



October 24, 2025

Commissioner Michael Conway  
Colorado Dept of Insurance  
1580 Broadway Ste 110  
Denver, CO

Mr. Dan Brown, President  
Partners Environmental  
[www.partnersenv.com](http://www.partnersenv.com) (800)763-1363

Re: HB24-1315 Wildfire Smoke Damage Study Considerations Stakeholder Meeting on 10/20/2025  
Feedback

Dear Commissioner Conway and Mr. Brown,

Thank you for the opportunity to submit comments on this vitally important study. We were pleased to support the legislation underlying the study and appreciate the chance to offer the following general and specific comments in response to your request for input.

It has become clear that the protocols many insurance companies and their retained vendors generally have been using to remediate, clean and restore properties exposed to wildfire and urban interface (WUI) conflagration debris are inadequate and unsafe, and that cost considerations have overridden public health and property value considerations.

Pre-remediation testing should be standard and mandatory to ensure that the scope of the cleaning/remediation plans are appropriate to the conditions at the property and money doesn't get wasted on inadequate methods that require further work.

Testing methods and locations matter and should be standardized, with due consideration, again, to conditions. Location, proximity to flames/smoke plumes, ventilation, (were doors and windows open during the fire, was there heat or A/C running?), and construction materials matter to measuring impact. While we acknowledge that there are a variety of test options, each with a cost, that consideration should not influence the study group's recommendation as to the protocols that will advance human safety and property restoration goals.

We urge the working group to recommend the establishment of education, training and certification standards for vendor/indoor air quality/industrial hygiene professionals. We urge the working group to recommend a disclosure requirement so that where a vendor is captive to an insurance company or derives a significant portion of income from insurance companies, the property owner is put on notice and given the opportunity to request an independent professional/company.

## REMEDIATION SURVEY

**SAMPLING/TESTING METHODS:** We urge the study group's report to expressly recognize that standard sampling/testing methods suitable for kitchen fires are not appropriate for use after WUI fires. Similarly, we urge the study group's report to expressly recognize the importance of testing in attics, crawlspaces, behind

walls, inside ducts and to porous surfaces. Sending an adjuster or captive restoration company to do a visual check of a few surfaces for gray or black char or soot, or to an olfactory assessment is unacceptable, yet that has been standard protocol on far too many wildfire claims.

In far too many situations, where a policyholder pushes for further testing, the next level (used by insurer contracted IH companies) is often a very limited scope assessment for particulates (soot, ash, and char) by a combination of tape sampling, maybe limited wet swab, and air sampling. This is usually limited to maybe 6 samples each at most and does not include asbestos, lead, or the other heavy metals or chemicals of concern. VOCs are rarely included in the standard testing protocol, and the contractors often claim that they naturally dissipate quickly, thus the insurer refuses to test for these. The study group report should reject this superficial approach and call out testing methods that are appropriate to the conditions at the property.

The most common lab method used to evaluate the samples seems to be the human eye counting microscopic particles via a microscope slide of the samples. Some independent industrial hygienists have developed appropriately thorough testing protocols, methods, and recommendations to address these types of Urban Conflagration impacted homes. Please see **Attachment A** for some examples of the types and numbers of sampling as well as citations of studies involved.

**CLEANUP/REGULATORY STANDARDS:** The Institute of Inspection Cleaning and Restoration (IICRC), sets forth the following standard, and a process which has been widely used by restoration contractors as the gold standard for restoration contractors, yet it offers no defined "levels" or science based, chemicals of concern (COC) or testing protocols in place to guide the work.

Please note disclaimer language in red below:

### [ANSI/IICRC S700](#)

#### [Standard for Professional Fire and Smoke Damage Restoration](#)

- [The ANSI/IICRC S700 \(2025\) First Edition is currently available on the Standards Webstore.](#)

[This standard describes the principles, processes, and procedures for assessing the presence, intensity of impact and boundaries of fire residues and odors affecting a building, building systems \(e.g., Heating, Ventilating and Air-Conditioning \(HVAC\)\), and contents after a fire event. The fire event can occur within the building, an adjoining building\(s\), or building\(s\) in the vicinity impacted by an external or internal fire, \*\*other than wildfires\*\*. This standard also describes the practical principles, methods, and processes including equipment, tools, and materials, for the restoration cleaning and fire odor management of buildings and contents. This standard also addresses contractor qualifications, administrative requirements, procedures, development of the Restoration Work Plan \(RWP\), documentation of project-related events, and compliance with Authorities Having Jurisdiction \(AHJ\).](#)

This standard does not comprehensively address:

- Building demolition other than for Fire and Smoke Damage (FSD) assessment, mitigation, or as source removal procedure
- Reconstruction
- Issues occurring from certain situations such as wildfires, chemical fires, or industrial fires that pose environmental hazards
- Buildings (e.g., healthcare, laboratory facilities, clean rooms, life science facilities) with special requirements
- Occupants with special requirements (e.g., immunocompromised, respiratory diseases, heightened sensitivities, elderly, infants)
- Exposures impacting occupants

This standard does not address all safety concerns associated with performing restoration work. Restorers should establish appropriate safety, health, and environmental practices to determine the applicability of regulations established by AHJ prior to the use of this standard.

Restorers should be aware of the potential for regulated hazardous materials to be present in buildings. When hazardous regulated materials are suspected to be present, restorers shall perform their work in a manner consistent with regulations established by the AHJ.

#### REPLACE vs. REPAIR:

Where insured property has been charred, water-logged or otherwise damaged due to a wildfire, the standard assessment of whether it is repairable (salvageable) versus non-salvageable and needs replacing is based on the following; 1) can the item or structure be fully restored to its pre-loss condition through cleaning/repair or does it need to be replaced, and/or 2) is the damage so extensive that it is a constructive total loss and it will be more cost effective to replace than repair/clean it? These same principles should apply to standing homes that have experienced with smoke and thermal damage from Urban Wildfire Conflagrations. It wastes policy benefits and insurer resources to pay for cleaning property that can't be fully cleaned, or restore items that can't be fully or safely restored.

#### **INSURANCE SURVEY**

COMMON COVERAGE "C" (PERSONAL PROPERTY/CONTENTS) LIMITS: When a policy is issued, it is common for insurers to set the amount of contents coverage limits as a percentage of the structure coverage limits. Contents limits are rarely customized to the actual property in the insured home.

AMOUNT OF COVERAGE "C" ABSORBED IN WILDFIRE LOSSES: It is in the best interests of policyholders and insurers that policy benefits not be wasted on cleaning things such as soft goods that weren't appropriate to clean and have to be destroyed after money has been spend on cleaning them. The same principle applies to dwelling cleaning and remediation that gets done before appropriate testing has been done. It is a waste of policy benefits, (including temporary rent coverage), when post-clearance testing reveals remaining toxins and inadequate cleaning, necessitating additional work and extended uninhabitability.



We respectfully submit that the study group should expressly require satisfactory clearance testing results before an insurer threatens to cut off temporary rent payments and seeks to compel the property owner to move back in. Further, where contaminated contents are kept in or returned to a mitigated structure, they can re-contaminate the structure. When cleaned or replaced contents are placed in an unmitigated structure, they can become re-contaminated as well.

Common sense and economy dictate that pre-cleaning, remediation and cleaning appropriate to the test results and conditions and satisfactory clearance testing should always be done before a property is deemed safe for re-habitation.

COMMON CLAIMS HANDLING BOTTLENECKS:

- Insurers refusing to pay for appropriate testing by qualified professionals and reputable, independent labs and structural engineering evaluations where appropriate.
- Insurance company adjusters making determinations they're not professionally qualified to make.
- Cleaning, remediation, and restoration work by unqualified vendors or vendors focused on saving their insurance company clients' money.
- Lack of quality contractors, timely availability of those contractors
- Temporary housing shortages
- Rotating adjusters; resulting delays, wasted time revisiting issues that were settled with the previous adjuster.
- Excessive depreciation of contents and structures that deprives policyholders of benefits to which they're entitled.
- Policyholders having to pay out of pocket for testing their insurer should be paying for.
- Policy benefits squandered on cleaning items that can't be cleaned and/or paying vendors whose work needs to be re-done.

Respectfully submitted,

Amy Bach, Executive Director  
United Policyholders  
917 Irving St., Suite 4  
San Francisco, CA 94122

Attachment A  
Attachment B

Attachment (A)

In response to the Stakeholder Meeting request to share information regarding recent publications on testing methods, we offer the following information. These come from report citations that appear to be used by some of the independent CIH companies in recent reports on findings from the Palisades/Eaton Urban Conflagration Fires. We have copied and paraphrased some of this information from what has been made publicly available, or shared through homeowner groups and thus cannot directly be attributed to the CIH sources:

- Bruns, E. A., J. G. Slowik, et al. (2017). "Characterization of gas-phase organics using proton transfer reaction time-of-flight mass spectrometry: fresh and aged residential wood combustion emissions." *Atmos. Chem. Phys.*, 17 (1): 705-720.
- Fent, K. W., D. E. Evans, et al. (2018). "Airborne contaminants during controlled residential fires." *Journal of Occupational and Environmental Hygiene*, 15 (5): 399-412. doi:10.1080/15459624.2018.1445260
- Gilman, J. B., B. M. Lerner, et al. (2015). "Biomass burning emissions and potential air quality impacts of volatile organic compounds and other trace gases from fuels common in the US." *Atmos. Chem. Phys.*, 15 (24): 13915-13938. <https://acp.copernicus.org/articles/15/13915/2015/>
- King, M. L. (2007). *Guidelines for Fire and Smoke Damage Repair (formerly the ASCR Guidelines for Fire and Smoke Damage Repair)*, Restoration Industry Association.
- NIOSH Manual of Analytical Methods 3800. ORGANIC AND INORGANIC GASES BY 3800 EXTRACTIVE FTIR SPECTROMETRY. <https://www.cdc.gov/niosh/docs/2003-154/pdfs/3800.pdf>
- NIOSH Manual of Analytical Methods (NMAM), 5th Edition Surface Sampling Guidance, Considerations, and Methods in Occupational Hygiene [https://www.cdc.gov/niosh/nmam/pdf/nmam\\_chap\\_sg-508.pdf](https://www.cdc.gov/niosh/nmam/pdf/nmam_chap_sg-508.pdf)
- Reid, C. E., J. A. de Gouw, et al. (2022). Homes that survived the Marshall Fire 1 year ago harbored another disaster inside – here’s what we’ve learned about this insidious urban wildfire risk. @Conversation US. Retrieved May 10

2023 from <http://theconversation.com/homes-that-survived-the-marshall-fire-1-year-ago-harbored-another-disaster-inside-heres-what-weve-learned-about-this-insidious-urban-wildfirerisk-196926>

- Residual Impacts of a Wildland Urban Interface on Urban Particulate Matter and Dust: a study from the Marshall Fire. (2023) Air Quality, Atmosphere & Health (2023) 16:1839- 1850 <https://link.springer.com/article/10.1007/s11869-023-01376-3>
  
- The Chemistry of Fires at the Wildland Urban Interface (2022) National Academies of Sciences, Engineering, and Medicine. 2022. The Chemistry of Fires at the Wildland-Urban Interface. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26460>
  
- USDOE. (1996). DOE Fire Protection Handbook, Volume II. Fire effects and electrical and electronic equipment. ; USDOE Office of Environmental Restoration and Waste Management, Washington, DC (United States). Medium: ED; Size: 125 p. available from <https://www.osti.gov/servlets/purl/374145>
  
- USEPA. (2021a, 2023108-23). University of Colorado Boulder researchers awarded \$1.1 million for projects to reduce exposure to wildland fire smoke at school and at home. USEPA. Retrieved May 10, 2023, from <https://www.epa.gov/newsreleases/universitycolorado-boulder-researchers-awarded-11-million-projectsreduce-exposure>
  
- USEPA. (2021b). Voluntary Guidelines for Methamphetamine and Fentanyl Laboratory Cleanup - meth\_lab\_guidelines.pdf. US EPA.EPA-540-B-21-002. available from [https://www.epa.gov/sites/default/files/documents/meth\\_lab\\_guidelines.pdf?VersionId=tiPBDYy5j1FYu50VrFWtQ5xmkarazoyZ](https://www.epa.gov/sites/default/files/documents/meth_lab_guidelines.pdf?VersionId=tiPBDYy5j1FYu50VrFWtQ5xmkarazoyZ)
  
- Why Indoor Air Chemistry Matters (2022) National Academies of Sciences, Engineering, and Medicine. 2022. Why Indoor Chemistry Matters. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26228>

## FURTHER NARROWING OF SOURCES

1. **The Chemistry of Fires at the Wildland Urban Interface (2022) National Academies of Sciences, Engineering, and Medicine. 2022.** The Chemistry of Fires at the Wildland-Urban Interface. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26460>.

*“These publications identify common fire emissions from building materials to show that homes exposed to such events as the Palisades Fire have become reservoirs for all the chemicals generated by the pyrolysis of the incinerated homes.” paraphrased*

2. **Why Indoor Air Chemistry Matters (2022) National Academies of Sciences, Engineering, and Medicine. 2022.** Why Indoor Chemistry Matters. Washington, DC: The National Academies Press.

<https://doi.org/10.17226/26228>

*“This publication gives descriptives of the indoor environmental reservoirs and surfaces that hold them to include porous surfaces such as carpeting, textiles used for clothing, furniture and painted walls. For this very reason, it is impossible to clean or otherwise remove the contamination without removing all the drywall as the drywall has become one of the reservoirs that are holding on to the chemicals that were generated from these types of fires.”  
Paraphrased*

3. **National Academies of Sciences (2022)**

*“This publication identifies typical building materials and contents in a typical home in the image below:” paraphrased*

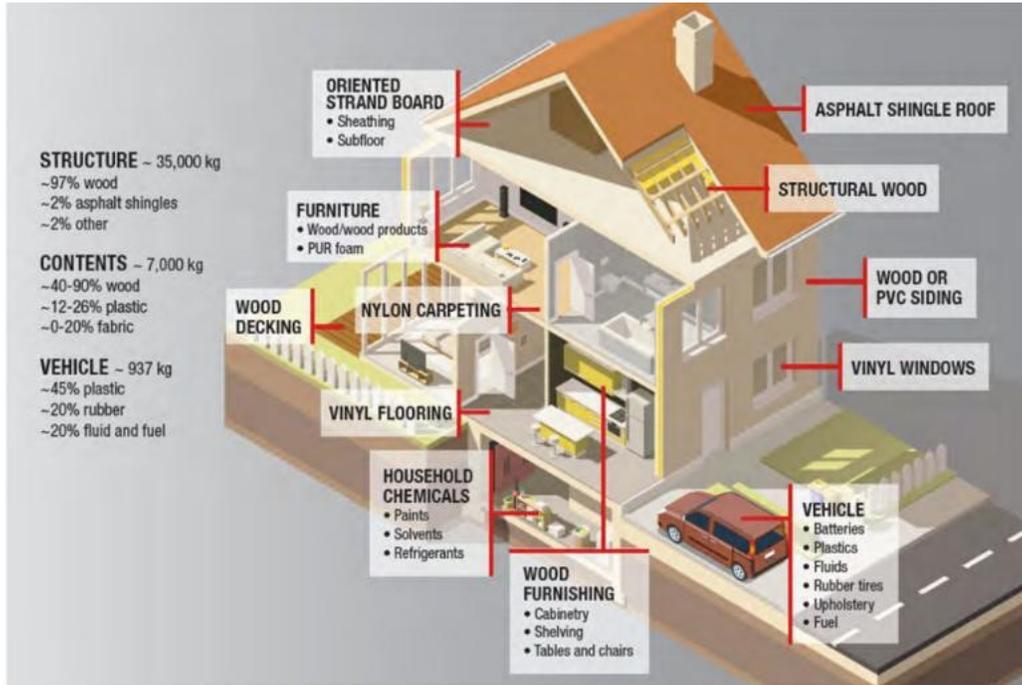


Photo credit: The National Academies of Sciences – The Chemistry of Fires at the Wildland-Urban Interface (2022)

4. Table below from **The Chemistry of Fires at the Wildland Urban Interface (2022)** publication (pg. 35) *“identifies common fire emissions from building materials and contents in a typical home:” paraphrased*

(TABLE 3-1) Materials Used in Buildings and Their Common Fire Emissions

Material Most commonly released fire emissions

Polyurethane foam in insulation	HCN, CO, NO, NO <sub>2</sub> , NH <sub>3</sub> , HCl, H <sub>3</sub> PO <sub>4</sub> , PM, PAHs, VOCs, SVOC, TCP, TCEP, PCDDs, PCDFs, isocyanates
Polyisocyanurate foam in insulation	HCN, CO, NO, NO <sub>2</sub> , NH <sub>3</sub> , HCl, H <sub>3</sub> PO <sub>4</sub> , PM, PAHs, VOCs, SVOC, TCP, TCEP, PCDDs, PCDFs, isocyanates
Phenolic foam in insulation	SO <sub>2</sub> , CO, HCl, acrolein, formaldehyde, PM, PAHs, VOCs, SVOCs, TCP, TCEP, PCDDs, PCDFs
Extruded polystyrene in insulation	HF, HBr, CO, PM, PAHs, VOCs, SVOCs
Glass wool in insulation	HCN, CO, NO <sub>2</sub> , HCl, isocyanates
Oriented strand board (OSB)	HCN, CO, NO <sub>2</sub> , HCl, acrolein, formaldehyde, PM, PAHs, VOCs, SVOCs, isocyanates
Vinyl siding and/or polyvinyl chloride (PVC) windows	HCl, CO, PCDDs, PCDFs
Upholstery on furniture	HCN, CO, NO, NO <sub>2</sub> , NH <sub>3</sub> , HCl, H <sub>3</sub> PO <sub>4</sub> , PM, PAHs, VOCs, SVOC, TCP, TCEP, PCDDs, PCDFs, isocyanates
Vinyl carpet	HCl, CO, PCDDs, PCDFs
Polyamide carpet	HCN, CO, NO, NO <sub>2</sub> , NH <sub>3</sub> , PM, PAHs, VOCs, SVOCs, isocyanates
Electrical wiring insulation	HCl, CO, PCDD, PCDFs
Acrylic clothing	HCN, CO, NO, NO <sub>2</sub> , NH <sub>3</sub> , PM, PAHs, VOCs, SVOCs, isocyanates
Residential furniture	Benzene, toluene, formaldehyde, organophosphate flame retardants

NOTES: PAH = polycyclic aromatic hydrocarbon; TCP = tris(1-chloro-2-propyl) phosphate; TCEP = tris (2- chloroethyl) phosphate; PCDD = polychlorinated dibenzo-p-dioxin; PCDF = polychlorinated dibenzofuran.

Reference: The Chemistry of Fires at the Wildland Urban Interface, National Academies of Sciences, Engineering and Medicine 2022

5. *The image below summarizes the 20 most abundantly emitted VOCs by mass in a fire:paraphrased*

The following image summarizes the 20 most abundantly emitted VOCs by mass in a fire.

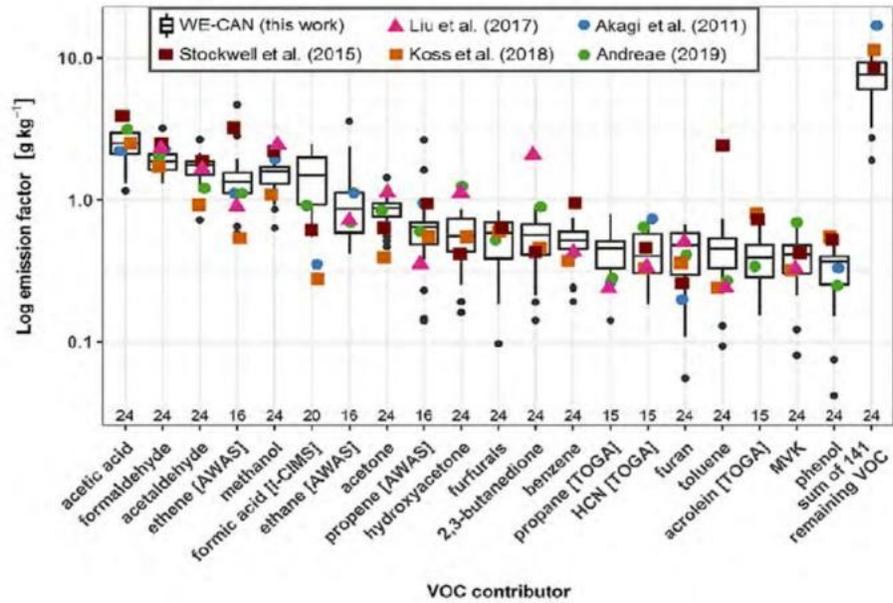


Image Credit: National Academies of Sciences: The Chemistry of Fires at the Wildland-Urban Interface (2022).



Attachment (B) - Redacted sample language from a recent proposal for testing in California

**RE: SMOKE TESTING PROPOSAL**

## 1. Introduction

This proposal outlines the methodology, scope, and objectives for conducting pre-remediation fire particulate contamination testing. The primary aim is to assess the combustion by-products produced by the fire and understand the composition and toxicity of the smoke. The inspection will consist of comprehensive post-fire testing and visual inspection. The findings from this test will provide the necessary information to determine if personal items are salvageable and offer remediation recommendations for those deemed salvageable. Industrial Hygienist, an ACAC Certified Fire and Smoke Inspector, will conduct inspections and Testing.

## 2. Objectives

During an inspection, the client can expect the following :

- Conduct a visual inspection of the property and its contents.

- Determine testing locations and conduct comprehensive testing as recommended.
- Conduct a visual inspection of attics and crawlspaces.
- Identify any additional remediation recommendations based on the visual inspection and comprehensive sampling results.

## 3. Recommended Testing for your property -

The following tests are currently being recommended for your property as part of this inspection:

- 12 Combustion by Product samples
- 1 CAM17 sample
- 2 Fire VOC samples
- 2 VOC samples
- 2 Aldehyde samples
- 2 Cyanide Air samples
- 4 Cyanide Bulk samples
- 3 Lithium samples

## 4. Scope of Work

- **Char/Soot/Ash (Combustion By-Product)**- Char and soot testing is a specialized analysis conducted to identify and evaluate residues left behind by combustion processes, such as fires or industrial emissions. These residues consist of particles that can include carbon based substances, such as char and soot. The testing provides crucial information about the source, nature, and potential impacts of these materials. The sample will be conducted using tape-lift samples, micro-vac samples, and/or bulk samples. Samples will be taken in various locations throughout the home to determine concentration levels in specific areas.

- **Fire Metals** - Metals testing in the context of fire and smoke investigations involves the identification and quantification of various metal contaminants that may be present in materials, residues, or the environment following a fire event. Some metals, such as lead, cadmium, mercury, and arsenic, are toxic and can pose significant health risks when inhaled, ingested, or absorbed through the skin. Metal testing is crucial for assessing exposure risks, environmental impact, and compliance with safety standards.
- **VOCs (Volatile Organic Compounds)**- Carbon-based chemicals that easily evaporate into the air at room temperature. During fires, building materials, furnishings, and other organic materials combust, releasing VOCs that can pose significant health and environmental risks. VOC testing in fire and smoke scenarios focuses on identifying and quantifying these compounds to assess air quality and potential hazards.
- **Formaldehyde**- A volatile organic compound (VOC) that is commonly released during the combustion of organic materials, including wood, plastics, fabrics, and resins. In fire and smoke testing, formaldehyde is assessed to evaluate its presence and concentration, as it is a toxic chemical with significant health risks, even at low levels of exposure.
- **Lithium**- To test an area for lithium, surface sampling may be conducted. Swabs or wipes are used to collect particles from surfaces where the fire was at its most intense. These samples are then sent off to a lab for analysis. Air sampling is another example of testing an area for lithium. This is done with air monitors that detect airborne particles or gases. Testing lithium after a fire is essential because lithium batteries can explode or reignite after the initial fire is extinguished. Additionally, the combustion of lithium-ion batteries can leave behind dangerous residues that pose health risks.
- **Cyanide**- After a fire, testing for cyanide involves air sampling, surface sampling, or bulk sampling. Cyanide is a hazardous byproduct of the combustion of certain materials, particularly synthetic or plastic-based materials. Cyanide can be released when organic compounds containing nitrogen, like certain plastics, burn at high temperatures.

## 5. Additional Testing Services and Pricing Available

The following section provides a comprehensive list of additional testing services and associated pricing available upon request. These tests are not necessarily recommended for your specific property and are included here for reference only. Further testing may be requested by the client or suggested by the inspector based on conditions observed during the inspection.

**\*\*Please note: This is a general menu of all testing services we offer. Some items listed may not apply to your situation and are not included in your inspection unless specifically discussed or requested.**

- **Lab Fees - (Char/Soot/Ash) - Standard 5 Day \$225.00 each**
- **Metals – CAM17 – 5-day TAT \$570.00 each**
- **Beryllium Air – 2 Wk TAT \$250.00 each**
- **Hex Chromium 6 – 10 day TAT \$265.00 each**
- **Lithium – 10-day TAT \$205.00 each**
- **Dioxins/Furans - 2-4 Wk TAT \$1530.00 each**

- VOCs - 5-day TAT \$300.00 each
- Fire VOC Panel - 5-day TAT \$720.00 each
- Formaldehyde- 5-day TAT \$300.00 each
- Aldehyde Panel – 10-day TAT \$300.00 each
- PAH Testing - 5-day TAT \$640.00 each
- Cyanide Air - 2-4 Wk TAT \$256.00 each
- Cyanide Testing - 10-day TAT \$150.00 each
- Chloride Anion- 10-day TAT \$135.00 each
- Pool Water for VOCs (4 samples) \$1,000.00 total
- Pool Water for Metals (2 samples) \$750.00 total

**\*All turnaround times (TAT) are Business Days**

## **6. Reporting**

Following the post-fire inspection and upon receipt and review of any testing results, xxxx will prepare a detailed report documenting the testing procedures, results, data analysis, and conclusions.

This report will provide recommendations for mitigating the personal items affected by combustion products in fires. The visual assessment and sampling will confirm whether the fire damage is pervasive and the scope of the fire damage, as well as determine the salvageability of personal items from the home.

Once smoke enters a building and remains suspended for days, the chemicals and particulates can be absorbed not only into porous building materials such as drywall, insulation, wooden furniture, cabinets, counters, flooring, but also into personal items that were located in the home during the fire.

The presence of soot, char, and ash within a structure or on its exterior is not only an indicator that smoke was present, but that many other contaminants that the smoke plume carries with it were present as well. Soot, char, and ash can have organic and inorganic materials such as chloride anions and cyanide salts. Smoke carries with it acidic particulates and airborne chemical contaminants that can cause damage by absorbing into building materials and electronics and corroding them. The absorption, adsorption, diffusion, infusion, and deposition of both particulates and toxic and corrosive gases are the reasons many items, including electronics and porous materials, may become contaminated and require remediation or proper disposal.

## **7. Conclusion**

Combustion by-product testing is crucial for evaluating the health risks associated with exposure to smoke, toxic gases, and particulate matter. By following a systematic testing methodology outlined in this proposal, we can gain valuable insights into the composition, toxicity, and dispersion characteristics of combustion by-products and develop effective mitigation strategies to enhance the safety of occupants.

The interpretation of results will be determined by both visual inspection and laboratory results. There are no regulations for combustion by-product air and surface samples for soot or char before remediation. Testing is conducted to assess the level of contamination throughout the house



and determine if additional structural materials need to be removed.

When a fire breaks out in a home, the smoke pressurizes inside the attic and makes its way through the house through various openings, absorbing into semi-porous and porous materials that will continue to off-gas over a long period of time. This can cause health issues if certain chemicals are present or if levels are reached. The results will determine the scope of the remediation required to restore the home to its pre-fire condition.

### **8. Cost**

The inspection will take 2-4 hours, and results will be received 5-10 business days from the date of receipt at the lab. Turn-around time may be delayed due to the influx of samples from the Fire. All travel and lab fees are included in the total cost.

#### **Total Cost for Testing Services \$xx,xxx.xx**

**\*Number of samples and types of testing can be adjusted to reflect what is needed on the day of inspection.**

**\*\* The inspection will include 12 Combustion by Product samples, 1 CAM17 sample, 3 Lithium samples, 2 Fire VOC samples, 2 VOC samples, 2 Aldehyde samples, 2 Cyanide Air samples, and 2 Cyanide Bulk samples. The fee includes all lab fees, travel expenses, certifications, and report preparation time. Additional testing services can be added either before or during the inspection.**

Please note that these results and interpretations are based upon the information gathered during this inspection. Changes in the conditions present at the time of testing, including previous weather patterns, activities in the home, maintenance activities, and the environmental atmosphere, may result in data different from that which was collected. This report is designed to serve as a quitclaim document, and not to be used to support or refute compliance with any local, state, or federal statutes, or be used in any related medical or legal claims.

There are no regulations on acceptable levels of char, soot, or ash contamination.

Diagnosis of a particular health effect should be left to a medical professional. Health effects in general are not well studied, and dosage, exposure, and sensitivity thresholds are not well understood and can potentially vary significantly depending on various conditions and individuals. Additionally, many ill effects of fire damage that have been observed recently are the result of modern building design and its inadequate ventilation, which can vary from room to room, let alone the entire building.



Due to the potential for rapid changes in smoke-related substances, the inspector and the inspection company cannot be held responsible for changes that occur after the inspection is performed. It is worth noting that the interpretation of smoke sampling is ambiguous because there is no established legal standard that sets specific limits for indoor concentrations of char, soot, and ash. Excluded from this smoke inspection are any portions of the building that are inaccessible, concealed from view, or cannot be reported on due to circumstances beyond the inspector's control. It is acknowledged that the level of char, soot, or ash particulates in or on any structure will determine the extent of the hazard arising from such.

It is understood and agreed that the inspection is visual. The report reflects the inspector's opinions based on visual observations and laboratory testing of the samples requested during the inspection. It is understood and agreed that the inspection and report are not intended or considered as a guarantee or warranty, expressed or implied, regarding the adequacy, performance, or condition of any inspected structure, item, or system.

It is understood and agreed that xxxx does not make any representation as to the advisability or inadvisability of the purchase, nor intends to reflect the value of the property.

Xxxx assumes no liability and shall not be liable for any mistakes, omissions, or errors of judgment beyond the cost of this report. This limitation of liability shall include and apply to all consequential damages, bodily injury, and property damage of any nature.