NCBC Gulfport, Drinking Water Investigation Fact Sheet

PFAS are "emerging" contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The EPA is currently studying PFAS to determine if regulation is needed. In May 2016, the EPA released lifetime health advisory levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Health advisory levels are not regulatory standards. They are health-based concentrations which the EPA states offer a margin of protection for all Americans throughout their lives from adverse health effects resulting from exposure to PFOS and PFOA in drinking water. The EPA health advisory level for lifetime exposure is 70 parts per trillion (ppt) for PFOS and 70 ppt for PFOA. When both PFOS and PFOA are found in drinking water, the combined concentrations should not exceed 70 ppt.

NAVY POLICY

Until a decision on regulating PFAS is made, the Navy has proactively developed a policy to ensure drinking water has not been impacted by PFOS and/or PFOA near installations where there has been a nearby known or suspected release of PFAS to the environment. Navy policy is to sample drinking water sources 1 mile downgradient (in the direction of groundwater flow) from a known or suspected release of PFAS. Sampling in this area will allow the Navy to identify if our neighbors are exposed to PFOS and/or PFOA in drinking water above the EPA health advisory levels.

Because AFFF was previously used and released at NCBC Gulfport and PFOS/PFOA were detected in the on-base groundwater, it is possible that these compounds have migrated off-base with the flow of groundwater. Therefore, our first priority is to determine if PFOS and/or PFOA are present in groundwater when used for drinking water by nearby residents and to take appropriate action. Once current exposures from drinking water have been addressed, the Navy will complete an on-base investigation to determine the full scope of these compounds on the installation and determine if PFAS have migrated off-base.

For more information, visit: www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

If you have specific questions, contact the Navy Public Affairs office at: 228-871-2699 or ncbc_gpt_pao@navy.mil

HEALTH INFORMATION

Exposure to PFOS and PFOA appears to be global. Studies have found both compounds in the blood samples of the general population. Studies on exposed populations indicate that PFOS and/or PFOA may cause elevated cholesterol levels and possibly low infant birth weight. In studies conducted using laboratory animals, effects on developmental, neurological, immune, thyroid, and liver function were observed. Evidence linking PFOS and/or PFOA with cancer is inconclusive.

Health effects from exposure to low levels of PFAS are not well known and studies are continuing. At this time, it is not possible to link exposures to PFOS and/or PFOA to a person's individual health issues. Blood tests are available to measure these chemicals, but they are not routinely done because the results can be inconclusive and test results do not predict health effects. Long-term exposure effects are still being investigated by the EPA.

Based on what is known and still unknown about PFOS and PFOA, it is recommended people not drink or cook with water that contains these compounds above the EPA's health based levels.

ACTIONS BASED ON RESULTS

The preliminary results from the off-base drinking water sampling are expected within approximately 30 days after collecting the samples. The Navy will keep the results confidential to the extent permitted by law. We will notify the property owners of their personal drinking water results and follow-up actions if needed.

The Navy will provide an alternate water source, likely bottled water, for drinking and cooking to any resident in the sampling area whose water contains PFOS and/or PFOA above health advisory levels. The Navy will continue to provide the alternate water source until a permanent solution can be implemented.



Naval Construction Battalion Center Gulfport, Mississippi

The Navy is requesting permission to sample all drinking water wells within a designated area near Naval Construction Battalion Center (NCBC) Gulfport Site 6 (former firefighting training area). The Navy has developed a protective policy to address past releases of per- and poly-fluoroalkyl substances, commonly known as PFAS. These substances may be present in the soil and/or groundwater at Navy sites as a result of historical firefighting activities using aqueous film forming foam (AFFF), including response to crashes, equipment testing, and training. If PFAS are in the groundwater, there is the potential for these substances to also be present in private drinking water wells in the designated area because of their proximity and location relative to NCBC Gulfport Site 6 (Figure 1).

In the review of available records, the Navy has identified several drinking water wells in the designated sampling area (Figure 2). We are seeking the public's assistance to verify the sources of drinking water in the sampling area and to identify any additional drinking water wells in this area.

PFAS have been detected in the groundwater at NCBC sampling in coordination with partners such as U.S. Gulfport Site 6. However, the Navy has not completed a Environmental Protection Agency (EPA) Region 4, full on-base investigation to determine the extent to Mississippi State Department of Health, and Mississippi which these chemicals are present in the groundwater. Department of Environmental Quality. Testing has shown that the drinking water at NCBC does BACKGROUND not contain PFAS; however, out of a concern for our neighbors and a desire to be proactive, the Navy is PFAS are manufactured chemicals that have been used addressing potential exposure to certain PFAS since the 1950s in many household and industrial compounds in drinking water before continuing with products because of their stain- and water-repellant the groundwater investigation at NCBC Gulfport. properties. PFAS are now present virtually everywhere

There is no legal requirement to conduct this drinking water testing. It is a voluntary measure because water quality for our off-base neighbors is a priority for the Navy. The Navy is performing this drinking water

> If your preliminary results show that your drinking water contains PFOS and/or PFOA above the EPA health advisory, then the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.

March 2017

Site 6 (Former Firefighting Training Area)

Drinking Water Investigation

March 2017

DRINKING WATER PROVIDED BY THE CITY OF LONG BEACH WATER DEPARTMENT HAS BEEN TESTED AND PFOS AND PFOA WERE NOT DETECTED. SAMPLING OF PROPERTIES RECEIVING WATER SUPPLIED BY THE CITY OF LONG BEACH WATER DEPARTMENT IS NOT NECESSARY.



in the world because of the large amounts that have been manufactured and used. Once these compounds are released to the environment, they break down very slowly.

Figure 2



Legend

- Downgradient Area
- Parcel
- Vacant/Timberland/Other Use Parcel (no drinking water well identified)
- Proposed Sample Location (well suspected)
- Proposed Sample Location (well suspected);
 - parcel also served by municipal drinking water
- Parcel Serviced by Municipal Drinking Water Public Water Supply Well
 - Surficial Groundwater Flow Direction



March 2017

Site Boundary (suspected source)