

# GLENN COUNTY

## Planning & Community Development Services Agency Environmental Health Department

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## Fire Debris Removal Guidelines

To ensure the safety of workers, the public, and the environment, certain protocols must be followed when removing structural ash and debris after a fire disaster. Below is an overview of the fire debris removal operations and protocols that shall be followed by property owners and their contractors. This information was adapted from various sources and includes “best practices.”

Cleanup Operations	Cleanup Protocols
Site Documentation	<ul style="list-style-type: none"><li>• Measure and record foundation, cleanup area and property lines-show on plot map.</li><li>• Notify appropriate entities of cleanup, including local utilities, USA Underground, and Air Pollution Control District(s).</li></ul>
Work Plan	<ul style="list-style-type: none"><li>• Create a Work Plan that provides for site testing and analysis, hazardous waste and asbestos removal, debris removal, erosion control, soil grading, and confirmation sampling.</li></ul>
Application Process Work Plan and Demolition Permit	<ul style="list-style-type: none"><li>• Owner or contractor will submit a work plan and demolition permit application to the Glenn County Planning and Community Development Services Agency (PCDSA).</li><li>• Once the application is approved, the County will issue a demolition permit.</li></ul>
Site Testing and Analysis	<ul style="list-style-type: none"><li>• The property owner will need to hire a certified Asbestos Consultant and Soil Consultant to test the site for Asbestos and Lead prior to beginning work.</li></ul>
Air Monitoring	<ul style="list-style-type: none"><li>• Fugitive Dust- Dust is a significant concern and there should be adequate dust control. Water shall be applied to the burned ash materials at all times, most importantly during contractor disturbance and loading.</li></ul>

Hazardous Waste and Asbestos Removal	<ul style="list-style-type: none"> <li>• All remaining hazardous waste and household hazardous waste must be identified and disposed of by a certified Hazardous Materials Contractor.</li> <li>• Asbestos must be assessed by a Certified Asbestos Consultant and removed by a licensed Asbestos Abatement Contractor.</li> </ul>
Debris Removal	<ul style="list-style-type: none"> <li>• Remove ash and debris, metals, and concrete from the site and dispose of properly.</li> <li>• Recycle metals and concrete, if possible.</li> </ul>
Foundations	<ul style="list-style-type: none"> <li>• Completely remove and dispose of foundation; <b>or</b></li> <li>• Submit a letter form a Licensed Civil or Structural Engineer certifying the foundation is acceptable for rebuild. The letter shall state reasons for their decision.</li> </ul>
Soil Grading	<ul style="list-style-type: none"> <li>• Remove 3 to 6 inches of soil from the impacted area after the burn ash and debris is removed to a level of visually clean soil.</li> </ul>
Confirmation Sampling	<ul style="list-style-type: none"> <li>• A licensed Soil Consultant will collect soil samples from 0-3 inches for confirmation sampling and compare soil sample results against cleanup goals as established by government agencies in the region, including the U.S Army Corp of Engineers (USACE) and CalRecycle.</li> </ul>
Appliance and Vehicle Recycling	<ul style="list-style-type: none"> <li>• Appliances and vehicles must be handled properly to meet the requirements of metals recycling facilities.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>• All reports and documentation shall be submitted to the Glenn County PCDSA. Including but not limited to: <ul style="list-style-type: none"> <li>➤ Work Plan</li> <li>➤ Asbestos and Lead sampling results</li> <li>➤ Soiling sampling results</li> <li>➤ Waste manifests</li> <li>➤ Waste tickets</li> </ul> </li> </ul>

### **Waste Removal Guidance for Property Owners and Contractors**

1. Property owners shall ensure that contractors are licensed for the work they will perform.
2. Trees that pose a hazard to the home site or to workers during debris removal activities, or that will pose a hazard during reconstruction activities, shall be removed. Trees may be cut and set aside for firewood or taken off site and recycled per owner's instruction.
3. Dust control and erosion protection measures shall be incorporated as follows:

- a. Ash and debris shall be thoroughly wetted prior to removal. Hoses with fine spray nozzles shall be used to apply water to the work site prior to and during active debris removal. The materials shall also be wetted while being loaded into trucks to prevent visible dust from crossing property lines. Care shall be taken to avoid excessive use of water in order to prevent runoff. Any runoff produced shall be contained onsite.
  - b. Silt fences, fiber rolls, wattles, erosion control blankets, and other best management practices shall be used to prevent ash or soil from washing into the street, drainage courses and culverts, or into neighboring properties.
  - c. Stockpiled materials that are not immediately loaded for transport shall be handled and stored on site in such a manner as to avoid offsite migration. This may include wetting and covering the waste until it is loaded and transported.
- 4.** Structural ash and debris shall be transported to and disposed of at an approved landfill.
- a. Ash and debris shall be wetted, wrapped with plastic sheeting, taped closed, and covered with a tarp to eliminate the release of dust during transport.
  - b. Mixed burned debris and ash shall be transported to an approved, lined, Class III landfill in California or Nevada. Property owners or contractors shall contact the landfill operator prior to hauling the waste to ensure its acceptance.
  - c. A receipt for waste disposal shall be obtained from the landfill operator and a copy provided to the Glenn County PCDSA.
- 5.** Transport and disposal of recyclable materials - concrete, metal, etc., shall be handled as follows:
- a. Trees and wood waste, metal, vehicles, appliances, and aggregate material (concrete, etc.) may be recycled locally.
  - b. These materials must be cleaned sufficiently of ash and debris at the site to allow safe transportation. Landfill/Transfer Station staff may reject loads that appear to be contaminated.
  - c. If recyclable materials cannot be cleaned of ash and debris, they must be handled and disposed of as mixed burned debris.
- 6.** Soil shall be sampled and analyzed to verify that cleanup standards have been met.
- a. Following removal of all debris and impacted soil from the site, soil samples shall be collected from the impacted structure area. Sample collection shall be performed by a Certified Soil Consultant. A report of analytical results shall be prepared by this consultant and a copy provided to the Glenn County PCDSA.
  - b. Confirmation samples will be collected from the impacted structure area in native soil, at random locations. The selection of the random samples shall be based on a 10 by 10-foot grid overlay of the impacted area with the number of samples to be collected based on the square footage.

For informational purposes, CalRecycle’s typical operations plan sampling frequencies are included below. The total number of samples to be collected is based on estimated square footage of ash footprint as follows:

<b>Estimated Square Footage of Ash Footprint (Decision Unit)</b>	<b>Number of 5- Point Aliquots</b>
0-100 square feet	1
101-1,000 square feet	2
1,001- 1,500	3
1,501-2,000	4
2,0001-5,000	5
>5,000 square feet	Must consult with local environmental health officials.

All confirmation samples should be collected from a depth of 0-3 inches using a dedicated 4-ounce plastic scoop and be placed in 8-ounce jars. Samples should be taken to an approved laboratory for analysis of Title 22 Metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc by either EPA Method 6010 or 6020, and mercury by EPA Method 7471A. Although either EPA Method 6010 or 6020 may be used, CalRecycle is currently using EPA Method 6020 in the Consolidated Debris Removal Program.

<b>Initial Health Screening Criteria for Soil</b>		
<b>Analyte</b>	<b>Health Screening Level mg/Kg</b>	<b>Cleanup Level</b>
Antimony	30	Health Screen
Arsenic	0.07	Health Screen
Barium	5,200	Health Screen
Beryllium	15	Health Screen
Cadmium	1.7	Health Screen
Chromium	36,000	Health Screen
Cobalt	23	Health Screen
Copper	3,000	Health Screen
Lead	80	Health Screen
Mercury	5.1	Health Screen
Molybdenum	380	Health Screen
Nickel	490	Health Screen
Selenium	380	Health Screen
Silver	380	Health Screen
Thallium	5	Health Screen
Vanadium	390	Health Screen
Zinc	23,000	Health Screen

## **Personal Protective Equipment**

Property owners and their contractors should use Personal Protective Equipment (PPE) when handling burned debris and ash. This includes but is not limited to the following:

- Respiratory protection - such as a N-95 or P-100 particulate masks or NIOSH approved respirator
- Eye protection - safety goggles or safety glasses
- Hand protection - heavy work gloves
- Head protection - hard hat, if necessary
- Foot protection - shoes or boots with heavy lug soles
- Clothing - long pants and long-sleeved shirts, Tyvek or similar protective, disposable clothing
- Hearing protection - if working in an area with excessive noise from equipment such as chain saw, backhoes, tractors, or other heavy equipment

## **General Guidance for Handling or Removal of Ash**

- Wear gloves, long sleeved shirts, and long pants and avoid skin contact.
- If you do get ash on your skin, wash off with soap and water as soon as possible.
- If you have a vegetable garden or fruit trees, wash the fruit or vegetables thoroughly with soap and water before eating them.
- Avoid getting ash into the air as much as possible. Do not use leaf blowers or take other actions that will put ash into the air.
- Shop vacuums and other common vacuum cleaners do not filter our small particles, but rather blow such particles out the exhaust into the air where they can be breathed. The use of shop vacuums and other non-HEPA filter vacuums is not recommended. HEPA filter vacuums could be used, if available.
- Well-fitting dust masks may provide some protection during cleanup. A mask rated N-95 or P-100 will be more effective than simpler dust or surgical masks in blocking particles from ash. In general, many ash particles are larger than those found in smoke; thus, wearing a dust mask can significantly reduce (but not eliminate) the number of particles inhaled.
- Persons with heart or lung disease should consult their physician before using a mask during post-fire cleanup.
- If ash is wet down, use as little water as possible.

## **Disposal of Fire Generated Waste**

Anderson Landfill <https://www.wmsolutions.com/locations/details/id/189> will accept waste created from the August Complex.

- Prior to hauling, customers must log onto Waste Management <https://www.wmsolutions.com/> or call 1-800-963-4776 to setup an account.
- After setting up an account, Waste Management may require an analysis of the materials to determine where the debris is to be disposed of.
- Analysis may consist of a certificate from Environmental Health or CalOES, or a sample of materials may need to be sent for analytical review. Contact Glenn County Environmental Health for additional information.

***Note: Butte County landfill is unable to accept fire generated waste from the August Complex Fires due to capacity restrictions related to the Butte County Fires.***