

# IS YOUR DECONTAMINATION PROCESS WORKING?

There has been growing concern among the fire and life safety community that repeated exposures to harmful contaminations is likely causing increased rates of cancer in fire fighters. This includes the fire scene and the subsequent post fire scene exposures to contamination clothing, tool, apparatus, and stations. The exposure to chemicals via permeation/penetration of combustion byproducts through or around personal protective equipment (PPE) or from the cross-transfer of contaminants is raising more and more a concern to the firefighting community.

Many materials found in modern buildings and furnishings are increasingly synthetic and can gengerate many toxic combusting byproducts when they burn. Toxic substances identified in the fire smoke include polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), hydrogen cyanide (HCN) to name a few. Many of these compounds are known as potential human carcinogens and have been measured on firefighters PPE. VOCs and HCN have also been measured off-gassing from turnout gear following use in live fires which can be transferred to the fire department vehicles and firehouse living spaces.

## **SLP** has made Fire House, PPE and CAB testing **EASY AS 1**-**2**-**E**

- Exposure to combusting byproducts of burning materials can contaminate your PPE, Equipment, Hoses and more...
- Test for the dangers you can't see.
- Some hazardous materials to be looked for are: Carbon Monoxide, Hydrogen Chloride, Hydrogen Cyanide, Formaldehyde Acetaldehyde, Nitrogen Dioxide, Carbon Dioxide, Benzene, VOCs, PAHs and Particulates. Plus many more...
- © SLP has the ability to test and search thousands of hazardous gases and materials.
- Be part of the "CCC" Clean Cab Concept.
- © Be positive, Be responsible, Be vigilant, Be a LEADER!
- © SLP CAB and PPE Testing Kit, Fire House Testing Kit and SCBA Testing Kit Affordable, Easy and Fast.
- NFPA 1851:2014



Keep Our Fire Fighters Safe Fight Fires NOT Cancer!

#### **Contamination Locations**



On Fireground



**Inside Apparatus** 



At Fire Station

#### **Contaminated Items**



**Turnout Gear** 



Fire Hose



Tools

### **Examples of Mitigation Methods**



On Scene Gross Decontamination



Laundering of Turnout Gear



Source Capture of Apparatus Diesel Exhaust

Figure 3 – White Paper Scope Related to Contamination Locations, Items, and Mitigation Methods