# Public Drinking Water Notice Health Advisory

Under the Safe Drinking Water Act, the Environmental Office monitors the quality of water removed from each of the supply wells used to provide your water. We sample each well routinely for substances for which the United States Environmental Protection Agency ("EPA") or Pennsylvania Department of Environmental Protection ("DEP") have set primary or secondary drinking water standards.

Recently, samples were taken in association with ground water monitoring onsite and in other nearby public water supplies that indicated the probable presence of these chemicals in the base public water system drinking water wells.

On August 22, 2014, we received notice that samples collected from bldg. 204, Horsham Air Guard Station, exceeded the federal provisional health advisory for Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic acid (PFOA). The results for PFOS were found to be 11.9 micrograms per liter (ug/l) and PFOA to be 3.28 ug/l. Research is continuing on these unregulated contaminants, however, EPA established a provisional HAL for PFOS at 0.2 micrograms per liter (µg/l) and PFOA at 0.4 micrograms per liter (µg/l). One microgram per liter is equivalent to one part per billion ("ppb").

After consulting with DEP, Horsham Air Guard station decided to take action by shutting off all water (drinking) fountains. Food Service personnel will use alternate means of food preparation. Additionally, bottled water will be supplied to personnel assigned to the 111th Attack Wing. Horsham Air Guard Station tenants will coordinate the supply of bottled water through their respective agency. We will continue to work with DEP and EPA in monitoring the situation and notify personnel of any changes.

You can visit EPA's website for more information about provisional HALs at the following website: http://water.epa.gov/drink/standards/hascience.cfm#pfoa.

Point of Contact for Horsham Air Guard Station: Lt Col Jacqueline Siciliano, 1051 Fairchild Street, Horsham Air Guard Station, PA 19044-5203, COMM: 215-323-8387.

#### What happened?

Groundwater contamination has been identified on and in the area of Willow Grove Naval Air Station Joint Reserve Base (NAS/JRB). Other wells have been impacted and also exceed the provisional health advisory levels for PFOS and PFOA. It is possible that the presence of PFOS and PFOA in the groundwater is related to historic activities on the Base. The Impacts on groundwater associated with Base operations is not a new condition and has been investigated in in the past and is in the process of being addressed; however the presence of PFOS and PFOA in drinking water on the Base has only very recently been identified.

## What are PFOS and PFOA?

PFOS and PFOA are organic chemicals used as stain, water, oil, and grease repellents for both water soluble and fat soluble materials. PFOS and PFOA were first used in the 1950s. They have been used in a variety of products such as the fabric of upholstered furniture, carpets, nonstick cookware, floor wax, and the lining of microwave popcorn bags. These chemicals are widely distributed in the environment and have been found in the blood of humans, wildlife, and fish.

## Are there adverse health effects with exposure to PFOS and PFOA?

Studies of broad negative impact on humans are inconclusive. Given its common use, the Centers for Disease Control and Prevention, estimates that perfluorinated chemicals, like PFOS and PFOA, are present in the blood of 98% of the United States population.

A few studies of pregnant women found higher levels of PFOA and PFOS to be associated with slightly lower weight babies. The most consistent findings from studies are elevated blood cholesterol levels among exposed populations.

In laboratory animals, studies indicate that PFOA and PFOS can cause developmental, reproductive, and other adverse effects, including tumors. There is no conclusive evidence that PFOA or PFOS causes cancer in humans. Some increases in prostate and bladder cancer have been seen in workers with significant exposure through their job but the actual cause of the cancers is unknown. Based upon the differences between animals and humans, scientists have not determined a direct link between the chemicals and cancer in humans.

### How are people exposed to PFOS and PFOA?

Exposure comes from many different sources. Both PFOS and PFOA have been found widely in the environment, including in the Arctic and Antarctic. People may be exposed to the chemicals via household products and in drinking water supplies, private wells and fish tissue, among other sources. PFOS and PFOA can also enter the water supply from industrial facilities, firefighting foam, run off from landfills, wastewater treatment and other sources. Neither chemical is biodegradable. These chemicals remain in the environment for a long time and also appear to remain in people's and animal's bodies (e.g., blood, liver, and kidney) for a long time.

#### What is being done?

On August 25, 2014, the Base Civil Engineer started to shut down all water fountains on the installation. The 111th Mission Support Group Contracting Office is establishing an emergency contract to purchase bottled water, which will be supplied to personnel assigned to the 111th Attack Wing. Tenant organizations on Horsham Air Guard Station have been notified of this situation.

Tenant organizations will coordinate through their respective agency for the supply of bottled water. Additional testing is being conducted. The Environmental Office will continue to work with DEP and EPA to monitor the situation and keep station personnel informed of any updates or additional guidance

#### What should you do?

You should not drink from any water source on Horsham Air Guard Station. If you have specific health concerns, you should consult a health professional, such as your family doctor. Please also share this information with the people in your facilities that drink this water, especially those who may not have received this notice directly. One way to do so is to post this notice in a public place, another is to distribute copies by hand or mail.

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This notice is being sent to you by Lt Col Jacqueline Siciliano, Environmental Manager, Horsham Air Guard Station. For more information, please contact Lt Col Jacqueline Siciliano at 215-323-8387.

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