

NALF Fentress Ongoing PFAS Investigation and Response Private Drinking Water Resampling

February 2018

BACKGROUND

Per- and Polyfluoroalkyl Substances (PFAS) are manufactured chemicals that have been used extensively since the 1950s in many household and industrial products because they are resistant to stains, heat, oil, and water. PFAS also are used for firefighting and in a number of industrial processes. PFAS are present worldwide in the environment, humans, and wildlife. Once these compounds are released to the environment, they break down very slowly.

PFAS are classified as unregulated or "emerging" contaminants, which have no Safe Drinking Water Act regulatory standards. The U.S. Environmental Protection Agency (EPA) is studying PFAS to determine if regulation is needed. In 2009, the EPA Office of Water published provisional health advisories establishing health-based hazard concentrations above which action should be taken to reduce exposure to certain PFAS, in particular perfluorooctane sulfonate (PFOS) at 0.2 parts per billion (ppb) and perfluorooctanoic acid (PFOA) at 0.4 ppb. On May 19, 2016, EPA replaced the provisional health advisories with a lifetime health advisory level of 70 parts per trillion (ppt, or 0.07 ppb) from exposure to PFOS and PFOA (combined) in drinking water.

FOR MORE INFORMATION

Navy, USEPA, and VDEQ federal-state partnership continues to focus on effected residents and their continued protection from PFAS in drinking water. Their success relies on ongoing public awareness and engagement throughout each step of the investigation. To answer any questions you may have contact 757-433-3132 or email fentressinfo@navy.mil.

HISTORY

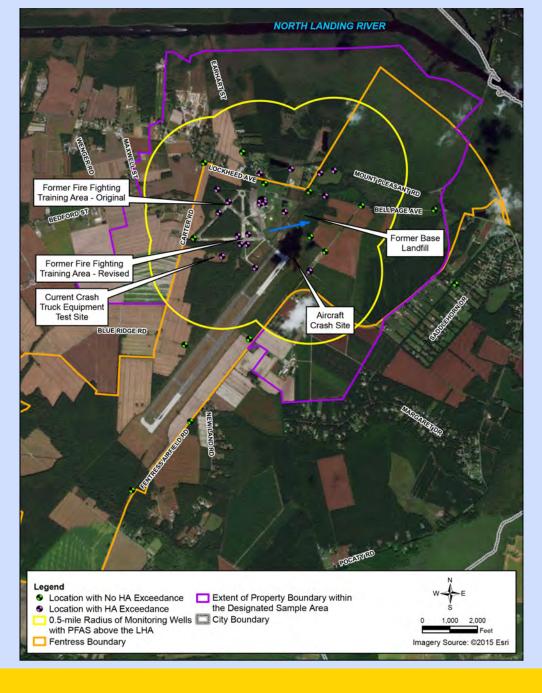
The Navy proactively developed a policy to ensure drinking water has not been affected by PFAS contamination at installations where there has been a nearby known or suspected release of PFAS into the environment. In response to Navy policy, the following actions have occurred to address PFAS contamination in groundwater in the community surrounding NALF Fentress:

SEPTEMBER 2015 Navy policy required drinking water sampling of per- and polyfluoroalkyl DECEMBER 2015 substances (PFAS) (commonly found in firefighting foam) on some Navy bases. The Navy sampled drinking water and groundwater on-base. JANUARY 2016 On-base results received. ◆ Drinking water was above the U.S. Environmental Protection Agency (EPA) FEBRUARY 2016 provisional health advisory levels. Public information session held, community water station established, and ◆ Some groundwater monitoring wells were above EPA provisional health off-base drinking water sampled. advisory levels MARCH 2016 Off-base property owners notified of results and provided with bottled water if APRIL 2016 necessary. Public information session held. Sampling area expanded to encompass 12 additional properties. **JUNE 2016** Six properties in expanded area sampled at owner's request. Results of the six-property expanded sampling area received, and no New health advisory issued by EPA resulted in the Navy providing bottled water additional actions required. to four additional properties. The new HAs did not result in any additional homes to be sampled. MAY-JUNE 2017 Treatment systems installed on six off-base drinking water wells to conduct a OCTOBER-NOVEMBER 2017 treatability study evaluate granular activated carbon (GAC) treatment of PFAS. Off-base monitoring wells installed to assess potential migration of PFAS. DECEMBER 2017 On-base drinking water treatment system began operating FEBRUARY 2018 APRIL 2018 Initiate resampling of off-base drinking water to verify 2016 sampling. Provide notification of off-base drinking water results

OFF-BASE DRINKING WATER SAMPLING

The Navy is requesting permission to resample drinking water in the designated area near NALF Fentress at no cost to the residents in order to confirm drinking water in the area remains below the USEPA Lifetime Health Advisory level established for two PFAS compounds, PFOS and PFOA Better understand the status of PFAS in groundwater around NALF Fentress. Off-base drinking water sampling is planned for February 5-16, 2018. Homeowners within the designated sampling area are asked to call XXX-XXX-XXXX to schedule a sampling appointment.

The sampling process will take approximately 30 minutes, and will involve a team of two technicians coming into the home to collect a sample from one indoor tap location. The technicians will also use hand-held equipment to collect additional information on the water (e.g. pH and temperature). Prior to collecting the sample, the technicians will go over a homeowner questionnaire that was provided with the sampling notification packet.



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ACTIONS BASED ON RESULTS

In April 2018, the Navy will notify residents of their personal drinking water sample results as well as notification of any follow on actions needed for their home. The Navy will share a summary of results and our next steps of the investigation with the public.

The following is a summary of planned actions based on drinking water sampling results:

Total PFOA/PFOS Concentration*	Action Based on Results
> 70 ppt	The Navy will provide bottled water for drinking and cooking at no cost to these residents until a long term solution can be put in place.
< 70 ppt	No additional sampling or other action will be taken at this time

^{*} The Navy will test and provide results for 14 PFAS as recommended by the USEPA drinking water testing method; however, only two PFAS (PFOS and PFOA) have a lifetime health advisory level.

The Navy will continue to use the data collected to further develop the ongoing groundwater investigation. Additionally, the Navy is working with EPA and VDEQ to identify and evaluate long-term solutions to PFAS in groundwater.

FOR MORE INFORMATION

To answer any questions you may have on the sampling program, please call 757-433-3132 or email fentressinfo@navy.mil.

The Navy also has established a website at www.cnic.navy.mil/FentressInfo, which will be updated as more information becomes available.

WATER FILLING STATION

The Navy and City of Chesapeake also have set up a water station at 1564 Mount Pleasant Road, Chesapeake, Virginia 23322 (across the street from Butts Road Intermediate School), where other concerned residents can take containers to fill with potable drinking water treated by the City of Chesapeake.

Health Information

Exposure to PFOA and PFOS appears to be widespread. Studies have found both compounds in the blood samples of the general human population and wildlife nationwide. Exposure to PFOS and PFOA through ingestion is the primary health concern for people. Studies on exposed human populations indicate PFOS and/or PFOA may cause elevated cholesterol levels and possibly low infant birth weight. When animals are given large doses, they exhibit developmental, reproductive, and liver effects. Other studies suggest a link with certain cancers.

Health effects from exposure to low levels of PFOS and PFOA are not well known, and studies are continuing. At this time, it is not possible to link exposures to PFOS and PFOA in water to a person's individual health issues. Blood tests are available, but they are not routinely done because the results can be inconclusive and test results do not predict health effects. EPA is still investigating long-term exposure effects to PFOS and PFOA. Based on what is known and still unknown about PFOS and PFOA, EPA recommends people not use water that contains PFOS and/or PFOA above the lifetime health advisory levels for drinking or cooking.