Abstract
Establishing Post-Wildfire Environmental Safety Standards: Evidence-Based Recommendations from the Eaton Fire Response

Background: The January 2025 Eaton Fire represents the most contamination-dense wildland-urban interface (WUI) fire in California history, with 9,400 structures destroyed across 14,000 acres—96% built before lead paint was banned in 1978. Unlike previous California WUI fires, no state or federal confirmation testing has verified complete contaminant removal from cleared lots, and standing structures have received inadequate attention despite widespread toxic infiltration.

Methods: Eaton Fire Residents United (EFRU), a resident-led advocacy organization, developed a contamination mapping project analyzing environmental testing data from 244 pre-remediation and 50 post-remediation privately tested homes across Altadena, Pasadena, and Sierra Madre. Our team of scientists, professors, and PhD researchers analyzed reports for CAM-17 heavy metals, asbestos, VOCs, PAHs, and other hazardous contaminants.

Key Findings:

- 100% of homes tested for lead showed contamination requiring professional remediation
- Complete array of CAM-17 heavy metals (arsenic, cadmium, chromium, nickel, zinc) detected throughout impact zone
- Post-remediation testing is critical for safe return and proper clearance
- Multiple rounds of remediation are likely necessary to remove all contaminates
- Elementary schools reopened adjacent to burn areas without adequate testing
- Underinsured, uninsured, rental, and small business properties face systematic barriers to testing and remediation, creating community-wide recontamination risk

Recommendations: EFRU proposes five critical policy interventions: (1) formal "Ash Zone" or “Impact Zone” designation using satellite imagery and soil testing to trigger systematic response protocols; (2) mandatory pre-remediation testing that includes CAM 17 and TEM asbestos and comprehensive post-remediation clearance testing with expanded contaminant panels including but not limited to TEM asbestos, cyanide, lithium, dioxins, and furans; (3) enhanced protections for children through stricter school, park, and playground testing and remediation standards; (4) state funding for equitable resource distribution ensuring all residents—regardless of insurance status—receive testing and remediation; and (5) standardized industrial hygienist qualifications and testing protocols to ensure worker safety and remediation efficacy, (6) require remediation companies provide pre-remediation testing to ensure worker safety.

Significance: These evidence-based recommendations address critical gaps in California's WUI fire response framework, directly supporting PUC § 917 objectives to maintain insurance

accessibility, expedite compensation, support community resilience, and equitably socialize catastrophic risk. EFRU's community-led remediation partnerships demonstrate scalable models combining resident expertise with government support, offering replicable approaches for future California WUI disasters.

Primary CEA Study Topics Addressed:

- Topic 1: Insurance accessibility and affordability
- Topic 2: Alternative structures to socialize risk
- Topic 6: Streamlined compensation mechanisms
- Topic 8: Risk reduction programs and community hardening
- Topic 9: Economic damage reduction through minimum insurance requirements
- Topic 10: New models to complement/replace Wildfire Fund

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