

Naval Air Station Whiting Field Alabama Outlying Landing Fields Drinking Water Investigation

Virtual Open House June–August 2021



TO REQUEST SAMPLING call 844-NASWFLD (844-627-9353) visit http://go.usa.gov/xAEQF or scan the QR code ↓



ACRONYMS &
ABBREVIATIONS

EPA U.S. Environmental Protection Agency NAS Naval Air Station PFAS per- and polyfluoroalkyl substances PFOA perfluorooctanoic acid

PFOS	perfluorooctane
	sulfonate

ppt part(s) per trillion

The Navy is addressing potential exposure to PFOA and PFOS in drinking water around outlying landing fields for NAS Whiting Field.

- In 2016, the EPA established a drinking water lifetime health advisory (70 ppt) for two PFAS, specifically PFOA and PFOS.
- The Navy issued a policy to address PFOA and PFOS in drinking water.
- The most common historical source of PFOA and PFOS was in firefighting foam, which is no longer used for firefighting training.
- The Navy initiated basewide investigations for all Navy installations to address potential exposure to PFOA and PFOS.



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Environmental Cleanup Process

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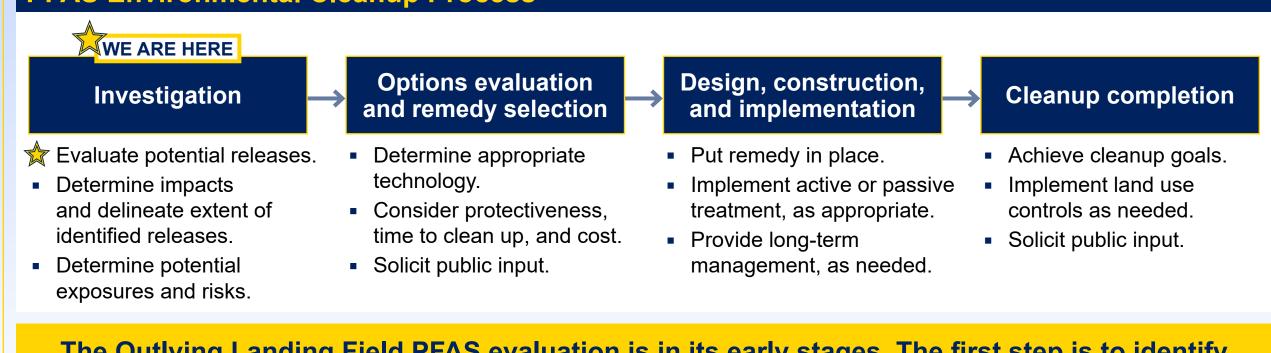


ACRONYMS & ABBREVIATIONS NAS Naval Air Station PFAS per- and polyfluoroalkyl substances

PRIORITY: Protect Human Health and the Environment

- The structured regulatory process, shown below, will be used to identify and clean up past environmental releases at outlying landing fields for NAS Whiting Field.
- The Alabama Department of Environmental Management and the Agency for Toxic Substances and Disease Registry are working closely with the Navy and providing oversight at every step of the process.
- Public input is welcome throughout the process and is formally solicited at certain points.
- From the beginning to end, this process can be lengthy.

PFAS Environmental Cleanup Process



The Outlying Landing Field PFAS evaluation is in its early stages. The first step is to identify potential sources of PFAS. The second step is to determine where PFAS are actually present.

NAS Whiting Field Outlying Landing Fields

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ACRONYMS &

ABBREVIATIONS

Naval Air Station

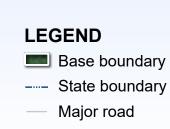
polyfluoroalkyl substances

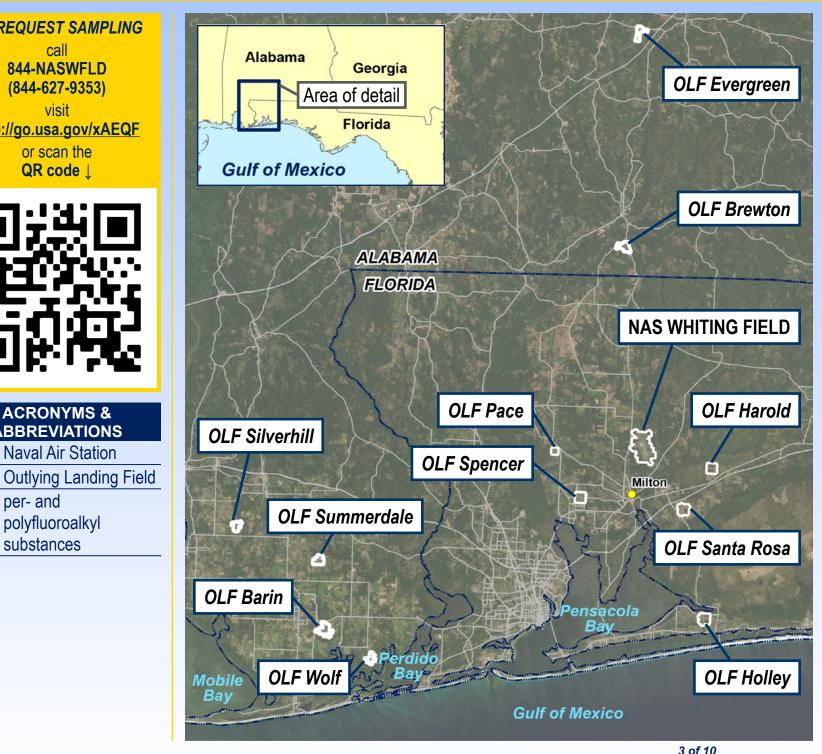
NAS

OLF

PFAS per- and

Potential PFAS release areas and sampling areas are included on OLF-specific posters, which can be viewed on the OLF pages.







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Per- and Polyfluoroalkyl Substances (PFAS)

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ACRONYMS & ABBREVIATIONS

- EPA U.S. Environmental **Protection Agency** PFAS per- and
- polyfluoroalkyl substances
- PFOA perfluorooctanoic acid PFOS perfluorooctane sulfonate
- part(s) per trillion ppt

What Are PFAS?

- Family of manufactured chemicals, no natural occurrence.
- PFOA and PFOS are the most studied and understood.
- Found in the environment around the world (in air, water, soil, animals, plants, as well as in people).
- Last a long time in the environment.
- Used since 1940s in many products, such as:



firefighting foam



personal care products



stain-resistant carpets and fabrics



nonstick cookware



water-resistant fabrics



food packaging

What Is the EPA Lifetime Health **Advisory for PFOA and PFOS?**

- 70 ppt in drinking water.
- It is intended to protect against harmful general public, for lifetime exposure.

How Was the EPA Lifetime Health **Advisory Calculated?**

- It is based on studies of health effects from PFOA and PFOS in laboratory animals.
- exposure is from other sources.
- It considers information regarding health effects in people exposed to PFOA and of mothers who are exposed.

It is a combined level of PFOA and PFOS of

health effects to sensitive populations and the

It assumes 20 percent of overall exposure is from drinking water, and 80 percent of overall

PFOS, including the fetuses or nursing infants

Exposure and Health Effects

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ACRONYMS & ABBREVIATIONS

- CDC Centers for **Disease Control** and Prevention
- OLF Outlying Landing Field
- PFAS per- and polyfluoroalkyl substances
- PFOA perfluorooctanoic acid
- PFOS perfluorooctane sulfonate

PFAS in People

- CDC estimates that most people in the U.S. have PFAS in their bodies.
- Levels of PFAS are decreasing following their phase-out from use.
- PFAS will build up in the body until exposure stops.

Exposures to PFAS

- PFAS may be in drinking water, food, indoor dust, some consumer products, and workplaces.
- Most non-occupational exposures occur by drinking water or eating food that contain PFAS.
- Exposure is minor through skin contact when bathing, showering, or swimming.
- PFAS reach the fetuses or nursing infants of mothers who are exposed.
 - However, based on current science, the benefits of breastfeeding appear to outweigh the risks for infants exposed to PFAS in breastmilk.

How to Reduce Exposure

- There are no medical treatments that will remove PFAS from the body.
- The best intervention is to stop the source of exposure (such as drinking water).
- There are at-home treatment systems that can reduce PFAS in drinking water, such as certain filters certified for PFAS removal.
 - For more information about PFAS filtration systems certified by NSF International, a public health organization, visit http://www.nsf.org or scan the QR code.

for more information about PFAS filtration, scan the QR code 1



Potential Health Effects

- At this time, scientists are still learning about how exposure to PFAS might affect people's health.
- Studies indicate possible health effects could include:
 - Increased cholesterol levels.
 - Increased risk of high blood pressure and preeclampsia in pregnant women.
 - Changes in growth, learning, and behavior of the developing fetus and child.
 - Small decrease in infant birth weight.
 - Immune system effects (possible decreased response to some vaccines).
 - Decreased fertility.
 - Altered hormone function.
- Increased risks of certain types of cancers (testicular, kidney, and prostate).
- health impact might occur as a result of exposure.

Should I Have My Blood Tested?

- recommended because:
 - will they provide information for treatment.
 - your health condition.

• The levels of PFOA or PFOS in drinking water do no predict what, if any,

Blood testing for PFAS is a specialized test that, though available, is not

• PFAS blood tests will not provide information on health problems, nor

PFAS blood tests results can't tell you if PFAS exposure has caused



Drinking Water Sampling Process

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call 844-NASWFLD (844-627-9353) visit http://go.usa.gov/xAEQF or scan the QR code



ACRONYMS & ABBREVIATIONS			
COVID-19	coronavirus		
	disease 2019		
EPA	U.S.		
	Environmental		
	Protection Agency		

Drinking water well sampling is voluntary.

Sampling Process

- We need the property owner's help to:
 - Make the sampling appointment.
 - Fill out the questionnaire prior to the appointment.
- An adult (18 years or older) must be present at the property during sampling.
- Samples will be collected by a team of experienced contractors:
 - Team will consist of two members.
 - The water sample will be collected as close to well as possible.
 - Water will run for 3 to 5 minutes prior to collection.
- Samples will be collected and analyzed according to EPA guidelines.
- Sampling takes less than an hour.

COVID-19 Precautions

- precautions to minimize exposure.
 - with the team.
 - Sampling team members may arrive in separate cars.
 - masks and gloves.

 - Upon completion of sampling, a team sampling is complete.

The sampling team will take the necessary

• A sampling team member will call you upon arrival; you do not need to directly interact

Sampling team members will be wearing

• One team member will collect the sample; the second team member will likely remain in the car to assist with documentation.

member will call you to let you know that

Sampling and Results Timeline

TO REQUEST SAMPLING call	Sequence of Events	Approximate Timeframe
844-NASWFLD (844-627-9353) visit http://go.usa.gov/xAEQF or scan the QR code ↓	 Property owner signs up for drinking water well sampling. 	Beginning May 29
	2. Navy contractor samples well.	June 11–18, 2021
	 Navy receives preliminary results. 	 Approximately 1 r after sample colle
		 Within 24 hours o
ACRONYMS & ABBREVIATIONS EPA U.S. Environmental Protection Agency PFOA perfluorooctanoic acid	 Navy calls property owner with results. 	 Bottled water deli and/or PFOA are lifetime health adv
PFOS perfluorooctane sulfonate ppt part(s) per trillion	 Lab data is verified and Navy mails final lab data to property owner. 	 Approximately 3 r from sampling.

29, 2021.

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month ected.

of results received.

livered if PFOS e above the EPA dvisory (70 ppt).

months

Sign Up for Your Sampling Appointment

TO REQUEST SAMPLING





ACRONYMS & ABBREVIATIONS

EPA U.S. Environmental **Protection Agency** PFOA perfluorooctanoic acid PFOS perfluorooctane sulfonate part(s) per trillion ppt

Off-Base Drinking Water Well Sampling

- The Navy will be sampling drinking water wells in the designated sampling area.
- Sampling is at no cost to you.
- Drinking water samples will be collected Friday, June 11 through Friday, June 18, 2021.
- Sampling appointments are available on these days 8 a.m.-6 p.m.

Additional times are available upon request

- The property owner must give permission for permission slip.
- Sampling takes less than an hour.
- An adult (18 years or older) must be present at the property during sampling.

The Navy will provide bottled water for cooking and drinking if PFOA and/or PFOS exceed the EPA lifetime health advisory (70 ppt).

Off-Base Drinking Water Sampling Activity Timeline – 2021 Virtual Open House Public Meeting June-August **Off-Base Drinking Communication of** Water Well Sampling **Preliminary Results** WE ARE HERE June 11–June 18 beginning mid-July JULY AUGUST JUNE

sampling and complete the questionnaire and