



**COUNTY OF LAKE**  
**HEALTH SERVICES DEPARTMENT**  
Division of Environmental Health  
922 Bevins Court, Lakeport 95453-9739  
Telephone 707-263-1164

**Denise Pomeroy**  
Health Services Director

**Sara Goldgraben, MD, MPH, MBA**  
Public Health Officer

**Jasjit Kang**  
Environmental Health Director

## **ASH AND BURN DEBRIS CLEAN-UP AND REMOVAL PROCESS**

The potential for widespread toxic exposures and threats to public health and the environment exists in the aftermath of a major wildfire disaster. Debris and ash from residential structure fires may contain hazardous substances and the health effects of hazardous substances releases after a wildfire is well-documented. Exposure to hazardous substances may lead to acute and chronic health effects, and may potentially cause long-term public health and environmental impacts. Uncontrolled hazardous materials and debris pose significant threats to public health through inhalation of dust particles and contamination of drinking water supplies. It is critical to contain many building materials such as siding, roofing tiles, and insulation due to asbestos and the structural ash due to heavy metals. Household hazardous waste such as paint, gasoline, cleaning products, pesticides, compressed gas cylinders and chemicals may have been stored in homes, garages, or sheds that may have also burned in the fire. To ensure worker safety, the public and the environment certain protocols should be followed during a wildfire disaster when removing structural ash and debris from a fire.

1. **If funding becomes available, owners may elect to participate in a county debris program** where property with destroyed structure(s) from a wildfire are being offered a clean-up and debris removal service conducted by specialized work crews, contracted and managed by county and state waste specialists. This program will be paid for with state disaster assistance funds and portions of property owner's insurance related to debris removal. Owners must sign up for this program using a Right-to-Enter form to allow access to their property to complete the removal work. Removal work in this program will be completed using the 2018 Pawnee Fire Incident Debris Removal Operations Plan for Lake County, when it becomes available. The operation plan will be made available at the Environmental Health page at [www.co.lake.ca.us](http://www.co.lake.ca.us) upon its completion.
2. **If owners elect not to participate in the county and state sponsored debris program** they are expected to have their property cleaned up with the burn debris removed either on their own or with their own qualified contractor. The work must be done to standards established in ordinances and regulations so that health and safety risks are adequately addressed for the community and the environment. Documentation on adequate cleanup and proper disposal will be required. State and County disaster funding will not be able to reimburse for this work. **A Demolition Permit is required from the County of Lake - Building and Safety Division.**

Should owners who elect not to participate in the county and state clean-up and do not accomplish a clean-up on their own then the destroyed structure(s) will be inspected and identified as a public nuisance. The nuisance will be abated by the process described in Chapter 13 and Chapter 5 of the Lake County Code. Please note that disaster funding is not

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*Our mission is to promote and protect the health of the people of Lake County through education and the enforcement of public health laws.*

available to property owners for their efforts in a nuisance abate action. In addition, the county expenses for contract work, staff time and administration is subject to cost recovery with a lien recorded on the property deed.

### **Private Cleanup Process**

The owner's contractor will need to meet the follow process and minimum safety standards. The contractor must possess either a valid class A-General Engineering or C-21 Building Moving, Demolition license.

1. The owner or contractor will submit a debris removal application to Lake County Environmental Health, 922 Bevins Court, Lakeport (707-263-1164).  
[lakeeh@lakecountyca.gov](mailto:lakeeh@lakecountyca.gov)
2. Once the debris removal application is accepted by Environmental Health, the owner or contractor will submit a demolition permit application to the Lake County Building and Safety Division, 255 North Forbes St., Lakeport (707-263-2382).
3. Once the demolition permit is approved the contractor may begin the removal process.
4. The removal shall follow the cleanup protocols and specifications below.
5. Before work begins the owner or contractor shall hire a Certified Asbestos Consultant to evaluate the site for bulk asbestos and hazardous asbestos waste.
6. Once completed, the owner or contractor shall hire a certified consultant and collect soil samples to be analyzed for heavy metals.
7. When the soil testing has met the cleanup goals the owner or contractor will submit a self-certification cleanup form to Environmental Health.
8. After the Cleanup Certification has been approved by Environmental Health, the owner or contractor will submit a copy to the Building and Safety Division to close the demolition permit.

### **Private Cleanup Protocols**

#### **A. Pre-Debris Removal**

1. Notify USA underground (<http://usanorth811.org/homeowners/>).
2. Secure all utilities
3. Identify property corners; secure and protect any existing survey monuments.
4. Thoroughly wet down the structural ash and debris before any removal activities begin.  
The debris site shall be wetted down 24 hours before debris activities begin.
5. Identify septic tank and leach field locations on each property.
6. Identify water wells or other water sources.
7. Field measure and record foundation area.
8. Identify other property-specific hazards (i.e. swimming pools, propane tanks, hazard trees).
9. Identify, sample, analyze, and remove bulk asbestos containing materials by a Certified Asbestos Consultant/Contractor.

#### **B. Debris Removal**

1. Complete notifications and obtain Demolition Permit from Building and Safety Division.
2. Wet the site down again before beginning removal activities.
3. Use appropriate personnel protective equipment.
4. Remove vehicles for recycling or disposal. Check with DMV and the homeowner before destruction.

5. Collect, consolidate, and remove metals for recycling.
6. Remove ash, debris and soil for disposal.
7. Remove 3 to 6 inches of soil under the ash.
8. Remove concrete foundations for recycling. If foundations are left contact the County Building department for further instruction.
9. Driveways may remain in place, when appropriate, to aid in rebuilding and erosion control. Driveways can be removed and replaced by the home builder as last step of the rebuilding process.
10. Remove hazardous trees for recycling or disposal.
11. Finish grading/smoothing ground surface.

**C. Confirmation Sampling**

1. Sample and analyze soil for metals by using a certified consultant.
2. Compare soil results to cleanup goals. (established as 2X background for metals)
3. If results exceed cleanup goals, remove an area of soil surround by the failed soil sample by visual inspection and re-sample.
4. If results are less than cleanup goals, prepare for final erosion control and certification.

**D. Implement Erosion Control**

Implement storm water best management practices to control sediment runoff and promote vegetation from each remediated property in the area where destroyed structures were cleaned up.

**Private Cleanup Specifications**

**A. Structural ash and debris**

1. Shall be transported to and disposed of at an approved lined, Class III landfill.
  - a) Eastlake Landfill at 16015 Davis St Clearlake, CA 95422 is an approved facility.
2. 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.
3. Property owners or contractors shall make contact with the landfill operator prior to hauling the waste in order assure its acceptance.
4. A receipt for waste disposal shall be obtained from the landfill operator and a copy provided to Lake County Environmental Health as part of the self-certification process.

**B. Dust control**

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.

**C. Erosion Control**

1. Best management practices shall be used to prevent ash or soil from washing into the street, drainage courses and culverts, or onto neighboring properties.
2. 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.

**D. Hazard Trees**

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.

**E. Hazardous materials**

Hazardous materials encountered, such as compressed gas cylinders, propane tanks, drums, batteries, paint, and other chemicals, etc., shall be set aside for later collection and not placed in the debris or ash waste stream.

**F. Cleanup Confirmation Sampling**

1. Soil shall be sampled and analyzed to confirm that cleanup standards have been met.
2. 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 California Professional Geologist, Registered Civil Engineer or other Registered Professional. A report of analytical results shall be prepared by this engineering contractor and a copy provided to Lake County Environmental Health.
3. 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 of the area impacted as follows (in square feet):

(1) <2000 sf	2 samples
(2) 2001-3000 sf	3 samples
(3) 3001-4000 sf	4 samples
(4) >4000 sf	1 sample per 1000 additional square feet or fraction thereof

4. Samples are to be analyzed by a California State Certified Laboratory for *heavy metals* (*California Assessment Manual (CAM) 17 metals, EPA Method 6010B*).
5. Samples must meet a cleanup goal as established by the CalRecycle Debris Removal Operations Plan.
6. If soil sample analyses indicate that cleanup goals have not been achieved, then additional excavation and sampling may be required.

## **Protection and Perpetuation of Survey Monuments**

The perpetuation of survey monuments is required and intended to protect both public and private property rights in accordance with federal and state law. Survey monuments will be at risk during the ash and burn debris cleanup and removal efforts.

All governmental agencies, private contractors, organizations, landowners, and/or other persons engaged in ash and burn debris cleanup and removal shall be aware of and adhere to the requirements of Business and Professions Code Section 8771 relating to survey monument protection and perpetuation and a person licensed to practice surveying in the State of California shall be required to attest in writing that all monuments have been preserved in the course of any such cleanup and removal efforts upon completion of those efforts. A copy of Business and Professions Code Section 8771 is attached here.

### **BUSINESS AND PROFESSIONS CODE**

8771. (a) Monuments set shall be sufficient in number and durability and efficiently placed so as not to be readily disturbed, to ensure, together with monuments already existing, the perpetuation or facile reestablishment of any point or line of the survey.

(b) When monuments exist that control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control, the monuments shall be located and referenced by or under the direction of a licensed land surveyor or licensed civil engineer legally authorized to practice land surveying, prior to the time when any streets, highways, other rights-of-way, or easements are improved, constructed, reconstructed, maintained, resurfaced, or relocated, and a corner record or record of survey of the references shall be filed with the county surveyor.

(c) A permanent monument shall be reset in the surface of the new construction or a witness monument or monuments set to perpetuate the location if any monument could be destroyed, damaged, covered, disturbed, or otherwise obliterated, and a corner record or record of survey shall be filed with the county surveyor prior to the recording of a certificate of completion for the project. Sufficient controlling monuments shall be retained or replaced in their original positions to enable property, right-of-way and easement lines, property corners, and subdivision and tract boundaries to be reestablished without devious surveys necessarily originating on monuments differing from those that currently control the area.

(d) The governmental agency performing or permitting construction or maintenance work is responsible for ensuring that either the governmental agency or landowner performing the construction or maintenance work provides for monument perpetuation required by this section.

(e) It shall be the duty of every licensed land surveyor or licensed civil engineer legally authorized to practice land surveying to assist the governmental agency in matters of maps, field notes, and other pertinent records. Monuments set to mark the limiting lines of highways, roads, streets or right-of-way or easement lines shall not be deemed adequate for this purpose, unless specifically noted on the corner record or record of survey of the improvement works with direct ties in bearing or azimuth and distance between these and other monuments of record.

(f) The decision to file either a corner record or a record of survey as required by subdivision (b) or (c) shall be at the election of the licensed land surveyor or the licensed civil engineer legally authorized to practice land surveying submitting the document.

**Avoid heavy equipment near the property boundary and especially the corner areas of the lot.**

*The Division of Environmental Health has information regarding firms who can provide services for asbestos and metals consulting and sampling. The county and state cannot make recommendations or referrals for private businesses. There are many more qualified firms who can be contacted to provide these services.*

<p>Westlake Environmental Contractors          Cloverdale, CA          707-291-9115  <a href="http://www.westlakeenvironmental.com">www.westlakeenvironmental.com</a></p>	<p>Adam Laboratories Inc          3807 Pasadena Ave # 190          Sacramento, CA 95821          916 – 979 - 9250  <a href="http://adamlabs.com/">http://adamlabs.com/</a></p>
<p><b>HB&amp;T Environmental, Inc</b>          1828 Tribute Road, Suite M          Sacramento, CA 95815          916- 646-6076          916- 646-6010 fax</p>	<p><b>David Brinkerhoff, CIH, CIEC   Director, Sacramento</b>          7625 Sunrise Boulevard, Suite 104          Citrus Heights, California 95610          P: 916-726-1303          F: 916-726-3747          C: 925-408-2672  <a href="mailto:dbrinkerhoff@forensicanalytical.com">dbrinkerhoff@forensicanalytical.com</a>    <a href="http://www.forensicanalytical.com">www.forensicanalytical.com</a></p>

# PRIVATE CLEAN-UP APPLICATION PAWNEE FIRE INCIDENT

## Who needs to complete this form?

Property owners who elect to clean-up their property on their own with a qualified contractor. The work must be done to standards established in ordinances and regulations so that health and safety risks are adequately addressed for the community and the environment. Documentation on adequate clean-up and proper disposal will be required. State and County disaster funding will not be able to reimburse for this work. **A Demolition Permit is required from Building and Safety Division.**

**Property Owner Name:** \_\_\_\_\_

**Property Address:** \_\_\_\_\_

**Assessor's Parcel #:** \_\_\_\_\_

Property Owner's mailing address \_\_\_\_\_

Property Owner's phone # \_\_\_\_\_ email \_\_\_\_\_

**Description of Debris Being Removed (How many structures, type of waste, etc.)**

\_\_\_\_\_  
\_\_\_\_\_

## **A. Program Participation and Household Hazardous Waste Removal**

1. Who will perform the household hazardous waste sweep and asbestos screening?

Owner / Name of Contractor \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

2. Who will perform the debris removal? **Licensed contractor, A or C-21**

Name of Contractor: \_\_\_\_\_

Contractor License #: \_\_\_\_\_

Start Date: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email: \_\_\_\_\_

## **B. Property Owner Acceptance**

I have reviewed the above protocols and specifications to remove debris from the Pawnee Fire. I understand the ash and debris contain hazardous substances and can be a health hazard. I understand the ash and debris shall be wetted down prior to removal, wrapped in plastic and tarped prior to transport and disposal to control dust. I understand that soil samples shall to be collected in order to self-certify the project was completed. I understand that since cleanup of the above mentioned property was performed under my direction or my contractor, the County of Lake cannot certify that cleanup was adequate.

\_\_\_\_\_  
Property Owner/Contractor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
County Acknowledgement

\_\_\_\_\_  
Date

# PRIVATE CLEANUP COMPLETION CERTIFICATION PAWNEE FIRE INCIDENT

**What is the purpose of this form?**

The purpose of this form is to verify that your parcel has been cleaned of hazardous wastes, ash, and debris. This form will be used to certify completion of cleanup by property owners so that building permits can be issued for new and replacement structures.

**Who needs to complete this form?**

Property owners who elect to cleanup their property on their own or with a qualified contractor.

<b>Owner:</b>	<b>Street Address:</b>
<b>Parcel#</b>	<b>City:</b>
<b>Phone Number:</b>	<b>Email:</b>

**A. Ash Disposal**

- The ash and debris was removed and disposed of by:  Myself  Licensed contractor  
Contractor and license number: \_\_\_\_\_
- The ash and debris from my property was disposed at the following facility:  
Facility Name: \_\_\_\_\_  
Date(s) of Delivery: \_\_\_\_\_  
Date of Completion (Note attach disposal receipts): \_\_\_\_\_

**B. Cleanup Confirmation Sampling Results**

Were soil samples collected?  Yes  No  
Consultant name and license: \_\_\_\_\_  
Did the samples meet the Lake County cleanup goal?  Yes  No (Please explain)  
\_\_\_\_\_  
Please attach a copy of the sampling results for the cleanup.

**C. Property Owner Certification**

I hereby certify that the burn ash and debris generated by the 2018 Pawnee Fire has been identified removed and disposed as described herein and in conformance with the Lake County protocols and specifications.

The above mentioned cleanup was performed under my direction and not the County of Lake or the State of California.

\_\_\_\_\_  
Property Owner Signature

\_\_\_\_\_  
Date

*County Approval*