

PERFLUOROOCTANOIC ACID (PFOA) and PERFLUOROOCTANE SULFONATE (PFOS)

PFOA AND PFOS: WHAT THEY ARE

Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) are part of a larger group of chemicals referred to as perfluorinated chemicals (PFCs). PFCs are not found naturally in the environment. PFOA and PFOS have been the most extensively produced and studied of these chemicals. They have been used to make cookware, carpets, clothing, fabrics for furniture, paper packaging for food, and other materials that are resistant to water, grease, or stains. They are also used in firefighting foams and in a number of industrial processes. DEP is working closely with public water systems and local governments across the Commonwealth to address these emerging contaminants. DEP will take immediate steps to mitigate the impact on public health if combined concentrations of PFOA and PFOS exceed the HA of 70ppt.

IMPACTS

PFOA and PFOS are widespread because they are persistent in the environment and do not readily break down when exposed to air, water, or sunlight. They can be found in air, soil, and water (both groundwater and surface water). PFOA and PFOS are also very persistent in the human body, and exposures to these chemicals are known to have a number of adverse effects in laboratory animals and humans. More information on the health impacts of these chemicals can be found by visiting the Agency for Toxic Substance and Disease Registry, the US EPA, and the PA Department of Health.

PFOA & PFOS DRINKING WATER HEALTH ADVISORIES IN PENNSYLVANIA

On May 19, 2016, the United States Environmental Protection Agency (EPA) established health advisories for PFOA and PFOS.

Health advisories (HA) provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination. EPA's health advisory level for PFOA and PFOS offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water.

To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, EPA has established the health advisory levels at 70 parts per trillion (ppt). When both PFOA and PFOS are found in drinking water, the combined concentrations of PFOA and PFOS should not exceed the 70 ppt HA.

At this time, DEP does not intend to deviate from the health advisories EPA has established for PFOA and PFOS.

DEP PROGRAM INVOLVEMENT

DEP is committed to devoting the appropriate programs to sites as needed. The Safe Drinking Water, Clean Water, and Hazardous Sites Cleanup programs will coordinate efforts to protect the residents of the Commonwealth.

SAFE DRINKING WATER

The Safe Drinking Water Program is charged with managing the federally delegated drinking water program and implements both the federal and state Safe Drinking Water Act and associated regulations. This program oversees permits, compliance, and operations as they pertain to public water systems across the Commonwealth, and works to take wells offline when concentrations of PFCs are found to exceed the HA.

CLEAN WATER PROGRAM

The Clean Water Program is responsible for protecting and preserving the waters of the Commonwealth. This program primarily focuses on requiring, and ensuring the effectiveness of, treatment systems that discharge to surface and ground water.

HAZARDOUS SITES CLEANUP PROGRAM (HSCA)

The Hazardous Sites Cleanup Program administers the Hazardous Sites Cleanup Act of 1988 (HSCA), which provides DEP with the funding and authority to conduct cleanup actions and investigations to determine the extent of contamination and search for a solution. It is through this program that private wells in areas where concentrations of PFCs have exceeded the HA are sampled and analyzed, and alternative drinking water supplies provided when those private wells have contained concentrations of PFCs that exceed the HA.

For more information, please visit <http://www.dep.pa.gov/pfcs>