

Naval Air Station Whiting Field Milton, Florida Off-Base Drinking Water Investigation

Updated April 2021

The Navy is requesting permission to sample water obtained from drinking water wells within a designated area near Naval Air Station (NAS) Whiting Field 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 at NAS Whiting Field (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 within the designated sampling area (Figure 2).

Records indicate that many residents in the sampling area purchase their drinking water from either the City of Milton or the Point Baker Water System. At this time, the Navy is only asking to sample from drinking water wells located in the designated area.

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. They are informal technical guidance to assist federal, state, and local officials, along with managers of public or community water systems, in protecting public health as needed.

PREVIOUS SAMPLING

In 2016, the Navy implemented a policy to identify and address sites with potential for exposure to PFOA and PFOS in drinking water. The review of existing records and databases identified confirmed and potential releases of PFAS within the Base boundary that could impact nearby drinking water. This records search identified one site on NAS Whiting Field – Former Crash Crew Fire Training Area. Following Navy policy, an off-base sampling area was established (Figure 2) and 10 drinking water wells were sampled in the direction of groundwater flow from the Former Crash Crew Fire Training Area. PFOA and/or PFOS were detected in five wells, one of which exceeded the EPA lifetime health advisory. Bottled water is being provided to this property, and implementation of a long-term remedy is underway.

The Navy has conducted extensive, basewide research that has identified additional areas at NAS Whiting Field where AFFF may have been released to the environment; therefore, additional drinking



Figure 1 – NAS Whiting Field

water sampling is being initiated in an expanded sampling area (designated sampling area as shown on Figure 2). This drinking water well investigation will allow us to address any current exposure to PFOA and/or PFOS above EPA's lifetime health advisory.

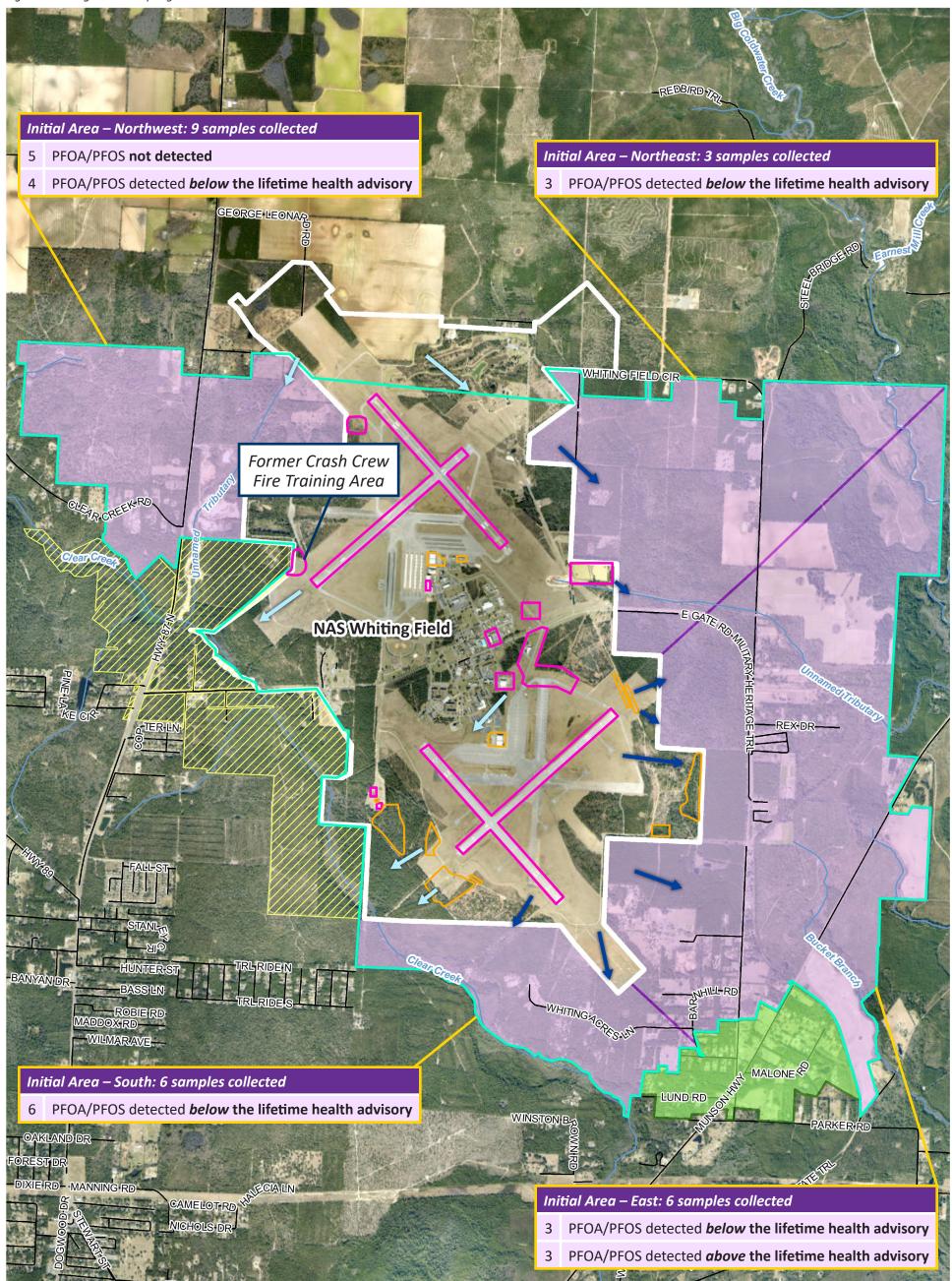
Drinking water at NAS Whiting Field is supplied by three on-base wells. In 2016, the on-base water supply was sampled for six different PFAS, and none were detected. NAS Whiting Field resampled the on-base drinking water in late 2020, and PFOA and PFOS were detected above the EPA lifetime health advisory. On-base residents and employees were notified, and an alternative drinking and cooking water source has been provided until a long-term solution is implemented.

There is no legal requirement to conduct this drinking water testing. The Navy is performing this voluntary testing because it is important that our neighbors in the designated sampling area are not drinking water with PFOA and/or PFOS concentrations above the EPA lifetime health advisory as a result of known or suspected releases of PFAS

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 EPA lifetime health advisory. The Navy will provide bottled water until a long-term solution is implemented.

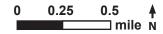
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Figure 2 – Designated Sampling Area



LEGEND

- Confirmed PFAS release area
 - Potential PFAS release area
- Installation boundary
- Confirmed groundwater flow direction
- Estimated groundwater flow direction
- Designated sampling area boundary
- 2021 initial sampling area
- 2021 expanded sampling area
- Z 2017 sampling area



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from NAS Whiting Field. The Navy is conducting the investigation in collaboration with partners such as EPA Region 4, the Florida Department of Environmental Protection, and the Florida Department of Health.

PFAS

PFAS are man-made chemicals that have been used since the 1950s in many household and industrial products because of their stainand 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 is currently studying PFAS to determine if national regulation is needed. The EPA'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 EPA's lifetime health advisory for 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.

INITIAL DRINKING WATER RESULTS

In March 2021, the Navy initiated off-base drinking water sampling near NAS Whiting Field. The table below summarizes the results of the 2021 initial sampling.

Table 1: Initial Area Drinking Water Results near NAS Whiting Field for PFOA and PFOS

SAMPLES COLLECTED	24
Not detected	5
Detections of PFOA and/or PFOS	19
below the EPA lifetime health advisory	16
above the EPA lifetime health advisory	3

Of the 24 samples collected by the Navy, 3 samples exceeded the lifetime health advisory of 70 ppt set by the EPA. Some properties in the 2021 initial sampling area did not request to have their drinking water tested. The Navy is still requesting permission to sample drinking water wells, not previously tested in the 2021 initial sampling area, to ensure additional exposure is not occurring.

EXPANDED DRINKING WATER SAMPLING

Of the 24 samples collected by the Navy in March 2021, 6 samples were collected to the southeast of NAS Whiting Field, where 3 samples exceeded the EPA lifetime health advisory of 70 ppt. Because of these three exceedances, the Navy is expanding the drinking water investigation downgradient from this area. The new sampling area is referred to as the expanded sampling area (see Figure 2). Based on the initial sampling results, the Navy is not expanding the sampling area to the northwest, northeast, or southwest of NAS Whiting Field.

FOR MORE INFORMATION http://go.usa.gov/xAEQF

If you have specific questions, contact the Navy at: 844-NASWFLD (844-627-9353) or whtg_naswf_pao.fct@navy.mil

NAVY POLICY

Until a decision for regulating PFAS is made, 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. The Navy's 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 EPA's lifetime health advisory as a result of a Navy PFAS release. When a known or suspected release of PFAS is identified on a Navy installation, a sampling area is established 1 mile in the direction that groundwater flows away from a release site. To be protective, the Navy offers sampling to all residents whose drinking water is supplied by groundwater wells in these designated areas. Once any potential exposure from drinking water has been addressed, the Navy will then complete the full investigation to determine the extent of these compounds on our installations.

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. The Navy will do its best to keep the results of individual properties confidential to the extent permitted by law.

The Navy will provide an alternate water source, likely 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 EPA's lifetime health advisory. The Navy will continue to provide the alternate water until a permanent solution is implemented.

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.