

	County of (Insert Here) (Health/ Fire) Agency (Address) (Phone #) (Email Address)	
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Debris Removal Guidelines

To ensure safety to workers, the public, and the environment, certain protocols must be followed during a wildfire disaster when removing structural ash and debris from a fire. The County is currently offering two ways to manage the debris and ash resulting from the wildfire disaster. A property owner may elect to participate in the Consolidated Debris Removal Program or may elect to complete the property remediation and debris removal themselves.

1. Property Owners Who Elect to Participate in the Consolidated Debris Removal
2. Property Owners Who Elect Not to Participate in the Consolidated Debris Removal Program

Private Debris Cleanup Process Overview

Below is an overview of the debris removal operations and protocols. This information was adapted from various sources and includes "best practices."

Cleanup Operations	Cleanup Protocols
Site Documentation	<ul style="list-style-type: none"> • Measure and record foundation and cleanup area. • Notify appropriate entities of cleanup, including local utilities, USA Underground, and Air Pollution Control District(s).
Work Plan	<ul style="list-style-type: none"> • 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.
Application Process	<ul style="list-style-type: none"> • Owner or contractor will submit a debris removal and demolition or similar permit application to the County • Once the application is approved, the County will issue a demolition or similar permit
Site Testing and Analysis	<ul style="list-style-type: none"> • The property owner will need to hire a certified Asbestos Consultant and Soil Consultant to test the site.

Air Monitoring	<ul style="list-style-type: none"> Fugitive Dust- Dust is a significant concern and there should be adequate dust control water applied to burn ash materials at all times, most importantly during contractor disturbance and loading.
Hazardous Waste and Asbestos Removal	<ul style="list-style-type: none"> All remaining Hazardous Waste and Household Hazardous Waste must be identified and disposed of through the County Hazardous Waste Disposal Program by a certified Hazardous Materials Contractor. Asbestos must be assessed by a Certified Asbestos Consultant and removed by a licensed Asbestos Abatement Contractor.
Debris Removal	<ul style="list-style-type: none"> Remove ash and debris, metals, and concrete from the site and dispose of properly. Recycle metals and concrete if possible.
Foundations	<ul style="list-style-type: none"> Completely remove and dispose of foundation; or Submit a letter from a Licensed Civil or Structural Engineer certifying the foundation is acceptable for rebuild. The letter shall state reasons for their decisions.
Soil Grading	<ul style="list-style-type: none"> 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.
Confirmation Sampling	<ul style="list-style-type: none"> 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.
Appliance and Vehicle Recycling	<ul style="list-style-type: none"> Appliances and vehicles must be handled properly to meet the requirements of metals recycling facilities.

Confirmation Sampling

Confirmation sampling should be conducted by a licensed professional after fire-related debris has been removed from a property. Representative soil samples should be collected and analyzed to determine compliance with cleanup goals as established by government agencies in the region, including the USACE and CalRecycle. 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:

Estimated Square Footage of Ash Footprint (Decision Unit)	Number of 5- Point Aliquots
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 shipped to an approved laboratory for analysis by Title 22 Metals for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc by either EPA Method 6010 or 620, 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.

Guidance for Residents Who Wish to Remove Waste Themselves

Property owners who wish to remove waste themselves will be required to clean their property to the same standards implemented by the CalRecycle program.

1. Remove vehicles for recycling. Collect, stockpile, and remove metals, appliances, and similar items for recycling.
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. Hazardous materials encountered which were missed in the previous DTSC sweep of the property, shall be set aside for later collection.
4. Remove all structural ash and debris from the impacted property.
5. Remove structural foundation and associated concrete. Driveways may stay in place, when appropriate, to aid in erosion control during the

rebuilding phase. They can then remove and replace, as necessary, as one of the last steps to reconstruction.

6. 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, 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.
7. 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 CA or NV. Property owners or contractors shall make contact with the landfill operator prior to hauling the waste in order assure its acceptance.
 - c. A receipt for waste disposal shall be obtained from the landfill operator and a copy provided to _____ County Environmental Health.
8. 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 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.
9. Soil shall be sampled and analyzed to verify that cleanup standards have been met.
 - a. Following removal of all debris and impacted solid form the site, soil samples shall be collected from the impacted structure area. Sample collection shall be performed by a California Professional Geologist or a Registered Civil Engineer. A report of analytical results shall be prepared by this engineering contractor and a copy provided to _____ County Environmental Health.
 - b. Confirmation samples will be collected from the impacted structure area in native soil, at random location. The selection of the random 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 foot.

Property owners should ensure that contractors are licensed for the work they will perform. The guidance below is provided to ensure that all mixed burned debris and ash generated by the Round Fire will be transported, handled, and managed in a manner that will protect public health and the environment. Proper personal protective equipment, including respiratory protection, should be used by anyone who handles ash or burned debris or who may come into contact with these materials during transport or management.

Storage of Waste Onsite

Mixed burned debris stored onsite prior to transport for disposal shall be managed to prevent offsite migration of ash and dust. This may include wetting and covering the waste. Bins containing debris and/or refuse shall be kept covered and wetted down as necessary. The property owner or contractor shall ensure that ash and dust are contained to the greatest extent possible.

Property owners or contractors should segregate recyclable materials from mixed burned debris to a facility that can accept trees and wood waste, metal, vehicles, appliances, and aggregate material (concrete, etc.). These materials must be cleaned sufficiently of ash and debris at the site to allow safe transportation, as landfill staff may reject loads that appear to be contaminated. If recyclable materials cannot be cleaned of ash and debris, they must be handled and disposed of as mixed burned debris.

Best management practices shall be used to prevent tracking ash and debris into the roadway.

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 mask 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 it off as soon as possible.
- If you have a vegetable garden or fruit trees, wash the fruit or vegetables thoroughly 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 completely eliminate) the amount of particles inhaled.
- Persons with heart or lung disease should consult their physician before using a masks during post-fire cleanup.
- If ash is wet down, use as little water as possible.