



Naval Air Station Oceana Virginia Beach, Virginia Ongoing PFAS Investigation and Response Fact Sheet

December 2019

The Navy has requested permission to sample drinking water obtained from private wells within a designated area near Naval Air Station (NAS) Oceana 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 sulfonic acid (PFOS).

The most common Navy activity that could have resulted in the historical release of PFOA, PFOS, and other PFAS to the environment is the use of firefighting foam (specifically aqueous film forming foam or AFFF) for testing, training, firefighting, and other life-saving emergency responses. PFAS compounds are present in the groundwater, soil, sediment, and surface water at NAS Oceana (Figure 1) as a result of historical activities using AFFF. Because of this historical use, PFOA, PFOS, and other PFAS are also present in nearby private drinking water wells that are located in the direction that the groundwater flows away from the base within the designated sampling areas (Figure 2).

Records indicate the majority of residents in the sampling area are provided drinking water by the City of Virginia Beach, but a limited number of properties use or may be using a private well for their drinking water. The Navy has offered to sample private drinking water wells in the designated areas, not drinking water provided by the City of Virginia Beach. The drinking water provided by the City of Virginia Beach has been tested, and PFOA and PFOS were not detected.

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 and provide technical information to states, agencies, and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

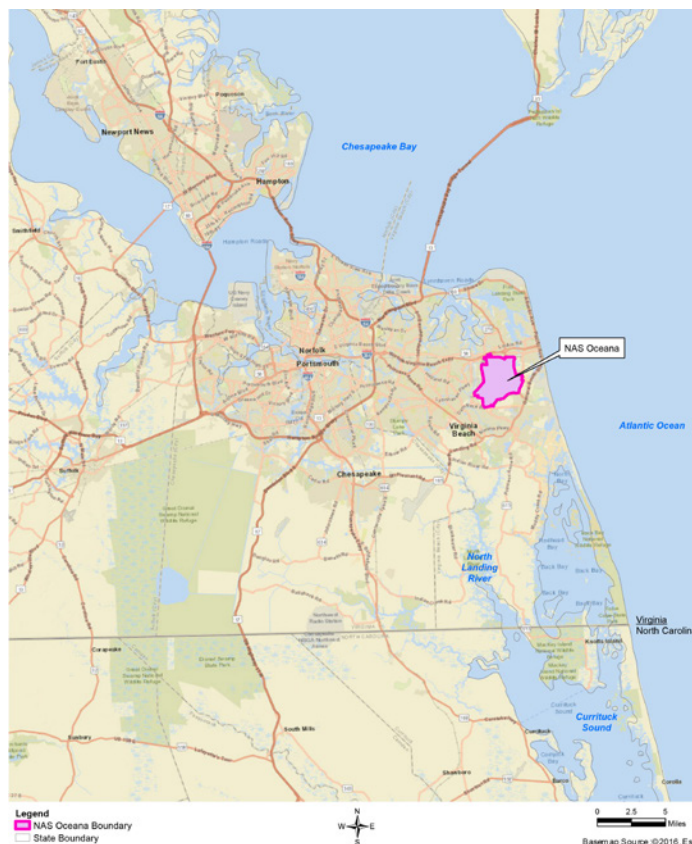


Figure 1 – NAS Oceana

The Navy established a proactive policy to ensure the communities near our installations are not exposed to drinking water impacted from a known or likely Navy release of PFOA and/or PFOS above the EPA's lifetime health advisory level. Following this policy, the Navy identified potential PFAS release areas on NAS Oceana that may present an exposure to nearby residents using private wells for their drinking water. The private drinking water well investigation allows us to identify and address any current exposure to PFOA and/or PFOS above EPA's lifetime health advisory.

To be protective, the Navy has provided bottled water for drinking and cooking to any resident in the designated sampling area whose private drinking water well contains PFOA and/or PFOS above the EPA lifetime health advisory levels. The Navy will provide bottled water until a long-term solution is implemented by the Navy.

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 has issued a lifetime health advisory for two commonly used and studied PFAS, PFOA and PFOS, and is currently studying PFAS to determine if national regulation is needed. The EPA's lifetime health advisory levels provide 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 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.

HISTORY

In response to Navy policy, the following actions have been completed to address PFAS contamination in the community on and surrounding NAS Oceana. The work is being conducted in accordance with Navy policy for both on-base and off-base investigations and the RCRA/CERCLA process (Figure 3; see page 4) for the on-base investigations.



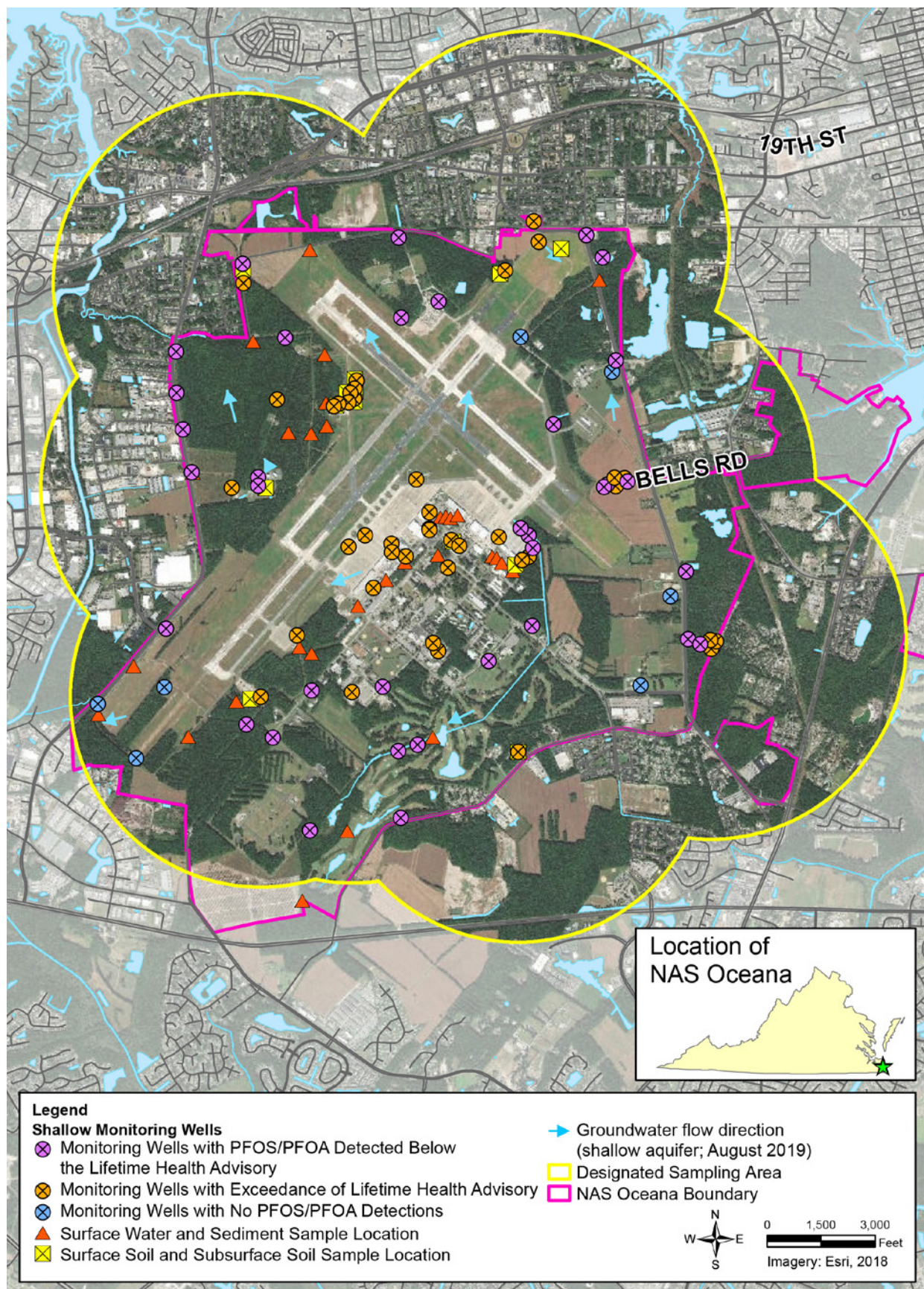


Figure 2 – Sample Locations and Monitoring Wells

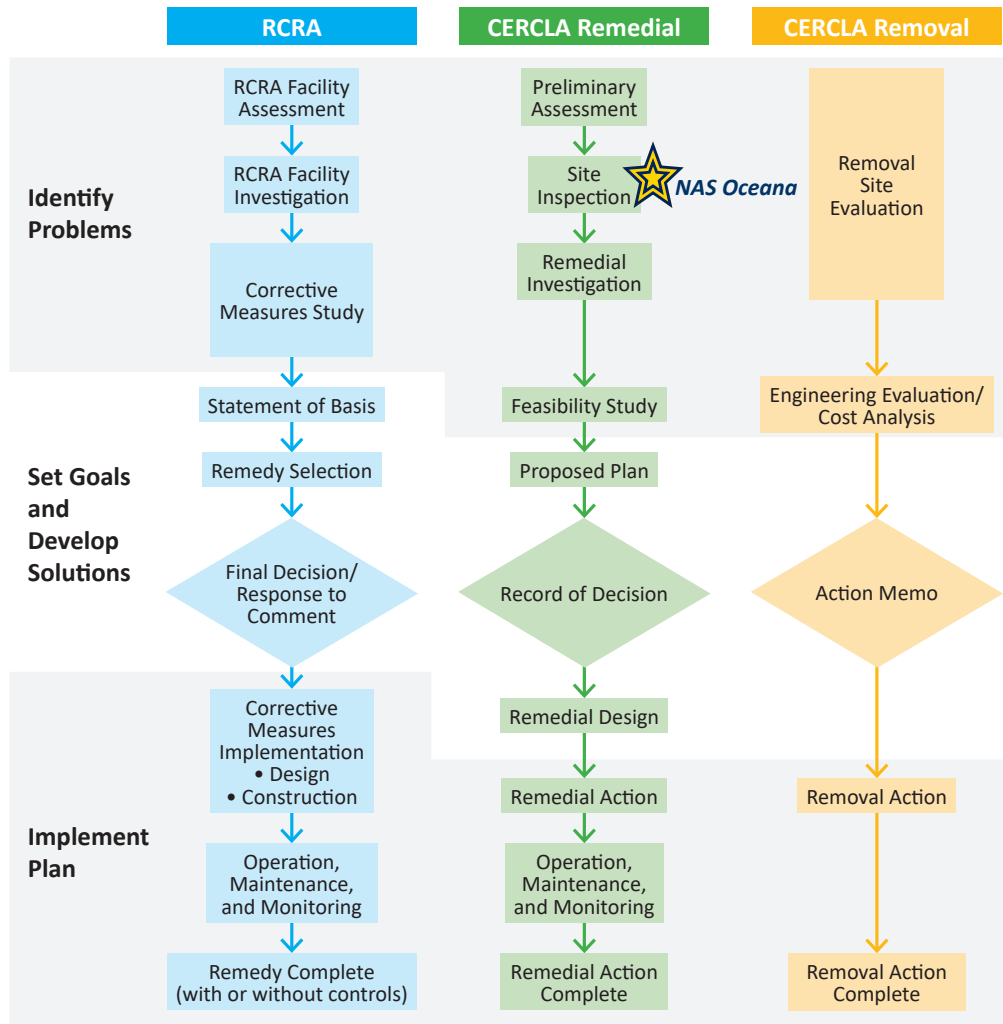


Figure 3 – RCRA and CERCLA processes

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

www.cnmc.navy.mil/oceana_water_info

If you have specific questions, contact 757-341-0485.