

PFOS/PFOA FACT SHEET

What is PFOS/PFOA?

Perfluorooctanoic Acid and Perfluorooctane Sulfonate are Perfluorinated Compounds, or PFCs, which are a group of manmade chemicals that have been used in many industrial and consumer products such as nonstick cookware, stain-resistant fabric and carpet, food packaging and firefighting materials. They have been manufactured for products that resist heat, stain, and grease since the early 1950s. PFOS/PFOA is commonly found in the environment, and can be absorbed by humans through air, food, and water.

Why is PFOS/PFOA in the news?

In 2009, the EPA issued a provisional health advisory for PFOS/PFOA in drinking water. In 2016, The EPA established a lifetime drinking water health advisory level for PFOS/PFOA of a combined 70 parts per trillion. PFOS/PFOA are considered to be emerging contaminants because they are currently unregulated by the EPA and scientists are still studying the effects of these substances on human health and the environment. These substances are considered to be bio-persistent and break down very slowly in the environment.

How does this involve the military?

The firefighting industry, to include the DoD, uses a substance known as Aqueous Film Forming Foam. AFFF that contains some form of PFOS/PFOA is considered to be the most effective form of extinguishing petroleum based fires. The Air Force is conducting a nation-wide assessment across Active, Reserve, Guard and closed installations to identify areas where AFFF containing PFOS/PFOA may have been released due to mission-related activities.

How does this affect Joe Foss Field and Sioux Falls, SD?

The city of Sioux Falls began monitoring for PFOS/PFOA as part of a 2011/2012 survey. Drinking water samples were collected and results showed very low levels of PFOS/PFOA. In 2013, additional testing was conducted to identify potential sources of these substances. The city discontinued the use of a number of wells on Joe Foss Field and airport property where PFOS/PFOA was detected. The city has detected PFOS/PFOA in the treated drinking water a total of three times; all of which were well below the Lifetime Health Advisory level of 70ppt. The city continues to monitor for this unregulated substance by testing well water, treated water, and the water it purchases from Lewis and Clark water on a monthly basis.

What are we doing about it?

In December of 2012, the Air Force directed all fire departments to cease operational testing involving AFFF, and begin taking precautionary measures to limit exposure and ensure containment of AFFF. In the fall of 2016, the South Dakota Air National Guard transitioned all fire trucks from the legacy AFFF to the new C6 short carbon chain AFFF formula. This new formula is considered to be safer and more environmentally friendly than the legacy long carbon chain formulas. All fire trucks have been retrofitted for future foam testing to verify proper agent proportioning without discharging any AFFF. As of August 2018, the South Dakota Air National Guard also swapped out all the legacy AFFF concentrate in hangar suppression systems with the new C6 AFFF formula.

The Air Force is following EPA's systematic process known as CERCLA, or the Comprehensive Environmental Response, Compensation, and Liability Act to identify and respond to PFOS/PFOA releases. At this point, we have confirmed the presence of PFOS/PFOA at locations on base through an Initial Site Inspection. The National Guard Bureau has awarded an Expanded Site Inspection contract to begin in October of 2018. The Expanded Site Inspection will continue to test areas on base and will likely include off base testing as well. This will help us to understand the extent of release and identify any pathways that exist to drinking water sources. The CERCLA process is a collaborative effort and includes input from the City of Sioux Falls, the state Department of Environment and Natural Resources, and the National Guard Bureau.

Public and media inquiries regarding PFOS/PFOA at Joe Foss Field, should contact the Wing Executive Support Officer, Captain Jessica Bak at 988-5644.