



**Shasta County Department of Resource Management  
Environmental Health Division**

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**ZOGG FIRE POST-DEBRIS REMOVAL SOIL SAMPLING GUIDELINES**

Confirmation sampling is recommended and would be conducted after fire-related debris has been removed from a property. Representative soil samples should be collected, analyzed and compared with established clean-up goals. The total number of samples to be collected is based on estimated square footage of ash footprint as shown below. It is recommended sampling be performed by a qualified environmental consultant, professional engineer, or registered geologist with experience in soil sampling.

<b>Estimated Square Footage of Ash Footprint (Decision Unit)</b>	<b>Number of 5-Point Composite samples (ft<sup>2</sup> of each area sampled is total ft<sup>2</sup> of ash footprint / the number of samples)</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	Contact Environmental Health Division

Samples should be collected from a depth of 0-3 inches using a dedicated 4-ounce plastic scoop and be mixed (homogenized) in a one gallon plastic bag before being placed in 8-ounce jars. Samples should be taken to an approved laboratory for analysis by Title 22 Metals for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc by EPA Method 6020. You may also collect background samples at a depth of 3-9 inches outside the ash footprint (min 20 ft) to determine if naturally occurring levels of any metals tested are above the cleanup goals. If samples from the ash footprint are below the cleanup goals then the lab will not need to test the background samples. Sample results should be below the cleanup goals or the background sample results. If any results are higher than the clean-up goals and background levels then additional soil removal should occur in the area(s) of concern and re-sampling should be completed. The State will be sampling to establish background levels in the areas affected by the Zogg Fire. These background levels may be used instead of taking your own background samples.

Initial Health Screening Criteria have been established during previous wildfire debris removal events for soil confirmation sampling after completion of visible clean-up of properties. Please note, that these are initial health screening criteria in the absence of background data.

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