



# Naval Support Activity (NSA) Northwest Annex Chesapeake, Virginia Results from Off-Base Drinking Water Investigation

July 2019

In early 2019, the Navy completed sampling of drinking water from wells within designated areas near Naval Support Activity (NSA) Northwest Annex. The Navy has a protective policy to address past releases of a class of compounds called 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 activities using firefighting foam (aqueous film forming foam or AFFF), including response to crashes, equipment testing and training.

PFAS compounds have been detected in certain groundwater locations at NSA Northwest Annex (Figure 1). Because these compounds have the potential to migrate with groundwater, the Navy initiated an investigation of private drinking water wells in designated areas near NSA Northwest Annex. **Results from this investigation indicate PFAS, specifically -perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), were not detected in private drinking water wells at levels requiring action.**

## **BACKGROUND**

PFAS are man-made chemicals that have been used since the 1950s in many household and industrial products because of their stain- and water-repellant properties. The term PFAS refers to a large group of thousands of chemicals. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used. PFAS have been found in non-stick cookware, food wrappers, and stain resistant fabrics. Once these compounds are released to the environment, they break down very slowly.

PFAS are “emerging” contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The United States Environmental Protection Agency (EPA) is currently studying certain PFAS to determine if regulation is needed. In May 2016, the EPA released lifetime health advisory levels for two PFAS, specifically PFOA and PFOS.

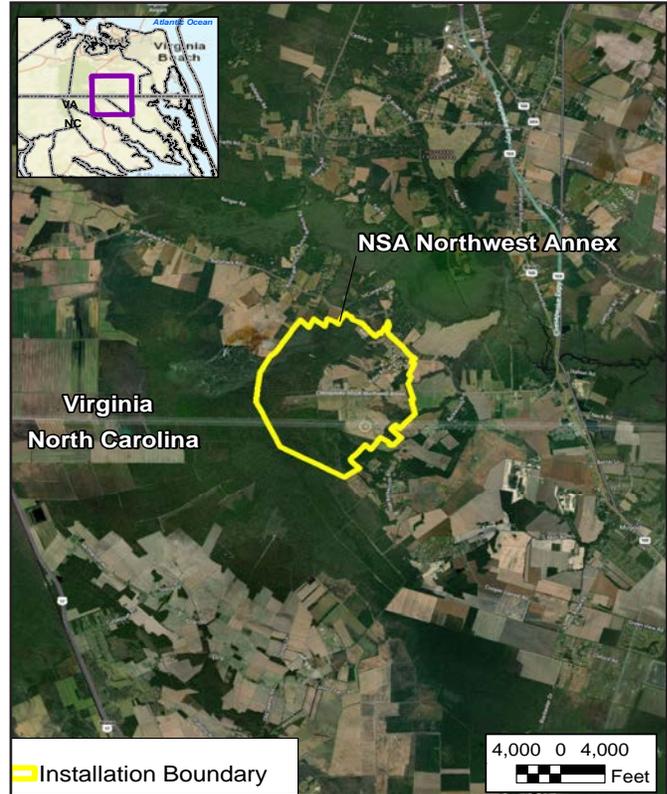


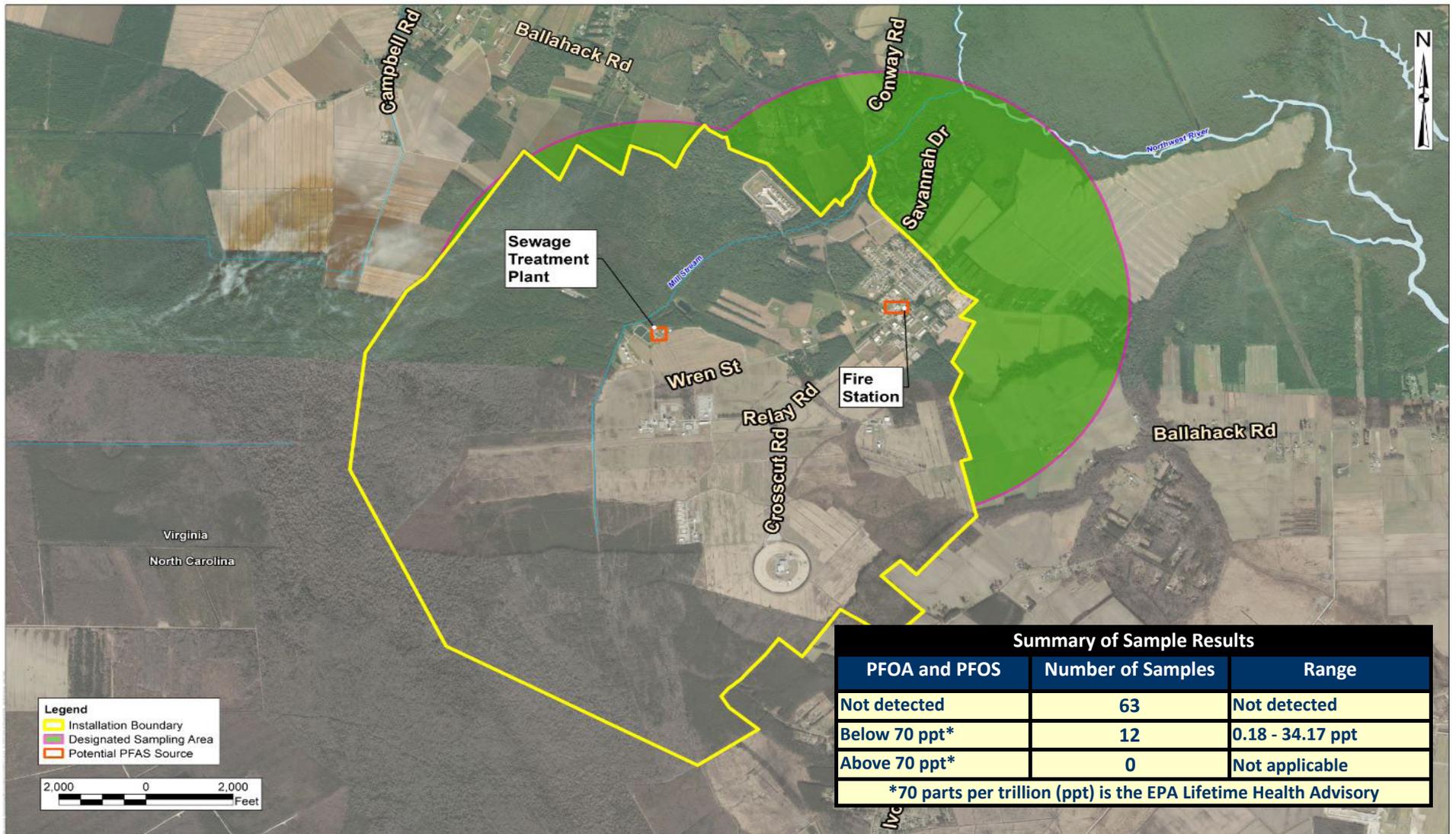
Figure 1- NSA Northwest Annex

**Health advisory levels are not regulatory standards. They are health-based concentrations which, the EPA states, offer a margin of protection for all Americans including the most sensitive populations throughout their life from exposure to PFOA and PFOS in drinking water.** The EPA 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. The Navy uses the EPA lifetime advisories to evaluate the drinking water results to determine if exposure to PFAS in drinking water needs to be addressed.

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

**Off-base sample results show PFOS and PFOA below the EPA lifetime health advisory.**

Figure 2- Designated Private Well Sampling Area



Summary of Sample Results		
PFOA and PFOS	Number of Samples	Range
Not detected	63	Not detected
Below 70 ppt*	12	0.18 - 34.17 ppt
Above 70 ppt*	0	Not applicable
*70 parts per trillion (ppt) is the EPA Lifetime Health Advisory		

The Navy conducted this drinking water sampling in coordination with partners, including EPA, Virginia Department of Environmental Quality (VDEQ), Virginia Department of Health (Chesapeake Health District), and the City of Chesapeake.

**NSA NORTHWEST OFF-BASE DRINKING WATER RESULTS SUMMARY**

The table below summarizes the results of the sampling conducted near NSA Northwest Annex in March, April, and May 2019. PFOA and PFOS were not detected in the majority of the private drinking water wells sampled.

Results from Off-Base Drinking Water Investigation at NSA Northwest Annex (as of May 24, 2019)			
Samples Collected	PFOA and/or PFOS Not detected	PFOA and/or PFOS Detected Below EPA Health Advisory	PFOA and/or PFOS Detected Above EPA Health Advisory
75	63	12	0

Twelve wells had PFOA and/or PFOS detected at concentrations ranging from 0.18 ppt to 34 ppt. **None of the private wells sampled contained PFOA and PFOS above the EPA lifetime health advisory of 70 ppt; as such, no immediate action is required to address exposure.**

Figure 2 shows the designated sampling area and a summary of the off-base drinking water results. Out of respect for resident’s privacy, the Navy has only provided individual results to each property owner.

**NSA NORTHWEST PATH FORWARD**

Because PFOA and PFOS were detected in the groundwater at NSA Northwest Annex, the Navy will continue on-base environmental investigations for PFAS. These environmental investigations are conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which starts with a Preliminary Assessment (PA). The PA is done to identify all known and potential releases of PFAS to the environment and includes a review of available historical information, available records, and interviews of facility personnel. As part of the ongoing PA at NSA Northwest Annex, the Navy is evaluating the potential for additional off-base drinking water to be impacted by historical PFAS releases (typically from AFFF). The results of the PA and any additional investigations will be used to determine future actions at, and near, the facility. Throughout this process, the Navy will continue to communicate with local residents and partner with Federal, State, and local agencies. Details of the steps of the CERCLA process are shown in Figure 3.

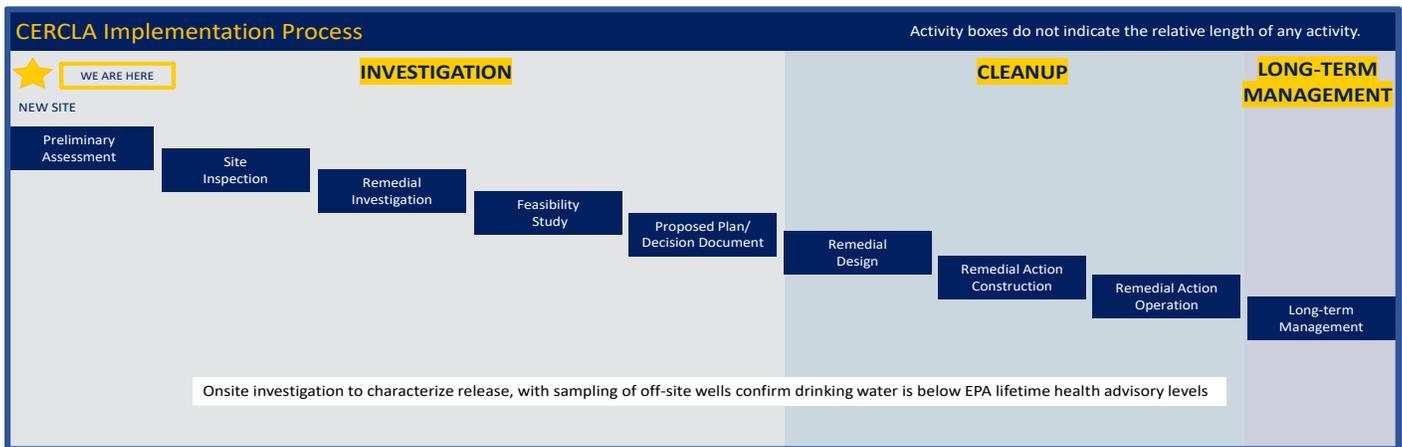


Figure 3- CERCLA Implementation Process

**FOR MORE INFORMATION**

<https://www.cnic.navy.mil/NWADrinkingWaterInfo>

If you have specific questions, contact the Navy Public Affairs office at: 757-836-1484 or [katisha.draughn-frag@navy.mil](mailto:katisha.draughn-frag@navy.mil)