MCOLF Camp Davis PFAS Drinking Water Sampling

March 2021

PFAS are chemicals of emerging concern, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. USEPA's lifetime health advisories are non-enforceable and non-regulatory. They provide technical information to states and other public health officials on health effects, analytical methodologies, and treatment technologies.

There is no legal requirement to conduct this drinking water testing. We are conducting this voluntary testing because it is important that our neighbors are not drinking water with PFOA and/or PFOS concentrations above the USEPA lifetime health advisory as a result of known or suspected releases of PFAS from MCB Camp Lejeune. We are conducting the sampling in collaboration with partners such as USEPA Region 4, the North Carolina Department of Environmental Quality, the North Carolina Department of Health and Human Services, and the Onslow County Health Department.

PFAS

PFAS are man-made chemicals that have been used since the 1950s in many households and industrial products because of their stain- and water-repellent properties. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used. Once these compounds are released, they break down very slowly.

The USEPA is currently studying PFAS to determine if national regulation is needed. The USEPA's lifetime health advisory provides Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS in drinking water. The USEPA's health advisory for lifetime exposure is 70 parts per trillion (ppt) for PFOA and 70 ppt for PFOS. When both PFOA and PFOS are found in drinking water, the combined concentrations should not exceed 70 ppt.

DEPARTMENT OF THE NAVY POLICY

Until a decision for regulating PFAS is made, the Department of the Navy has proactively developed a policy to conduct investigations at installations where there has been a known or suspected release of PFAS to the environment. Our first priority with these investigations is to ensure people are not being exposed to PFOA and/or PFOS in their drinking water at concentrations exceeding the USEPA's lifetime health advisory as a result of a Navy/Marine Corps PFAS release. As a result of PFOA and PFOS detections in the shallow groundwater at MCOLF Camp Davis South, a sampling area has been established 1 mile from the on-base detection, in the direction that groundwater has been identified to flow from the base. To ensure protectiveness, we offer sampling to all residents whose drinking water is supplied by groundwater wells in the designated area. Once any potential exposure from drinking water has been addressed, we will then complete the full investigation to determine the extent of these compounds on our installations.

HEALTH INFORMATION

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

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 exposure to PFOA and/or PFOS 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 USEPA.

Based on what is known and still unknown about PFOA and PFOS, USEPA recommends people do not drink or cook with water that contains these compounds above the USEPA's lifetime health advisory.

For updates about
this sampling, visit:
https://go.usa.gov/xAFx5
or scan the QR code →

If you have specific questions, contact:
866-MCDAVIS (866-623-2847)
or CampDavisPFAS@usmc.mil



ACTIONS BASED ON RESULTS

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

We will provide an alternate water source, such as bottled water, for drinking and cooking to any resident in the designated sampling area whose drinking water well contains PFOA and/or PFOS above the USEPA's lifetime health advisory. We will continue to provide the alternate water until a permanent solution is implemented.

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Marine Corps Outlying Landing Field Camp Davis Marine Corps Base Camp Lejeune | Holly Ridge, North Carolina PFAS Drinking Water Sampling



March 2021

We are requesting permission to sample water obtained from drinking water wells within a designated area near the Marine Corps Outlying Landing Field (MCOLF) Camp Davis area of Marine Corps Base (MCB)

Camp Lejeune for certain per- and polyfluoroalkyl substances, commonly known as PFAS.

PFAS are a family of thousands of different chemicals which have been widely used in industrial and consumer products since the 1950s. The Department of the Navy developed a proactive policy to address past releases of PFAS at installations nationwide, as several PFAS are now of emerging public concern. The United States Environmental Protection Agency (USEPA) has issued a lifetime health advisory for two commonly used and studied PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

The most common activity associated with the historical release of PFOA, PFOS, and other PFAS to the environment at MCB Camp Lejeune (Figure 1) is the use of firefighting foam (specifically aqueous film-forming foam, or AFFF) for testing, training, firefighting, and other life-saving emergency responses. Because of this

historical use, PFOA, PFOS, and other PFAS are present in the soil and/or groundwater on-base, and they may also be present in nearby off-base drinking water wells located in the direction that groundwater flows away from the Base.

MCB Camp Lejeune first investigated some on-base areas with known AFFF releases for PFAS in 2017. In 2019, a comprehensive Basewide Preliminary Assessment (PA) was completed to identify all potential historical releases of PFAS to the environment. The additional potential release areas were then investigated during the Basewide Site Inspection (SI), which began in 2020. To date, over 200 groundwater samples have been collected on-base to confirm if PFAS were historically released to the environment.



Figure 1 – MCB Camp Lejeune

Based on the SI results received to date, one area at MCB Camp Lejeune – MCOLF Camp Davis South – was identified with the potential for PFAS to migrate off-base and impact nearby drinking water wells (**Figure 2**). Due to limited information on groundwater flow direction in this area, the designated sampling area includes all private properties within 1 mile of MCOLF Camp Davis.

Records indicate that drinking water from the Onslow Water and Sewer Authority is available for the majority of properties within the designated sampling area; however, some residents within the sampling area may use a private well for their drinking water. We are asking to sample only water from private drinking water wells in the designated area.

To be protective, the Department of the Navy will provide bottled water for drinking and cooking to any resident in the designated sampling area whose well contains drinking water with PFOA and/or PFOS above the USEPA lifetime health advisory. The Department of the Navy will provide an alternate water source, such as bottled water, until a long-term solution is implemented.

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Figure 2 – Designated Sampling Area

