

Naval Outlying Landing Field Waldron Corpus Christi, Texas Results from Off-Base PFAS Drinking Water Investigation

May 2020

In February and March 2020, the Navy completed sampling of drinking water from wells near Naval Outlying Landing Field (NOLF) Waldron, Corpus Christi, Texas (Figure 1). 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 certain types of firefighting foam (aqueous film forming foam or AFFF), including response to crashes, equipment testing and firefighting training.

Through a Preliminary Assessment process, the Navy identified areas at NOLF Waldron where AFFF was released or have potentially been released (Figure 2). Because these compounds have the potential to migrate with groundwater, the Navy initiated an investigation of private drinking water wells in a designated area near NOLF Waldron. Results from this investigation indicate PFAS, specifically perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), were not detected at levels requiring action in private wells.

OFF-BASE DRINKING WATER RESULTS SUMMARY

PFOA and PFOS were not detected in the majority of the private drinking water wells sampled. The table below summarizes the results of the sampling conducted near NOLF Waldron in February and March 2020. All results for PFOA and PFOS are presented in the table on page 3.

Results from Off-Base Drinking Water Investigation
at NOLF Waldron (as of April 30, 2020)

Samples Analyzed	PFOA and/ or PFOS not detected	PFOA and/or PFOS Detected Below EPA Lifetime Health Advisory	PFOA and/or PFOS Detected Above EPA Lifetime Health Advisory
28	22	6	0

No results were above the EPA lifetime health advisory; therefore, no action is required at this time.

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



Figure 1- NOLF Waldron

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-repellent 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" chemicals, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The 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. Health advisory levels are not regulatory standards. They are health-based concentrations that, 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.

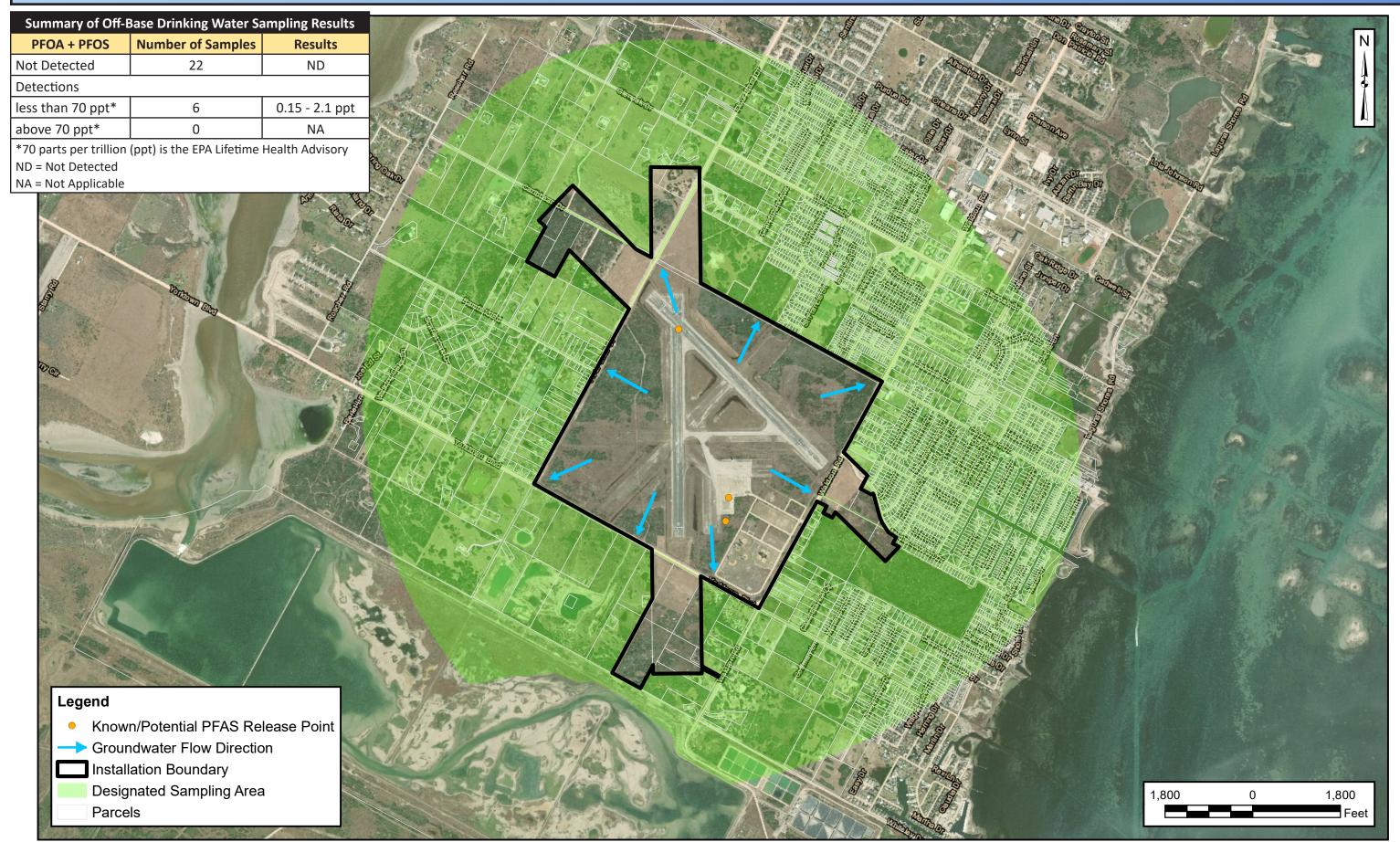


Figure 2- Designated Private Well Sampling Area

There is no legal requirement to conduct this drinking water testing. It was a voluntary measure because water quality for our off-base neighbors is a priority for the Navy. The Navy conducted this drinking water sampling in coordination with partners, including EPA Region 6, the Texas Commission on Environmental Quality (TCEQ), the Agency for Toxic Substances and Disease Registry (ATSDR) Region 6, and the Texas Department of State Health Services (TDSHS).

NAVY POLICY

The Navy 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 the groundwater flows away from a release site. To ensure protectiveness, the Navy offers sampling to all residents whose drinking water is supplied by private wells (i.e., not on public water) 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.

PATH FORWARD

The Navy will continue on-base environmental investigations for PFAS following the procedures established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as "Superfund." The CERCLA process starts with a Preliminary Assessment (PA) 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. The PFAS PA for NOLF Waldron will be finalized, and then a Site Inspection will be conducted at the facility to define the source and nature of the releases identified in the PFAS PA. Throughout this process, the Navy will continue to communicate with local residents and partner with Federal, State, and local agencies.

Results Summary: NOLF Waldron Private Drinking Water Well Samples

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Sample Count	PFOA ppt	PFOS ppt	PFOA + PFOS ppt
1	ND	ND	ND
2	ND	ND	ND
3	ND	ND	ND
4	ND	ND	ND
5	ND	ND	ND
6	ND	ND	ND
7	ND	ND	ND
8	ND	ND	ND
9	ND	ND	ND
10	ND	ND	ND
11	ND	ND	ND
12	ND	ND	ND
13	ND	ND	ND
14	ND	ND	ND
15	ND	ND	ND
16	ND	ND	ND
17	ND	ND	ND
18	ND	ND	ND
19	ND	ND	ND
20	ND	ND	ND
21	ND	ND	ND
22	ND	ND	ND
23	ND	0.15 J	0.15
24	ND	0.15 J	0.15
25	ND	0.24 J	0.24
26	ND	0.24 J	0.24
27	0.83 J	0.18 J	1.01
28	1.94 J	0.16 J	2.1
1			

J = Estimated value

ppt = parts per trillion

ND = Not Detected

FOR MORE INFORMATION

https://www.cnic.navy.mil/regions/cnrse/installations/nas_corpus_christi.html
If you have specific questions, please contact Fifi Kieschnick at:
361-961-2674 or nascc-pao@navy.mil