



Outlying Landing Field Barin Foley, Alabama Drinking Water Investigation

May 2021

The Navy is requesting permission to sample water obtained from drinking water wells within a designated area near Outlying Landing Field (OLF) Barin, an OLF for Naval Air Station 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 OLF Barin (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 may be 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 OLF within the designated sampling area (Figure 2).

Records indicate that many residents in the sampling area purchase their drinking water from Riviera Utilities. The Navy is not asking to sample water provided by Riviera Utilities. **At this time, the Navy is only asking to sample from drinking water wells located in the designated sampling 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.

In 2020, a comprehensive Preliminary Assessment (PA) was completed at the OLFs in Alabama associated with NAS Whiting Field. It identified potential historical releases of firefighting foam to the environment during activities such as testing, training, firefighting, and other life-saving

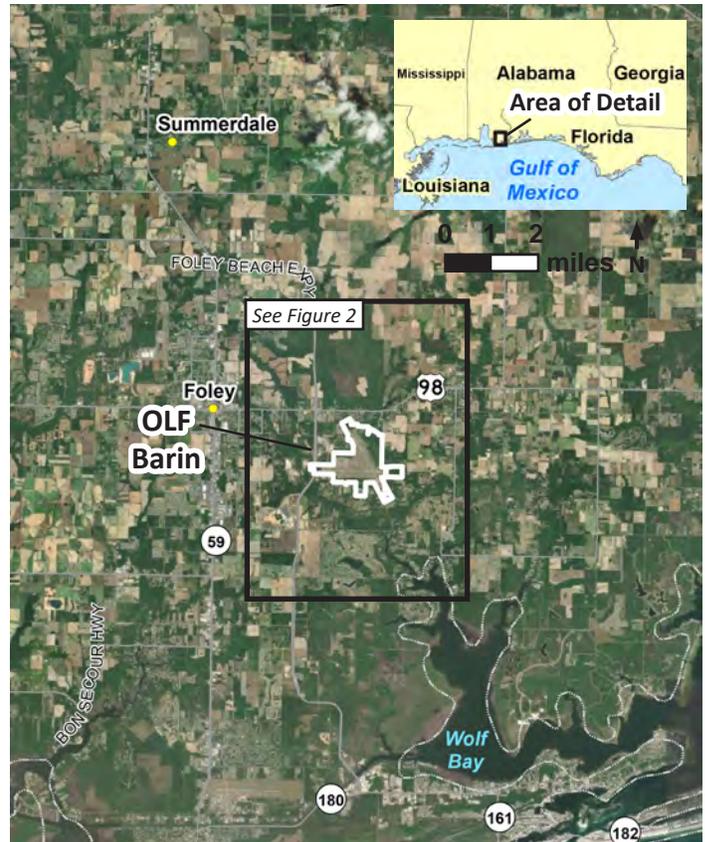
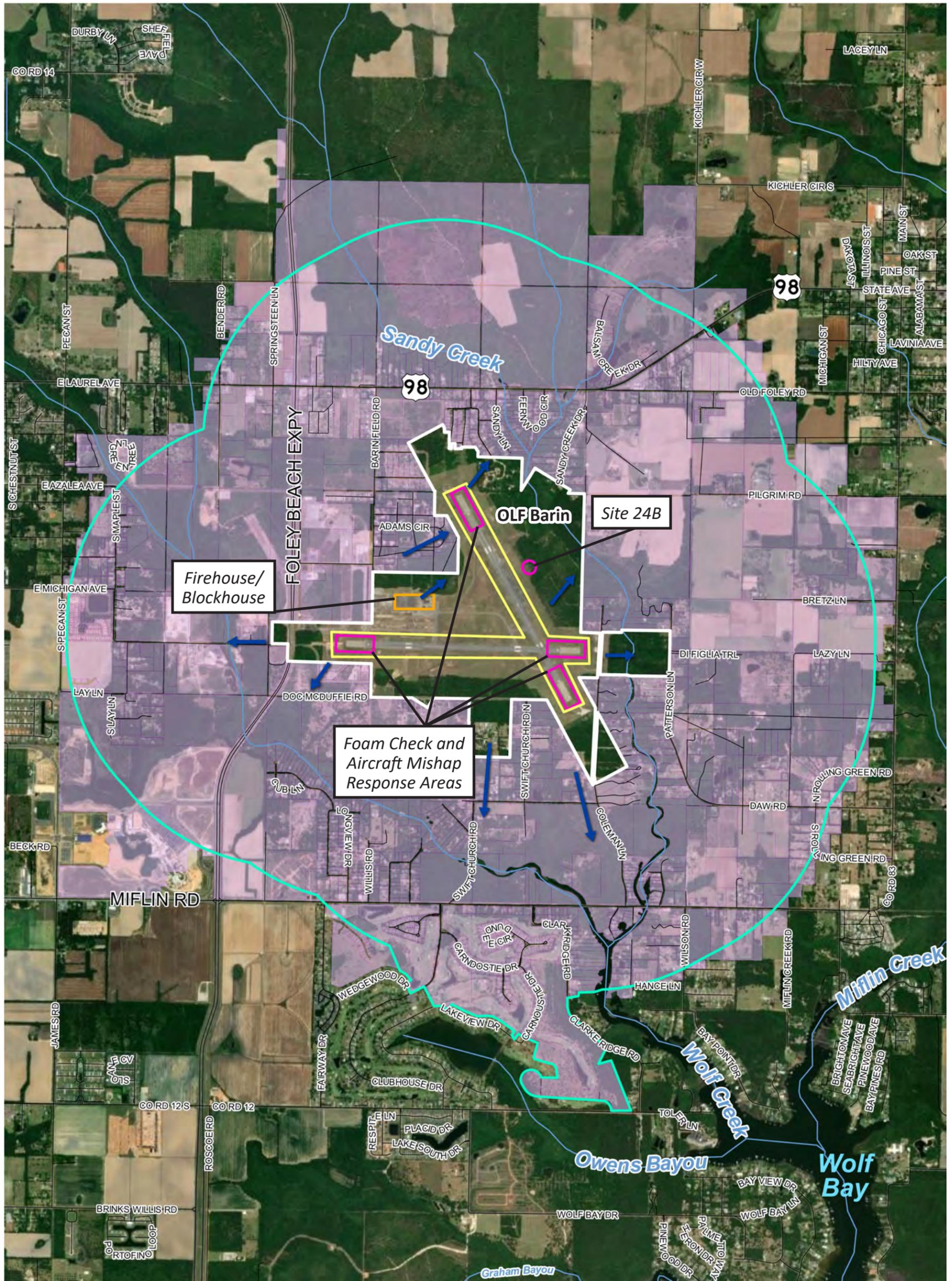


Figure 1 – OLF Barin

emergency responses. The PA confirmed that firefighting foam was released to the environment at Site 24B (a firefighting training area) and four Foam Check and Aircraft Mishap Response Areas. It also identified an additional site, the Firehouse/Blockhouse, where firefighting foam may have been released to the environment. At each of these sites, PFAS may be present in groundwater, and may have migrated off-base to nearby drinking water wells (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.

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.

Figure 2 – Designated Sampling Area



LEGEND

- Confirmed PFAS release area
- Potential PFAS release area
- Runways
- Installation boundary
- Surface water
- Estimated groundwater flow direction
- Designated sampling area boundary
- Designated sampling area



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 confirmed or potential releases of PFAS from OLF Barin. The Navy is conducting the investigation in collaboration with the Agency for Toxic Substances and Disease Registry, the Alabama Department of Environmental Management, and the Alabama Department of Public Health.

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 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.

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 confirmed or potential 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 confirmed or potential release of PFAS is identified on a Navy installation, a sampling area is designated 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 source 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.

FOR MORE INFORMATION

<http://go.usa.gov/xAEQF>

If you have any questions, please call **844-NASWFLD (844-627-9353)** or email whgtg_naswf_pao.fct@navy.mil