



INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS®

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The Honorable Frank Pallone
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515

Dear Chairman Pallone,

On behalf of the nation's 316,000 professional fire fighters and emergency medical responders, I am writing in response to your questions arising from the March 13, 2019 hearing of the Subcommittee on Environment and Climate Change entitled "Mismanaging Chemical Risks: EPA's Failure to Protect Workers."

1) Fire fighter exposure to PFAS-

- a. Do fire fighters currently receive guidance or training on how to minimize their exposure to PFAS in fire fighting foam?

Standardized training is typical within the fire service. Fire fighters receive generalized training on the importance of personal protection from carcinogens and toxins expected to be found at all scenes of emergency response. However, specific training related to PFAS exposure is not part of the standardized fire fighter training programs.

- b. When using foam in fire fighting, how do fire fighters determine the volume of foam to use? Are exposure concerns weighed in determining how much foam to use?

When flowing foam suppressants, fire fighters rely on a foam proportioner to determine the exact amount of concentrate mixed with water at the fire pump. Line proportioners are venturi devices that introduce foam concentrate into a flowing stream of water at a controlled, proportioning rate. The in-line proportioner (as known as an inductor or educator) is a simple, inexpensive method of proportioning the foam concentrate at a predetermined rate, generally at 3% or 6% of the total water/foam agent, delivered to extinguish or control a fire. Fire fighters limit the suppressant flow to the amount of fire suppressant agent necessary to establish a foam barrier over the entirety of the liquid fueling a fire. The foam acts as a barrier to deny the fire oxygen essential for combustion, thus extinguishing a fire, while simultaneously cooling the covered substance, which prevents re-ignition.

Aqueous film forming foam (AFFF) is not designed to be applied to burning solid materials.

- c. Should EPA or other federal agencies play a role in investigating fire fighter exposures and hazards to PFAS?

Federal oversight and investigation of fire fighter exposures to PFAS are timely and important. The EPA should examine workers' perspectives as it regulates toxic chemicals, including PFAS, but it should do so in conjunction with the National Institute for Occupational Safety and Health. NIOSH has extensive experience working with the fire service and is in the best position to leverage this experience, along with existing relationships, to improve the health and safety of fire fighters.

The Department of Defense, which employs approximately 10,000 federal fire fighters who are regularly exposed to AFFF, also has a responsibility to track worker exposure to PFAS, including fire fighter exposure.

2) Fire fighter exposure to asbestos-

- a. Are fire fighters always able to wear SCBA while fighting fire where asbestos may be a concern?

The SCBA is the primary apparatus used by fire fighters to protect their respiratory system in nearly all conditions where a fire is present. When asbestos is known, fire fighters must take proactive measures to protect their respiratory system from airborne asbestos during all phases of the operation on and about the scene, even when a fire is not present. Most SCBA facemasks are capable of being fitted with a high-efficiency particulate air (HEPA) filtering canister designed for capturing airborne particulates such as asbestos fibers, thereby protecting the fire fighters' respiratory system. Unfortunately, the presence of asbestos is not always known and SCBAs are often removed once the fire is suppressed and during decontamination activities, resulting in exposure. The major concern is that we are relying on PPE, the least effective control to protect fire fighters, rather than eliminating the toxic chemical. SCBAs are always available, but the length of time they are used are conditional to the levels of toxic gases in the air and not based on the presence of asbestos since that information is not always readily available.

- b. Does the advice in this data safety sheet address exposures to asbestos fibers on your equipment and clothing after fighting a fire where asbestos is present?

The current language contained on safety data sheets provides a good

foundation for the protection of fire fighters when a fire is present. However, the safety data sheet should be enhanced by including language directing fire fighters to perform on-scene decontamination procedures using copious amounts of soap and water before bagging equipment and clothing to be sent for specialized cleaning.

- c. Is a safety data sheet enough to protect fire fighters from asbestos risks?

No. Beyond the safety data sheet, the IAFF would welcome a compulsory requirement for building and property owners to notify local fire departments of the presence of asbestos. Notification should occur each time the building or property ownership or occupancy changes.

I hope you find the answers provided to be responsive to the questions asked. However, if there are additional questions or a need for further clarification, please do not hesitate to ask.

Again, thank you for your support of our nation's fire fighters and your leadership on this important issue.

Sincerely,

//Signed//

Patrick Morrison,
Assistant to the General
President for Health,
Safety, and Medicine