



**Maurice Sampson, Eastern Pennsylvania Director
Prepared Comments for the
House Veterans Affairs & Emergency Preparedness Committee
Subcommittee on Security & Emergency Response Readiness
Thursday, October 26, 1 p.m., Warminster Township Administration Building**

Good afternoon, Chair Solomon, Subcommittee Chair Evans-Hill, and other members of the House Veteran Affairs and Emergency Preparedness Committee. My name is Maurice Sampson. I am the Eastern Pennsylvania Director for Clean Water Action. Thank you for holding this meeting and for the opportunity to testify on the important topic of battling cancer and other occupational diseases in firefighting.

Clean Water Action is a national non-profit environmental organization with roughly 80,000 members across Pennsylvania. Since our founding during the campaign to pass the landmark Clean Water Act in 1972, we have worked to win strong health and environmental protections by bringing issue expertise, solution-oriented thinking and people power to the table.

Fire fighters face occupational hazards on a daily basis as they respond to calls to control and extinguish fires that threaten life and property, as well as to rescue persons from confinement or dangerous situations. But the hazards they face extend beyond the nature of these calls and to the equipment they use in response to them. That's because this equipment often contains perfluoroalkyl and polyfluoroalkyl substances better know by their acronym PFAS.

PFAS are a suite of thousands of man-made chemicals that are used in a variety of products that are resistant to heat, water, grease and oil. They're known as "forever chemicals" because they do not readily breakdown and persist in the environment as well as the human body. A recent study released by the US Agency for Toxic Substances & Disease Registry found that PFAS were more harmful than previously thought and that exposure to small amounts of the toxic chemicals can cause many serious health problems in children and adults. Potential health effects identified in this study include liver damage, increases in cholesterol, increased risk of thyroid disease, asthma, and infertility, decreased response to vaccines, riskier pregnancies, and decreases in birth weight. A federal report by an independent Science Advisory Board, acknowledged in May of 2006 that the compounds are also a "likely" cause of cancer.

The Pennsylvania Department of Environmental Protection has identified 39 sites across 19 counties that have been contaminated by PFAS. The biggest cause of contamination among these sites has been from the use of PFAS-based class B firefighting foams also known as aqueous film forming foam.

The Bucks and Montgomery County communities of Horsham, Warminster, and Warrington are ground zero in Pennsylvania for a PFAS contamination due to three area U.S. Department of Defense facilities- the Horsham Air Guard station, the Willow Grove Naval Air station Joint Reserve Base, and the Naval Air Warfare Center. These facilities contaminated area drinking water sources for decades through the use of PFAS-based class B firefighting foams during regular fire-training exercises. The result was some of the highest recorded PFAS levels in drinking water in the country according to the U.S. Environmental Protection Agency.

PFAS-based class B firefighting foams have been used since the 1970s for vapor suppression, firefighting and firefighting training at military bases, airports, storage tanks, petroleum/chemical operations, rail transportation and some power generating facilities. PFAS chemicals are used in these foam products because of their ability to produce a fast-spreading foam.

For more than a decade however, foam manufacturers have been working on possible replacements. There are now dozens of PFAS-free firefighting foams from multiple manufactures available on the market. Extensive testing by the Fire Protection Research Foundation, the US Department of Defense, and the petroleum industry research group LASTFIRE has shown that many of these new products are considered good for extinguishing Class B fires under the right conditions. Several countries have already put some of them to use for jet fuel blazes at major international airports, including Australia's Sydney Airport; Dubai International in the United Arab Emirates; the United Kingdom's London Heathrow and Gatwick, and France's-Charles De Gaulle. Fluorine-free foams are also being used by oil and chemical manufacturers, including BP, ExxonMobil, Statoil, BASF, AkzoNobel, Pfizer and Lilly.

In addition, the U.S. Department of Defense stopped purchasing PFAS-containing firefighting foam this year and will phase it out entirely in 2024. The Federal Aviation Administration also recently authorized airports to use firefighting foam that does not contain PFAS.

This summer Pennsylvania Attorney General Henry filed a complaint in Pennsylvania Commonwealth Court against DuPont, Chemours, and Corteva seeking restitution, civil penalties, and other costs to be determined for causing widespread environmental damages due to the PFAS contained in products such as aqueous film forming foam.

States across the country are taking action beyond legal pursuits by passing legislation and regulation to ban the use of PFAS based firefighting foam, and/or creating take back programs for already purchased foam, including California, Colorado, Connecticut, Hawaii, Illinois, Maine, Maryland, Minnesota, New Hampshire, New York, Vermont and Washington.

It's clear that every time PFAS-based class B firefighting foams are used not only are our fire fighters placed in harm's way but so are the very communities they're trying to protect. Simply limiting or restricting its use doesn't eliminate that risk. That's why Clean Water Action recommends that the General Assembly pursue a policy that follows other states in banning the use of PFSA laden firefighting foam.

Yet the threat to fire fighters doesn't end here. PFAS is omni present in waterproof clothing, and firefighters are cloak from head to toe. They also face additional risk just by gearing up.

A study led by Graham Peaslee, professor of physics at the University of Notre Dame found that fabric used for firefighter turnout gear tested positive for the presence of PFAS. Peaslee's team tested more than 30 samples of used and unused personal protective equipment from six specialty textile manufacturers in the United States and found high concentrations of fluorine on the moisture barrier and outer shell. The study found that some of these chemicals have the ability to migrate off treated surfaces and materials, meaning the PFAS in the moisture barrier and outer shell could potentially contaminate the thermal layer and come in direct contact with skin. So, if they touch the gear, it gets on their hands, and if they go fight a fire and they put the gear on and take it off and then go eat and don't wash hands, it could transfer hand to mouth, and if they're sweating and have sweat pores some of these chemicals could probably come off on the thermal layer and get into the skin. And when Firefighter go home—they risk contaminating their families

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Clean Water Action further recommends the General Assembly press manufacturers to remove PFAS from turnout gear and in the short term at least require turnout gear containing PFAS to contain warning labels.

We'd like to thank the committee again for their time today and their interest in this important issue. We'd also like to thank our fellow testifiers for their service. Everyday fire fighters across the Commonwealth put their lives on the line to protect us and our communities. We should be honoring that service by doing everything under our control to protect them.

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