

Naval Auxiliary Landing Field Fentress Chesapeake, Virginia Ongoing PFAS Investigation and Response Fact Sheet

December 2019

The Navy has requested permission to sample drinking water obtained from private wells within a designated area near Naval Auxiliary Landing (NALF) Fentress 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 Navy developed a proactive policy to address past releases of PFAS at installations nationwide, as several PFAS are now of emerging public health concern. The U.S. Environmental Protection Agency (EPA) has issued a lifetime health advisory for two commonly used and studied PFAS, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).

The most common Navy activity that could have resulted in the historical release of PFOA, PFOS, and other PFAS to the environment is the use of firefighting foam (specifically aqueous film forming foam or AFFF) for testing, training, firefighting, and other life-saving emergency responses. PFAS compounds may be present in the soil and/or groundwater at NALF Fentress (Figure 1) as a result of historical activities using AFFF. Because of this historical use, there is potential for PFOA, PFOS, and other PFAS to be in the groundwater, soil, sediment, and surface water on base, and it may also be present in nearby private drinking water wells that are located in the direction that the groundwater flows away from the base within the designated sampling areas (Figure 2).

The Navy has offered to sample private drinking water wells in the designated areas, not drinking water provided by the City of Chesapeake. The drinking water provided by the City of Chesapeake has been tested, and PFOA and PFOS were not detected. The Navy and City of Chesapeake have set up a water station at **1564 Mount Pleasant Road, Chesapeake, Virginia 23322** (across the street from Butts Road Intermediate School), where other concerned property owners can take containers to fill with potable drinking water treated by the City of Chesapeake.

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

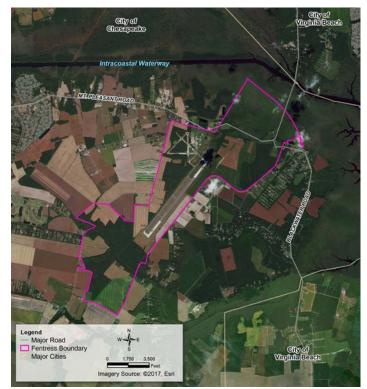


Figure 1 – NALF Fentress

on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

The Navy established a proactive policy to ensure the communities near our installations are not exposed to drinking water impacted from a known or likely Navy release of PFOA and/or PFOS above the EPA's lifetime health advisory level. Following this policy, the Navy identified potential PFAS release areas on NALF Fentress that may present an exposure to nearby residents using private wells for their drinking water. The private drinking water well investigation allows us to identify and address any current exposure to PFOA and/or PFOS above EPA's lifetime health advisory.

To be protective, the Navy has provided bottled water for drinking and cooking to any resident in the designated sampling area whose private drinking water well contains PFOA and/or PFOS above the EPA lifetime health advisory levels. The Navy will provide bottled water until a long-term solution is implemented by the Navy.

PFAS

PFAS are man-made chemicals that have been used since the 1950s in many household 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 EPA has issued a lifetime health advisory for two commonly used and studied PFAS, PFOA and PFOS, and is currently studying PFAS to determine if national regulation is needed. The EPA's lifetime health advisory levels provide Americans, including the most sensitive populations, with a margin of

protection from a lifetime of exposure to PFOA and PFOS in drinking water. The EPA's health advisory level 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.

HISTORY

In response to Navy policy, the following actions have been completed to address PFAS contamination in the community on and surrounding NALF Fentress. The work is being conducted in accordance with Navy policy for both on-base and off-base investigations and the CERCLA process (Figure 3; see page 4) for the on-base investigations.

SEPTEMBER 2015

Navy policy required drinking water sampling for PFOA and/or PFOS (commonly found in firefighting foam) on some Navy bases.

JANUARY 2016

- Results of on-base drinking water investigation indicate the presence of PFOA/PFOS above EPA lifetime health advisory.
- Results of on-base groundwater investigation indicate that the extent of PFOA/PFOS above EPA lifetime health advisory may extend off-base.

MAY-JUNE 2017

Treatment systems installed on off base drinking water wells (with PFOA/PFOS concentrations above EPA lifetime health advisory) to conduct a treatability study to evaluate granular activated carbon treatment of PFOA/PFOS.

FEBRUARY 2018

Voluntary resampling of all parcels within designated sampling area.

MARCH-APRIL 2018

- Resampling results received and notification provided to property owners; no additional action required.
- Treatment system installed on one additional drinking water well to conduct a treatability study to evaluate granular activated carbon treatment of PFAS.

SEPTEMBER-OCTOBER 2019

Initiated Basewide PFAS Site Investigation Addendum fieldwork, which included installing and sampling additional on-base monitoring wells and collecting off-base drinking water (with permission from property owners), soil, sediment, and surface water samples to assess PFAS concentrations.

JANUARY 2020

Results for voluntary resampling of all parcels within designated sampling area to be provided to property owners requesting resampling.

JANUARY 2022

Anticipated date for completion of water line installation activities.

DECEMBER 2015

Initiated Basewide PFAS Site Investigation at suspected source areas by collecting drinking water and groundwater samples on-base.

FEBRUARY-MAY 2016

- Public information sessions held and off-base private drinking water wells sampled with permission from property owners.
- Bottled water provided to property owners where drinking water concentrations were greater than EPA lifetime health advisory.

OCTOBER-NOVEMBER 2017

Off-base monitoring wells installed to assess potential migration of PFAS.

DECEMBER 2017

On-base drinking water treatment system began operating to treat PFOA/PFOS concentrations above EPA lifetime health advisory.

OCTOBER 2018

Public information session held to give surrounding property owners a chance to review and comment on the Engineering Evaluation/Cost Analysis.

FEBRUARY 2019

Action Memorandum signed documenting the Navy's approval to address PFOA/PFOS in drinking water by providing public water to affected property owners.

OCTOBER 2019

Voluntary resampling of all parcels within designated sampling area.

MAY 2020

- Basewide Preliminary Assessment for PFAS to be drafted to identify additional source areas.
- Scoping for Basewide PFAS Remedial Investigation to begin.

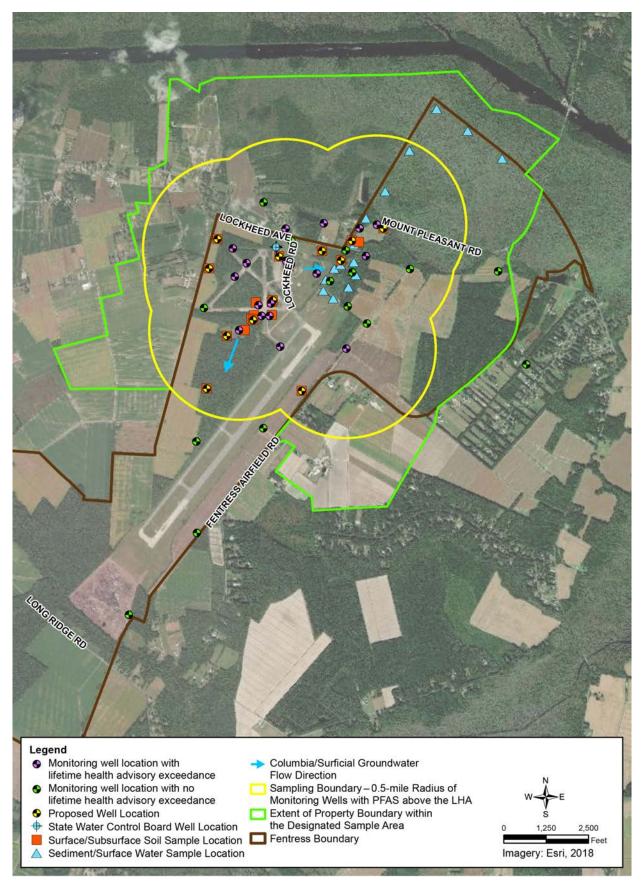


Figure 2 – Sample Locations and Monitoring Wells

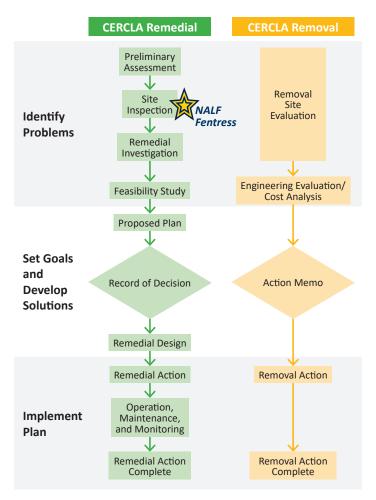


Figure 3 – CERCLA process

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 possibly 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 exposures 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 EPA.

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

FOR MORE INFORMATION

www.cnic.navy.mil/FentressInfo

If you have specific questions, contact (800) 931-6118.