



**County of Sonoma Department of Health Services  
Environmental Health**

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## **SONOMA COUNTY WILDFIRE DEBRIS MANAGEMENT REQUIREMENTS**

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. Due to the public health emergency, property owners are required to remove all burn debris from their properties in a timely manner. The property owner is required to submit a Sonoma County Debris Removal Application, Signed Appendix A and work plan to Sonoma County Environmental Health for approval prior to commencing debris removal. After completion of the work described in the approved work plan, the owner must submit a certification showing that all work has been completed as specified. All cleanup activities must be completed pursuant to standards set forth by the County. These standards were established to ensure the protection of public health. Documentation of adequate clean-up and proper disposal is required. Property owners are encouraged to review all requirements thoroughly before commencing debris removal. Property owners will not be allowed to build on their property until there is a certification of completion for the property cleanup.

Due to the recent COVID-19 pandemic, California has issued industry guidance for construction. All contractors must read the COVID-19 Industry Guidance for Construction (<https://files.covid19.ca.gov/pdf/guidance-construction--en.pdf>) and complete the COVID-19 General Checklist for Construction Employers (<https://files.covid19.ca.gov/pdf/checklist-construction.pdf>).

The County is available to answer questions by calling **707-565-6700** or emailing [EHDebrisRemoval@sonoma-county.org](mailto:EHDebrisRemoval@sonoma-county.org).

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## Debris Removal Requirements

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To ensure safety to the workers, public, and the environment, certain protocols must be followed after a (wildfire) disaster when removing structural ash and debris from a fire.

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### 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"> <li>• Measure and record foundation and cleanup area.</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. Visual monitoring shall be provided as part of work scope to ensure no fugitive ash or debris is created or dispersed during work. Also, the cleanup area shall be clearly delineated on a plan map with all proposed sampling locations.</li> </ul>
Application Process	<ul style="list-style-type: none"> <li>• Owner or contractor will submit a debris removal application</li> <li>• Once the application is approved, the County will issue a 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 (professional civil engineer or geologist) to test the site.</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 applied to burn 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 hazardous waste remaining after the Household Hazardous Waste must be identified and legally disposed of.</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> <li>• Work Areas shall be clearly delineated, and be restricted to those personnel performing the cleanup with proper PPE.</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 & Background Sampling	<ul style="list-style-type: none"> <li>• A licensed Soil Consultant (civil engineer or geologist) will oversee the collection of soil samples from 0-3 inches for confirmation sampling and compare soil sample results against cleanup goals. Similarly, this same consultant will collect background samples off the burn footprint from 3-9 inches to establish cleanup levels above health screening goals.</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>
Erosion Control	<ul style="list-style-type: none"> <li>• Hay and seed with straw wattle or other erosion control material will be used to maintain erosion control and water runoff after cleanup is complete.</li> </ul>

## **Background Sampling**

As no regional background data exists for this event, baseline sampling should be conducted under the supervision of a professionally licensed civil engineer, petroleum engineer, or geologist to determine background conditions in the vicinity of the cleanup. These results will establish site specific cleanup levels that may be in excess of published health screening levels for the site.

The establishment of background conditions must take into consideration site specific data relative to local geology, and the geologic chemical data in the background data. Results within 20% of the background data set will be considered passing.

### **Site Specific Background Data Collection and Analyses**

The following requirements apply:

- 1) Three sampling locations shall be identified away from the impacted/cleanup area, such that minimal air blown ash or debris may disturb the desired samples. Locations should be staggered to represent the area. Please note, these are to be three discreet samples analyzed separately and shall not be composited into one.
- 2) In order to assure a "clean" or "native" sample, the first 3 inches of dirt shall be removed from the ground surface.
- 3) Samples shall be collected from 3 to 9 inches and placed in appropriate containers for transport to an analytical laboratory
- 4) Samples shall be analyzed for metals under either EPA 6010 or Method 6020 and Mercury by EPA Method 7471A. Confirmation samples taken later must use the same analytical method as used for determining background.
- 5) Analytical results will be reviewed and compiled by the licensed professional, and a determination made if the results are representative of background for the subject site.

## **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. 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, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

**Soil Testing and Screening Criteria for Work Plans and subsequent Report of Findings**

<b>Initial Health Screening Criteria for Soil</b>		
Analyte	Health Screening Level mg/Kg	Cleanup Level
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

These Initial Screening Criteria have been establish based on CalRecycle guidelines for soil confirmation sampling after completion of visible cleanup of properties. These are initial

health screening criteria in the absence of specific background data. Screening levels provided here **should be raised** (to become more lenient) if ambient concentrations of metals are found to be prevalent in background data sets established by the licensed professional conducting the background study.

Samples should be sent to an approved laboratory for analysis of Title 22 Metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, 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, **the same lab method** should be used for baseline and confirmation samples.

**Additional Advisory:**

In cases where a subject site has been cleaned up to background levels that exceed initial screening levels, property owners should be advised of the exceedance.

**Reporting:**

In order to facilitate the expedient review of cleanup documentation, results of testing and analyses shall be outlined in tables for each site compared against the identified screening level. Certified analytical reports shall be attached including all QA/QC documentation from the lab. As the results presented will include interpretation, all reports must be certified and stamped by the licensed professional (civil engineer, petroleum engineer, or geologist) who is taking responsible charge for the work.

\* \* \*

**Requirements**

Cleanups shall meet the following standards.

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 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. A copy of the County's storm water best management practices may be found at: <https://sonomacounty.ca.gov/PRMD/Eng-and-Constr/Grading-and-Storm-Water/Best-Management-Practice-Guide/>
  - 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 (burrito wrapping).
  - b. Mixed burned debris and ash shall be transported to an approved landfill in California or Nevada. Property owners or contractors shall make contact with the landfill operator prior to hauling the waste to ensure its acceptance. Note that waste characterization testing may be required by the landfill that is the final point of disposal.
  - c. A receipt for waste disposal shall be obtained from the landfill operator and a copy provided to the County as part of certification of the work.
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 from the site, soil samples shall be collected from the impacted structure area. Sample collection shall be performed under the supervision of a California licensed Professional Civil Engineer, Petroleum Engineer, or Geologist. A report of analytical results shall be prepared by this engineering contractor and a copy provided to the County as part of certification of the work.
  - b. Confirmation samples will be collected from the impacted structure area (burn footprint) in native soil, to effectively represent the cleanup area. The selection of sample locations 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.

Property owners shall 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 disaster 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. Recyclables should be taken 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 (Level C protection). 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
- Chemical resistant clothing (one piece coverall, hooded two piece chemical splash suit, chemical resistant hood and apron, disposable chemical resistant coveralls.)
- 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.

## **Templates and Resource List for Property Owners, Contractors and Consultants**

The following templates and resource list have been created in order to assist property owners and / or contractors and consultants through the cleanup process. While the templates presented here are optional, it is highly encouraged that the organizational processes outlined are adhered to in order to facilitate an expedient review and approval of work plans and reports such that a property completion certification can be issued.

### **Work Plans and Reports Checklist/Contents**

Please be advised it is the intent of work plans and reports to provide working guidance so that no steps are missed in the cleanup process that might unduly burden property owners in having to perform additional or unnecessary work that may have been caught at the early stages of the project cleanup. With this, **submittals made under these guidelines can be abbreviated to the bare necessities** in order to achieve cleanup removal and disposal goals. For example, items such as fugitive dust control may be addressed by referencing posted County documents and acknowledging that practices outlined therein will be adhered to.

Included as Attachment A and B to this document, please find general work plan and report format templates that will assist in the timely review of submitted documents.

### **Templates/Resources Summary**

Attachment A	Work Plan Checklist/Contents
Attachment B	Report Checklist/Contents
Attachment C	Sample Work Plan

# **Attachment A**

## **Work Plan Checklist/Contents**

### Index of Work Plan Contents

Section 1: Property Information (Assessor's Parcel Number, contacts for owner/contractor(s)/consultant(s))

Section 2: Description of work to be performed:  
2A Site Testing and Analyses Plan (Asbestos and Soil)  
2B Air Monitoring Protocols for Fugitive Dust  
2C Hazardous Waste and Asbestos Removal Plan  
2D Debris Removal Plan  
2E Soil Grading / Removal to Level of Visually Clean  
2F Foundations Plan (Removal or Testing for Potential Reuse)  
2G Confirmation Sampling  
2H Appliance and Vehicle Recycling or Disposal  
2I Well and Septic Plan (if applicable)

Section 3: Vicinity Map, Plan Maps and Drawings

# **Attachment B**

## **Report Checklist/Contents**

### Index of Report Contents

- Section 1: Property Information (Assessor's Parcel Number, contacts for owner/contractor(s)/consultant(s))
- Section 2: Description of work performed:  
2A Site Testing and Analyses – Description and Summary of Results (Asbestos and Soil)  
2B Air Monitoring Protocols for Fugitive Dust Implementation  
2C Hazardous Waste and Asbestos Removal Documentation  
2D Debris Removal Documentation (Disposal Receipts)  
2E Soil Grading / Removal to Level of Visually Clean  
2F Foundations (Removal or Testing Results for Potential Reuse)  
2G Confirmation Sampling Results Discussion  
2H Documentation of Appliance and Vehicle Recycling or Disposal  
2I Documentation of Work Related to Well and Septic
- Section 3: Vicinity Map, Plan Maps and Drawings
- Section 4: Analytical Test Results Compared with State Health Screening Criteria
- Section 5: Certified Lab Reports

# **Attachment C**

## **Sample Work Plan**

# Site Work Plan

## ADDRESS OF PROPERTY

**Section 1:** APN# fill in

Property Owners: fill in with contact number

Contractor: fill in with license number with contact number

**Section 2:** Generalized work plan is to have owner with contractor perform all work. Specialized work including asbestos abatement and hazardous waste handling will be performed by those licensed and trained to do so with HAZWOPER training where applicable using personal protective equipment (PPE).

2A: Site Testing, Prior to any handling of waste on the property, certified asbestos and soil engineers must come in and test the property as appropriate. Samples of suspect asbestos containing materials will be scraped up and collected by contractor for testing.

- fill in with contractor name and license (if you don't know who this is yet, simply state a contractor with qualifications and license to perform work will be retained to perform such work) for debris removal, soil removal, and grading/erosion control.

2B: Air monitoring Protocols- In order to maintain dust during clean up the site will remain watered down at all times while being actively worked on. Water will applied with a fine mist sprayer, no excessive water jets will be used to control water runoff. Water will applied especially when contractor is disturbing and cleaning debris. Visual monitoring shall be the primary method of ensuring proper handling and dust control in the field, unless otherwise advised/recommended by the certified asbestos or soil consultant for project.

2C: Hazardous waste and asbestos removal- The County has initially cleared the property of all household hazardous waste. For remaining hazardous waste, such as asbestos or other identified constituents Name contractor or another contractor certified as appropriate will remove it from the property. Contractor Name is a licensed contractor with Hazmat certifications. Personal Protective Equipment will be used as appropriate for all work.

2D: Debris removal- All remaining debris such as metal will be removed by contractor to the correct establishments as provided in the "Sonoma County Wildfire Debris Management Requirements" document. All debris loads that are transported will be covered and use the CalRecycle protocol burrito wrap method to properly secure debris. Work Areas shall be clearly delineated, and be restricted to those personnel performing the cleanup with proper PPE.

All documents/records for transportation and debris removal will be retained and supplied with "Sonoma County Debris Removal Completion Certificate".

2E: Grading: Soil will be graded down 3 to 6" or more until clean up area is visually clean. The site will remain properly watered down during grading.

2F: Foundation Removal- At this time foundation removal is **planned/not planned**. If recommended by certified asbestos consultant foundation material may be tested prior to disposal or recycling. Otherwise, the material will be brought to a facility appropriate to the waste stream. Should it be decided to save portions of the foundation or leave in place, a California licensed civil/structural engineer will be required to certify such use is appropriate and will need to document any field testing, observations, or implemented lab material testing used to certify such conclusions and recommendations for reuse are appropriate. It is understood that even if foundation material is allowed to stay in place, it may be subject to further review and approval once building plans are submitted to the County.

2G: Background and Confirmation Sampling- Soil background and confirmation testing will be conducted after cleanup to confirm the site is clear of hazardous material and results are either below established health screening levels or returned to background conditions under the supervision of a licensed engineer or geologist.

Background Sampling - As no regional background data exists for this event, baseline sampling will be conducted under the supervision of a professionally licensed civil engineer, petroleum engineer, or geologist to determine background conditions in the vicinity of the cleanup. These results will establish site specific cleanup levels that may be in excess of published health screening levels for the site.

The establishment of background conditions will take into consideration site specific data relative to local geology, and the geologic chemical data in the background data. Results within 20% of the background data based on County published standards will be considered passing.

#### Site Specific Background Data Collection and Analyses

The following requirements apply:

- 6) Three discreet sampling locations shall be identified away from the impacted/cleanup area, such that minimal air blown ash or debris may disturb the desired samples. Locations should be staggered to represent the area. In no event will samples be composited.
- 7) In order to assure a "clean" or "native" sample, the first 3 inches of dirt shall be removed from the ground surface.
- 8) Samples shall be collected from 3 to 9 inches and placed in appropriate containers for transport to an analytical laboratory
- 9) Samples shall be analyzed for metals under either EPA 6010 or Method 6020 and Mercury by EPA Method 7471A. Confirmation samples taken must use the same analytical method as used for determining background.
- 10) Analytical results from the three sample locations will be reviewed and compiled by the licensed professional, and a determination made if the results are representative of background for the subject site.

#### Confirmation Samples

Sampling will be performed pursuant to County published guidelines based on the estimated square footage of the ash footprints. All samples will be collected between 0-3 inches and placed in an 8 ounce jar prior to testing.

Results will be included/attached with the final certification form submitted to the County, and certified by the licensed professional. In general sampling shall be performed as follows:

Confirmation sampling should be conducted under the direction of licensed professional (California licensed geologist or engineer) after fire-related debris has been removed from a property. Representative soil samples will be collected and analyzed to determine compliance with clean-up goals. The total number of samples to be collected will be based on estimated square footage of ash footprint:

<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 square feet	3
1,501-2,000 square feet	4
2,001-5,000 square feet	5
>5,000 square feet	Will consult with local environmental health officials

All confirmation samples will be collected from a depth of 0-3 inches using a dedicated 4-ounce plastic scoop and be placed in 8-ounce jars. Samples will 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 EPA Method 6010 or 6020, and mercury by EPA Method 7471A.

2H: Appliance and Vehicle removal- Remaining appliances will be removed from the property and disposed of properly; receipts where applicable will be recorded and documented for reference. All burnt vehicles will be towed away and disposed by a contractor licensed to do so, and similarly brought to a facility appropriately licensed to recycle or dispose of the material/waste.

2I: Well and Septic- Current assessments of both the well and Septic (if present) will be performed, and appropriate measure taken, based upon the results of the assessment, action will be taken to ensure well and septic is suitable for living.

2J: Erosion Control – Hay and seed with straw wattle or other erosion control material will be used to maintain erosion control and water runoff.

2K. Best Management Practices

Dust Control

- Contractor/Property owner will provide water or an approved dust palliative, or both, to prevent dust nuisance at the site. Dust resulting from performance of the work shall be controlled at all times.
- Each area of ash and debris to be removed will be pre-watered 48 to 72 hours in advance of the removal. Hoses with a fine spray nozzle will be utilized where applicable. The water will be applied



in a manner that does not generate runoff. Engineering controls for storm water discharges will be in place prior to dust control operations.

- All loads shall be covered with a tarp; this includes metal debris. Ash and debris loads shall be fully encapsulated with a tarp (“burrito wrap” method). Concrete loads will be covered with a tarp or provided the loads are wetted prior to leaving no tarp will be required. If concrete loads generate dust, then the loads will be wetted and covered.
- All waste material that is not unloaded at the end of each workday will be consolidated, sufficiently wetted, and/or covered to prevent the offsite migration of contaminants.
- All visibly dry disturbed soil surface areas of operation will be watered to minimize dust emissions during performance of work.
- Speeds will be reduced when driving on unpaved roadways.
- Procedures will be implemented to prevent or minimize dirt, soil, or ash contaminating roadways, neighboring parcels, or creating an airborne health hazard. The use of blower devices, dry rotary brushes, or brooms for removal of carryout and track out on public roads is strictly prohibited.

### Vehicle and Road Safety

If removal activities on property owners’ parcels will create a roadway blockage or hinder traffic patterns, property owners or contractor will obtain any required local permits and shall post all warning signs, as required by local ordinances. As there may be many contractors actively working on remediation efforts in the burn area, property owners or contractor will to the best of their ability identify removal and remediation efforts in adjacent areas that could impact the ability to locate, park, or transport equipment and materials.

### Utility Clearance

Consultant/Homeowner shall identify all utilities which could affect work on the project to ensure safe working conditions during cleanup.

### Grading and Erosion Control

Once grading has been completed, best management practices (BMPs) shall be implemented to establish erosion control at the disturbed site.

- a. Follow best management erosion and sediment control practices (BMPs) to prevent ash, soil, and other pollutants from washing into the street, drainage courses and culverts, or onto neighboring properties.
- b. 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. Stockpiles may be stored for up to 180 days. This may include wetting and covering the waste until it is loaded and transported. Locate stockpiles away from drainage courses, drain inlets or concentrated flows of storm water.
- c. Stockpiled material may not be stored or placed in a public roadway.
- d. If a stockpile is classified as hazardous, it must be transported to a hazardous landfill. Hazardous materials and refuse must be kept in closed containers that are covered and utilize secondary containment, not directly on soil. If the stockpile is non-hazardous, it can be sent to a Class Three (3) landfill.
- e. During the project rainy season, cover non-active soil stockpiles and contain them within temporary perimeter sediment barriers, such as berms, dikes, silt fences, or sandbag barriers. A soil stabilization measure may be used in lieu of cover.

- f. Implement appropriate erosion control measures during debris removal and provide final site stabilization after debris removal is completed.

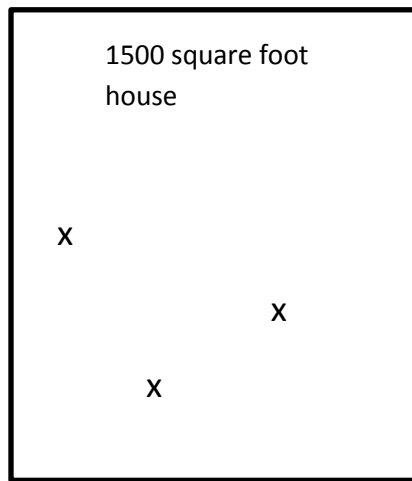
**Section 3:** Attached as Section Three please find a plan map with the approximate area of cleanup delineated. Also shown are anticipated soil sampling locations, and staging/loading areas as applicable along with areas where erosion control measures are anticipated to be put in place (have map showing anticipated soil sampling locations, staging area, locations where erosion control will be placed – can be sketched on)

**Report/Certification** - A property cleanup completion certification will be submitted at the end of the work with all appropriate documentation, including a report with soil confirmation data and certification by a California licensed civil engineer or geologist that such results meet published health screening levels, or in the alternative, exceed those screening levels, but are consistent with background for the area requiring no further action or cleanup.

# Sample Site Map

X = soil sample locations

Background sample 1



Erosion control

Erosion control

Background sample 3

Background sample 2

Staging Area