

Governor Gavin Newsom
1021 O Street, Suite 9000
Sacramento, CA 95814

cc: Honorable Ann Patterson, Senior Counselor to the Governor
cc: Secretary Yana Garcia, California Environmental Protection Agency
cc: Secretary Tomiquia Moss, Business, California Consumer Services and Housing Agency

May 14, 2025

Urgent Community Concern Over Parcel Soil Testing After Wildfire

Dear Governor Newsom:

We are submitting this brief to support the State of California's previously adopted standardized residential soil testing approach after wildfires that CalRecycle created. We recommend that the State of California provide Los Angeles County technical and financial assistance and adopt the Ventura County debris removal and soil sampling model which was previously adopted after the 2017 Thomas Fire, 2018 Woolsey Fire, and 2024 Mountain View Fire. This model was supported by CalOES and CalRecycle as recently as 2024. This model is enclosed in the attached pages.

Wildfires damage and destroy structures, causing a release of pollutants onto the soil. Since at least 2017, the State of California and counties have adopted and implemented a soil confirmation testing program developed based on field observations and laboratory results. This experience has shown that up to three in ten residential parcels have chemical of concern, such as lead and arsenic, that exceed established health risk goals.

At present, no parcel specific soil testing is required or recommended by the State for residential properties impacted by the Eaton Fire and Palisades Fire. **In our view, this poses a serious risk to public health and the economic recovery of the communities.**

- It has been well-known, based on data from California for previous wildfires, that 16 to 32% of the lots will remain unsafe after debris removal is completed. This means that one or more metal contaminants exceeded an established health and environmental based screening criterion for soil and posed a significant risk to human health and the environment. These were from California OEHHA, DTSC, and the U.S. Environmental Protection Agency.
- On May 3, the *Los Angeles Times* reported 20% of properties scraped by federal cleanup crews still had lead levels exceeding California's state standards for residential properties¹. The lack of residential soil testing prevents a homeowner, future owner, or rebuild contractor from knowing a lot is safe from chemical soil exposure.
- On May 8, the Los Angeles County Department of Public Health reported that 27% of properties scraped by federal cleanup crews still had lead levels exceeding California's state standards for residential properties (80 milligrams per kilogram)².
- Soil confirmation sampling results from previous fires have shown hazardous waste and environmental health risk concentrations of arsenic, antimony, cobalt, copper, lead, mercury, thallium, zinc, and other metal contaminants.

There is an immediate need for residential property soil testing.

¹ [L.A. County finds high lead levels in soil on properties already cleaned by Army Corps. *Los Angeles Times*. May 3, 2024.](#)

² [Post-Fire Air, Soil, Water Assessment Plan Virtual Town Hall. L.A. County. May 8, 2024.](#)

By not conducting parcel specific soil testing, the State and Los Angeles County will not be able to identify and address unsafe properties, which has occurred during past fires. The State and Los Angeles County will also be unable to detect any debris removal fraud, which has occurred during past fires^{3,4}. Further, the U.S. Army Corps of Engineers stated during their 2023 Maui wildfire cleanup that they expected a 20% soil confirmation failure rate⁵. During the 2020 wildfire season, CalRecycle reported 40 to 90% soil confirmation failure rates from three contracts due to a bidding modification.

Failure rates can also be used to determine if a contractor is removing too much soil. In two projects, contractors were either required to replace soil or soil was brought in by the State after it was determined that contractors had removed too much soil. When contractors have extremely low overall rescraper rates throughout the project, the project data need to be carefully evaluated to ensure taxpayer money is being appropriately spent.

The ongoing property soil research by Los Angeles County will not take the place of validated previous government-industry practices by parcel. This ongoing soil testing research by private contractors is not answering the same question that property owners and banks/lenders want answered.

The 2024 wildfire residential property debris removal and soil sampling actions of Ventura County should be a model to inform Los Angeles County practice. It is our understanding that soil sampling after wildfires has been part of contracts between CalOES and CalRecycle. The Ventura County program aligned with those tasks and activities that are eligible for reimbursement under the State's *California Disaster Assistance Act*⁶. Each of the properties that participated in the Ventura County-led program received a "final sign-off form". This document allowed the owner to apply for planning, building, and safety permits to rebuild. The actual sample results were provided to the owner in their "property completion report" once the County reconciled property records. This information was obtained directly from Ventura County.

Our understanding is that Ventura County's prior practice — which we strongly suggest Los Angeles County should adopt — operates under Section 101480 of the *California Health and Safety Code*⁷, governing local jurisdiction treatment of a remedial investigation consistent with state law.

In summary, it is the recommendation of the multi-organizational group that Los Angeles County should be provided technical assistance by the State and adopt the Ventura County/CalRecycle method for residential soil testing and support its confirmation testing with adequate financial resources as appropriate. Thank you for considering this information. Please do not hesitate to contact me at awhelton@purdue.edu.

Respectfully,

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³ [In Scathing Letter, State Criticizes Army Corps' Poor Oversight in North Bay Wildfire Cleanup](#). *KQED*. August 24, 2018.

⁴ [Cleanup up a mess](#). *Chico News and Review*. January 10, 2019.

⁵ [Maui Wildfire Temporary Debris Storage Operations & Residential Debris Removal](#). U.S. Army Corps of Eng. May 21, 2024.

⁶ [California Disaster Assistance Act | California Governor's Office of Emergency Services](#).

⁷ [State of California Health and Safety Code](#), Section 101480.

* All persons are signing on behalf of themselves as individuals, not on behalf of the organization.

Enclosures

Confirmation Soil Parcel Method Recommendations

In the wake of the 2025 Palisades and Eaton Fires in the Los Angeles, California area, **we urge the adoption of residential soil testing approach that follows past fires**. The following information is provided to help policymakers better understand actions necessary after wildfires to restore residential properties to safe use.

1. Tracking with history and information available, Los Angeles County Department of Public Works (DPW) or Department of Public Health (DPH) should hire a turnkey contractor to oversee and conduct both the residential post-fire soil sampling and rescape program with CalRecycle technical assistance. The environmental contractor should be required to be operational in five business days after the contract is signed. This program should be available for both private and public removals at no cost to the parcel owners. The program should also be available to public and non-profit facilities such as schools, parks, recreational facilities at no cost. Sampling should be offered to commercial and industrial at cost.
2. Private sector environmental contractor versed in soil sampling and soil analysis should conduct the testing. These companies shall certify results to property owner with government agency oversight. Like prior wildfires and the fire in Ventura County, remediation contractors should be available to scrape any isolated contamination and enable the property to undergo soil retesting.
3. Like past wildfire debris removal efforts, soil sampling shall be conducted for all Title 22 metals.
4. Two background soil sampling studies shall be conducted by environmental contractor within five days working with Los Angeles County and CalRecycle. This effort will benchmark expected background levels of metals so residential soil remediation decisions can be made for both fires.
5. Every residential property who participates shall be offered soil sampling and remediation assistance. Environmental contractor shall create a general soil sampling plan and a field sampling plan indicating where each decision unit (DU) will be collected for each property. The field sampling plan shall be based on the ash footprint from either the site documentation prepared by the US Army Corps of Engineers (USACE), aerial imagery, Lidar, or other satellite before and after imagery. All vehicles and structures and ash footprints greater than 100 sf on the parcel should be identified on the field sampling plan. Before starting confirmation sampling, contracts shall submit 100 (50 from each fire) field soil sampling plans for approval by government agencies. Understanding where destroyed structures and vehicles were important to consider for each property soil sampling plan. Contractors often receive this information from the USACE to help design sampling plans.
6. The DPH shall review and approve the residential soil sampling plans. Note: Guidance and training is available from CalRecycle and Ventura County⁸.
7. **“Soil Testing and Screening Criteria for Work Plans and subsequent Report of Findings Initial Screening**. Criteria have been established in consultation with CalRecycle 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. As such, screening levels provided here may be raised (more lenient) should ambient concentrations of metals be found to be prevalent in background data sets.”

⁸ Ventura County, Environmental Health Decision. *Private Debris Removal Program Application & Standard Work Plan Template*. 2024. Ventura, California. Accessed May 8, 2025. rmadocs.venturacounty.gov/rebuilding-together/mountain-fire/forms/ventura-county-local-debris-removal-program-application-unincorporated-areas-only.pdf

Table 1. List of Metals Health-Based Screening Levels Used by Ventura County, 2024

Initial Health Screening Criteria for Soil		
Analyte	Health Screening Level mg/Kg	Cleanup Level
Antimony	30	Health Screen
Arsenic	0.07	Background
Barium	5,200	Health Screen
Beryllium	15	Health Screen
Cadmium	1.7	Health Screen
Chromium	36,000	Health Screen
Cobalt	23	Background and Health Screen
Copper	3,000	Health Screen
Lead	80	Background and 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

8. Lithium should be added to the screening list. Lithium ion batteries and electric vehicles were present. The residential soil USEPA Regional Screening Level (RSL) for lithium is 16 mg/kg.
9. Testing of metals must be performed using USEPA Method 6020, with the exception of mercury which should be analyzed by USEPA Method 7471A.
10. **“Confirmation Sampling.** Confirmation sampling should be conducted by a licensed professional after fire-related debris has been removed from a property. Representative soil samples must be collected and analyzed to determine compliance with clean-up goals used by the state and federal government which will be available at Environmental Health. The total number of samples to be collected should be based on estimated square footage of ash footprint.”

Table 2. Approach to Soil Sampling on a Residential Property Used by Ventura County, 2024

Estimated Square Footage of Ash Footprint	Number of 5-Point Aliquots (Composite Sampling)
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	Must consult with local Environmental Health officials

11. “All confirmation samples should be collected after debris is removed and grading is complete 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 for Title 22 Metals for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium,

vanadium, and zinc by EPA Method 6020, and mercury by EPA Method 7471A. CalRecycle is currently using EPA Method 6020 in the Consolidated Debris Removal Program. This information is based upon statutes and regulations and is intended to provide a basic overview to help achieve compliance.”

- Testing is recommended for each DECISION UNIT by applying the “DICE” model for smaller or irregular footprints (100 to 1,000 sqft), whereas linear sampling should be conducted for larger areas (1,001 to >5,000 sq ft).

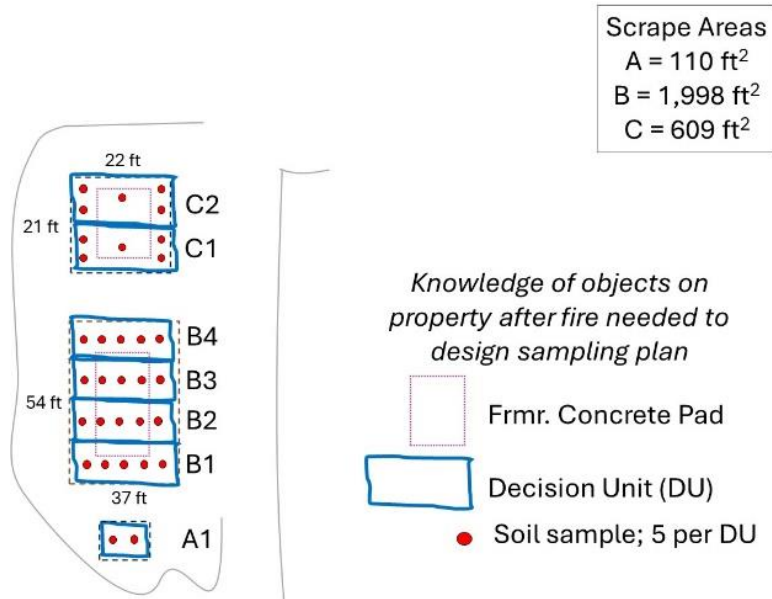


Figure 1. This example diagram shows that soil samples should be collected in each decision unit. For those samples, they should be well mixed in a 5 gallon plastic bucket and one sample should be collected for laboratory analysis.

- Rescraping a residential property should be done selectively with contractors collaborating on the data, with the advisement of Los Angeles County, and support of CalRecycle.