HRA ENVIRONMENTAL CONSULTANTS, Inc.
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February, 27, 2026

Dear Mr. Cignarale,

It has been a pleasure to serve on this Task Force. I would like to provide my comments and opinions, which are based on the presentations made to the Task Force the past several months, as well as my many years of education, training, and experience investigating and conducting testing and providing remediation scopes for fire-related impacts to residential buildings and structures.

I. Qualifications

Industrial hygiene is a science-based field and part of the overall public health field. An industrial hygienist who has undergraduate and graduate degrees in physical sciences with advanced education in exposure assessment science, aerosol technology and behavior, toxicology, epidemiology, analytical chemistry, and sampling methodology, is considered a scientist qualified to conduct evaluations for fire-related impact and provide recommendations for cleaning and remediation.
Since the practice of industrial hygiene is not licensed by states or other agencies, there are those who conduct testing and provide recommendations without the above-mentioned education and qualifications.
Those industrial hygienists who have the qualifications are part of an overall public health team to conduct exposure assessments, which includes what to test for and how to interpret the results.

II. Inspections & Pre-Remediation Testing

In the case of fire-related impact, the best methodology for evaluation is the following:
• Conduct a site visit and site survey
• Ascertain the presence and extent of visible impact from wildfire components of char, soot, and ash
• Assess the presence of smoke odor
• Collect surface samples for char, soot, and ash

• In cases where the presence of lead and/or asbestos were reasonably likely (for example, if there is reason to believe older structures or industrial facilities burned in close proximity), conduct surface testing for lead and/or asbestos.

i.An alternative, in lieu of testing, is to conduct remediation on surfaces as it is conducted when lead and/or asbestos is present on surfaces.

Based on experience, findings, and what has been reported by others, there is no need to conduct air sampling. It has been shown that air sampling that has been conducted after the active phase of the fire has not produced results which have provided a rationale to continue such testing. VOCs dissipate naturally and quickly, and air sampling results (which may indicate low levels of chemicals that can be present in residences unrelated to a fire event) may cause unnecessary concerns by the public. Public health agencies throughout the country, and especially in California, agree with the approach with not testing for the sake of testing, and with taking the practical steps mentioned in this memorandum.

It is also not advisable to rigidly classify residences into zones based on proximity to the fire. A home may be further away from the epicenter of the fire, but still may have been impacted by fire components of char, soot, and ash. Conversely, a home may be much closer to the fire, but, because of the individual characteristics of the home or weather conditions, be minimally impacted. For that reason, dividing the overall area into arbitrary zones is not a proper approach.
The better approach is to have a qualified, science-based industrial hygienist (who has gone through the rigor of graduate studies to evaluate structures) survey each residence and structure individually. If a home has no visible particulate or fire odor, testing and remediation are likely unnecessary.

III. Remediation

The remediation process should depend in part on whether the flames partially burned the structure. Remediation for any residence which has not been partially consumed by flames should be to conduct a cleaning of all

surfaces inside the residence by a qualified remediation company, followed by post-cleanup surface testing for char, soot, and ash, and, if applicable, for lead and/or asbestos. Remediation should be conducted as soon as possible after the fire.
Where a residence has been partially burned, qualified professionals (construction, electrical, and other experts, in concert with the industrial hygienist and remediation company) should develop a plan to address first the burned and damaged sections, and clean and remediate the rest of the residence. Lead-based-paint and asbestos testing for the structure should also be conducted in these cases.

Additionally, while the discussions sensibly focused on the extent of necessary cleaning, and did not advocate for residences exposed to smoke to be automatically declared “total losses” or require rebuilding, there were a handful of comments that suggested otherwise. Any suggestion to that effect is not founded in practice or experience. Homes exposed to smoke should not be declared uninhabitable and/or torn down before any remediation and science-based re-testing effort. Thorough cleaning and retesting should always be the first approach to smoke exposure.

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Sincerely,

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