be burned in an ACI during a declared disaster.

How do I obtain authorization for use of an ACI?

If you plan to clean up debris from a **declared** disaster you do not have to register an ACI. Instead, before burning, contact your local TCEQ regional office. You must meet the conditions on the TDMS form.

Depending on the emergency, regional office personnel may conduct a site assessment. Once the regional office has granted permission, you don't need an ACI permit for the disaster cleanup as long as you follow the limitations you and the TCEQ have agreed to.

Where can I operate an ACI?

To reduce the potential of nuisance conditions, operate ACIs at least 300 feet from the nearest property line and any other facility with an air permit. If that is not possible, contact your TCEQ regional office.

How long can I operate a portable ACI?

You may operate portable facilities temporarily located at a site for up to 180 consecutive calendar days or 600 hours, whichever ends first. However, federal requirements begin to apply after eight weeks of use.

If you need to operate the ACI for longer than eight weeks, contact your TCEQ regional office to request an extension. When the ACI is no longer in use, you must remove it from the site.

What records do I need to keep?

Equip the ACI with a run-time meter and record the dates and times, and how many hours the ACI is used. Keep records showing that you complied with all operating instructions and followed requirements for locating the ACI.

If you bury ash from trench-burning on the site, contact your TCEQ regional office and your county about filing deed records, if necessary. Keep any other records requested by your regional office.

Disposal of Construction and Demolition Debris

Construction and demolition waste includes all materials that are direct or indirect by-products of construction work or that result from demolition of buildings and other structures, including, but not limited to:

- drywall
- wood
- packing material and boxes
- plastics
- roof shingles and other roofing material
- metal
- concrete, bricks and stones

You may recycle many construction demolition materials. The TCEQ offers recycling resources at www.tceq.texas.gov/p2/recycle. If recycling isn't possible, waste should be sent to an authorized landfill.

See Table 1 for disposal options for demolition-related storm debris such as household hazardous or commercial waste, appliances, compressed-gas containers, tires, and vegetation.

Household Hazardous Waste

Household hazardous waste collection may be an option for a community affected by a disaster. Check with your local emergency-management officials or county office. Substances often found in homes that might be considered HHW include:

- paints, thinners, and turpentine; furniture strippers; wood preservatives, stains, and finishes
- pesticides, insecticides, flea collars and sprays, roach and ant killers, rat and mouse poisons, and herbicides
- oven, toilet, drain, and rug and upholstery cleaners

- bleaches, disinfectants, mothballs, ammonia-based and powdered cleansers, and swimming-pool chemicals (i.e. chlorine tablets, muriatic acid, salts, etc.)
- floor and furniture polish
- household and automobile batteries
- fluorescent lamps and compact fluorescent light bulbs
- automotive products including antifreeze, transmission and brake fluids, motor oil, and gasoline

Communities affected by a disaster may be able to compile the household hazardous waste in a staging area for collection and disposal by a contractor. City and county officials are encouraged to offer options for collection. If an HHW collection is scheduled, residents should separate these types of materials.

For general questions about household hazardous waste, visit the HHW Program webpage at www.tceq.texas.gov/p2/hhw/howto.html. You may also contact the TCEQ HHW Program Manager at 512-239-3143 or recycle@tceq.texas.gov.

If you are a public official in one of the counties eligible for relief and have questions about the disposal of HHW by a TCEQ contractor, call your local TCEQ regional office or the TCEQ emergency-management section in Austin at 512-239-1510.

Disposal of Unknown, Suspicious, or Leaking Waste

Do not approach, examine, or attempt to move any containers of unknown substances or potentially hazardous materials, regardless of size. These containers may be leaking fumes or contain flammable or pressurized chemicals.

Call the Texas 24-hour spill hot line at 800-832-8224 to report the location of drums or other containers of hazardous or unknown wastes in any of the counties affected by the disaster declaration.

When you call, please give your contact information, a location and description of the container, and any potentially affected residences or businesses that are nearby. Emergency personnel will remove the container for safe disposal or transport it to a safe location.

Disposal of Animal Carcasses

Animal carcasses should be buried in pits or trenches, or by mounding. Disposal should always be carried out in a manner that protects public health and safety, does not create a nuisance, and prevents the spread of disease and adverse effects on water quality. The owner or operator of a farm or facility is responsible for disposal in a timely and sanitary manner.

For more information see these TCEQ publications:

- *Disposal of Domestic or Exotic Livestock Carcasses* (RG-419)
<www.tceq.texas.gov/goto/carcassdisposal>
- *Outdoor Burning in Texas* (RG-049) <www.tceq.texas.gov/goto/rg-049>

If you suspect that an animal died from a disease, contact the Texas Animal Health Commission at <www.tahc.state.tx.us/>.

Note: Be aware of burn bans. If the animal carcasses are the result of a wildfire, burning is **not** allowed. Find a map of county burn bans at <<http://txforests-service.tamu.edu/>>.

Table 1

Options for management of segregated debris

Waste Type	Examples of Waste Type	Disposal or Burn Option
Vegetation	Trees, brush	Preferred: Recycle Option: Outdoor burn using an ACI, if possible Option: Type I MSW landfill Option: Type IV MSW landfill
Clean Lumber	Lumber, and similar wood materials that have not been painted, stained, or chemically treated	Preferred: Recycle Option: Outdoor burn using an ACI, if possible Option: Type I MSW landfill Option: Type IV MSW landfill
Animal Carcasses	Non-diseased poultry, cattle, domestic animals	Preferred: On-site burial or mounding Preferred: MSW Type I landfill Option: Outdoor burn, using an ACI if possible Option: Off-site disposal using a renderer or a commercial waste incinerator
	Diseased poultry, cattle	Contact the Texas Animal Health Commission at www.tahc.state.tx.us/
Household or Commercial Waste	Putrescible waste	MSW Type I landfill
	Garbage, refuse, rubbish	MSW Type I landfill
Construction or Demolition Waste	Asbestos containing debris - shingles, siding, insulation, tiles	MSW Type I landfill with Special Waste Authorization
	Painted, stained, or treated wood	Preferred: MSW Type IV landfill Option: MSW Type I landfill
	Non-asbestos roof shingles	Preferred: Fuel source for cement kilns with appropriate air authorization Option: MSW Type IV landfill Preferred: MSW Type I landfill
	Drywall	Preferred: MSW Type IV landfill Option: MSW Type I landfill
White Goods, Appliances	Refrigerators, stoves, washers, dryers, small appliances, etc	Preferred: Recycle Option: MSW Type I landfill

Waste Type	Examples of Waste Type	Disposal or Burn Option
Household Hazardous Waste	Cleaning products	Preferred: HHW collection Option: MSW Type I landfill Option: Permitted HW facility
	Paints, solvents	Preferred: HHW collection Option: MSW Type I landfill Option: Permitted HW facility
	Pesticides	HHW collection
	Automotive products: oil, antifreeze, brake fluid, gasoline, etc	Preferred: HHW collection Option: Registered used-oil collector Option: Permitted HW facility
	Batteries	Preferred: Recycle (lead-acid batteries are not allowed in MSW landfills) Option: HHW collection
	Electronics: computers, TVs, etc.	Preferred: HHW collection Option: Recycle Option: MSW Type I landfill Permitted HW facility
Compressed Gas Containers		Recycle
Tires		Pick up by authorized scrap-tire transporter Option: authorized processing or end-use facility (Disposal of whole tires is not allowed in MSW landfills)