



# INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS®

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Senator Paul Pinsky, Chair  
Senate Educational, Health & Environmental Affairs Committee  
2 West, Miller Senate Office Building  
Annapolis, Maryland 21401

## **Testimony Concerning SB 420, an Act concerning Public Safety – Fire Fighting Foam and PFAS Chemicals**

### **Submitted to the Educational, Health & Environmental Affairs Committee**

#### **Position: Support with Amendments**

On behalf of the International Association of Fire Fighters and the 320,000 professional fire fighters and emergency medical personnel which comprise our organization, I hereby submit the following testimony for the record regarding SB 420.

We are pleased that the Committee is considering legislation to regulate fluorinated fire fighting foam by limiting its use in testing and training. Prohibiting the use of PFAS-laden fire fighting foams in testing and training exercises will help lower fire fighter exposure to known toxins, and SB 420 takes important steps in that direction.

Once thought to be safe, we now know PFAS to be toxic. The Environmental Protection Agency has determined there is no safe level of PFAS within the human body. A single exposure to PFAS through ingestion, inhalation or absorption can remain in the body for years even if there are no additional exposures. The half-life of these chemicals ranges from 2- 9 years, allowing the chemical to remain in the body and build up to concentrations that may cause various negative health effects as a result of exposure.

PFOS and PFOA (two classifications of PFAS chemicals) are corrosive and can cause damage to skin and eyes. Additionally, The International Agency for Research on Cancer (IARC) classifies PFOA as a Group 2B carcinogen. In studies with lab animals, when exposed to high levels of PFAS, exposure led to tumors on the body, particularly on the liver, pancreas and reproductive organs. Further studies on highly exposed populations have shown a not-insignificant risk of testicular, kidney, bladder or thyroid cancers. Other health concerns derived from an exposure to PFAS include but are not limited to; hormone toxicity, immunotoxicity, ulcerative colitis, thyroid and liver damage and high cholesterol levels.

Most regularly, humans are exposed to PFAS through the ingestion of contaminated water or food. However, through exposure from PFAS-laden fire fighting foam, fire fighters are repeatedly exposed to PFAS chemicals through inhalation and absorption through the skin.

Due in large part to their increased exposure to toxic chemicals, including PFAS, cancer is the largest health-related issue facing the fire fighting profession. Fire fighters dying from occupational-related cancers now account for 70 percent of the line-of-duty deaths each year. The State of Maryland recognized the threat fire fighters face from cancer when it, in 2017, passed a workers' compensation benefit for fire fighters that presumed leukemia or prostate, rectal, throat, multiple myeloma, non-Hodgkin's lymphoma, brain, testicular or breast cancer were occupationally related. In 2019, this law was expanded to include bladder, kidney and renal cell cancers, cancers which have been linked to PFAS exposure in several health studies.

SB 420 properly recognizes the cancer threat facing fire fighters and, by limiting their exposure to fluorinated foams, works to reduce this risk.

SB 420 is also consistent with recent federal actions to limit fire fighters' exposure to fluorinated foams. The 2019 National Defense Authorization Act banned the Department of Defense from using PFAS-laden fire fighting foams in training, due in large part to the exposure faced by federal fire fighters at military bases.

While SB 420 takes important steps to reduce fire fighters' exposure to PFAS, we believe two amendments would strengthen its protections for Maryland's fire fighters. First, we recommend striking the clause "and designed to be fully functional in class B fire fighting foam formulations" from section (C) (1). This clause may limit the types of foams regulated under the Act and dilutes the intention of the bill.

We understand that a similar bill in the House of Delegates, HB 619, contains a provision that limits the Act's application to the use of foams at the Baltimore – Washington International (BWI) Thurgood Marshall Airport. Airport fire fighters are regularly exposed to fluorinated foams. Safe alternative foams currently exist and are routinely utilized at several European airports without any degradation of fire suppression capabilities or effectiveness. Further, the federal government recently allowed airports to voluntarily opt out of using PFAS foams via the Federal Aviation Administration Reauthorization Act of 2018. Even if BWI chooses to continue using fluorinated foams in operations, there is no valid reason to use them in testing or training. We would oppose such a provision being added to SB 420.

Thank you for your attention to this critical piece of legislation and consideration of our testimony. By prohibiting the use of fluorinated foams during testing and training, this legislation will help reduce fire fighters' exposure to PFAS, lowering the overall toxic load and reducing their risk of cancer.

Sincerely,

A handwritten signature in blue ink that reads "Harold A. Schaitberger". The signature is fluid and cursive, with the first name "Harold" being the most prominent part.

Harold A. Schaitberger  
General President

Sources Used:

1. United States Agency for Toxic Substances and Disease Registry. Per- and Polyfluoroalkyl Substances (PFAS) and your health- What are the health effects? August 2018. <https://www.atsdr.cdc.gov/pfas/health-effects.html>.
2. United States Environmental Protection Agency. Emerging Contaminants Fact Sheet - Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA). November 2017. [https://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet\\_contaminants\\_pfos\\_pfoa\\_11-20-17\\_508\\_0.pdf](https://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf).
3. American Cancer Society. Teflon and Perfluorooctanoic Acid. January 2016. <https://www.cancer.org/cancer/cancer-causes/teflon-and-perfluorooctanoic-acid-pfoa.html>.
4. Steenland K, Fletcher T, Savitz DA. Epidemiological evidence on the health effects of perfluorooctanoic acid. *Environmental Health Perspectives*. 2010;118(8):1100-1108.