

Navy

The Navy appreciates the opportunity to review the Draft Per- and Polyfluoroalkyl Substances (PFAS) Chemical Action Plan (CAP) issued for public comment on October 7, 2020. The Navy's comments pertain to the PFAS drinking water and groundwater investigation at and near Naval Air Station Whidbey Island. The Navy's intent in providing comments on this information is to ensure the CAP reflects accurate facts regarding the investigation. The comment table in Attachment 1 is organized in two columns: the first column contains the location of information in the Draft CAP and second column contains the specific comment and/or proposed revised language.



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND NORTHWEST
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SILVERDALE, WASHINGTON 98315-1101

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Ser EV/21-00012
20 January 2021

Department of Ecology
P.O. Box 47600
Olympia, WA, 98504-7600

Dear Washington State of Department of Ecology and Health representatives:

The Navy appreciates the opportunity to review the Draft Per- and Polyfluoroalkyl Substances (PFAS) Chemical Action Plan (CAP) issued for public comment on October 7, 2020. The Navy's comments pertain to the PFAS drinking water and groundwater investigation at and near Naval Air Station Whidbey Island. The Navy's intent in providing comments on this information is to ensure the CAP reflects accurate facts regarding the investigation. The comment table in Enclosure 1 is organized in two columns: the first column contains the location of information in the Draft CAP and second column contains the specific comment and/or proposed revised language.

If you have any questions on the comments, please contact my point of contact Ms. Kendra Clubb, who can be reached at (360) 396-0022 or kendra.leibman@navy.mil.

Regards,

A handwritten signature in cursive script, appearing to read "Dina Ginn", is written over a circular stamp.

Dina Ginn

Environmental Restoration Manager
By title

Enclosure: (1) Draft Per- and Polyfluoroalkyl Substances Chemical Action Plan Comment Table

**Washington State Department of Ecology and Department of Health
Per- and Polyfluoroalkyl Substances Draft Chemical Action Plan
October 2020, Publication 20-04-035**

Reviewer: Kendra Clubb, Naval Facilities Engineering Systems Command Northwest
Kendra.leibman@navy.mil; 360-396-0022

Section, Page	Comment
<p>PFAS Assessment Summary, Economic Analysis (Appendix 10), page 42</p> <p>“The Naval Air Station Whidbey Island spent \$1.37 million, to date, for investigation and mitigation efforts. Estimated cost to add an activated carbon treatment to the Town of Coupeville’s water system is \$1.5 million.”</p>	<p>Change to: The Navy spent \$9.8M to add granular activated carbon treatment to the Town of Coupeville's water system and connect impacted private well owners to the Town's water system near Naval Air Station Whidbey Island, Outlying Landing Field (OLF Coupeville). The Navy has also spent over \$14M, to date, for PFAS investigation and other drinking water mitigation efforts.</p>
<p>Appendix 3: Source and Uses, 3.2.3 Defense Installations, page 152</p> <p>“As required by law, DOD installations in Washington no longer use AFFF containing PFAS in training operations (Shirley, 2018).”</p>	<p>Change to: Federal law requires that the Secretary of Defense prohibit the use of fluorinated aqueous film forming foam for training exercises at military installations by October 2024.</p>
<p>Appendix 3: Source and Uses, 3.2.3 Defense Installations, page 153</p> <p>“Naval Air Station Whidbey (DON, 2018, 2019).”</p>	<p>Change to: “Naval Air Station Whidbey Island (DON, 2018, 2019).”</p>
<p>Appendix 7: Health, 7.0.1 Findings, page 293-294</p> <p>“In 2019, Health published draft recommendations for state action levels for five PFAAs in drinking water: PFOS (15 ppt), PFOA (10 ppt), PFNA (14 ppt), PFHxS (70 ppt), and PFBS (1,300 ppt).”</p>	<p>In 2020, the proposed PFBS state action level changed to 860 ppt. I recommend changing the value to reflect the updated 2020 proposed PFBS state action level of 860ppt.</p>
<p>Appendix 7: Health, Figure 45, page 323</p> <p>Call-outs: “Naval Air Station Whidbey Island (also Town of Coupeville PWS, private wells off-base)” and “Naval Base Bangor-Kitsap (private wells off-base)”</p>	<p>Change call-outs to (changes underlined for clarity, not for the document):</p> <p>“Naval Air Station Whidbey Island (<u>private and community wells off-base</u>)</p> <p>“Naval Base <u>Kitsap – Bangor</u> (private wells off-base)</p>

Appendix 7: Health, 7.4.2 NAS Whidbey Island, 2016-2019, page 324 and 326

Page 324:

“In 2016, the NAS Whidbey Island began offering PFAS water testing in off-base drinking water wells located within one mile from potential or known release sites of AFFF on the base. Water results were compared to the 2016 EPA health advisory level for PFOA and PFOS. Subsequent sampling rounds have “stepped out” in a half-mile radius from exceedances of PFOS or PFOA in drinking water.”

“As a result of this new information, the Navy expanded its off-base drinking water sampling near Ault Field, specifically without one-half mile of Clover Valley Stream and Dugualla Bay. No exceedance of the EPA health advisory was identified.”

Page 326:

“The Navy provides bottled water to residents whose results for PFOA or PFOS exceed the EPA health advisory until a long-term solution is developed and implemented.”

“In addition to private wells, two Group A public water systems in the area were found to have PFAS detections. The Town of Coupeville is located near OLF. Coupeville’s water system blends water from multiple wells, most of which are not impacted, so tap water has remained below the EPA health advisory for PFOA and PFOS (Hinds, 2017). Water testing results from two specific wells in March 2019 showed PFOA concentrations ranged from 0.022 – 0.061 µg/L (Anatek Labs Inc., 2019). Detectable levels of PFHxS and PFHpA were also present (see Table 69). As part of the long-term

Change the excerpts as follows (changes underlined for clarity, not for the document):

Page 324:

“In 2016, the NAS Whidbey Island began offering PFAS water testing in off-base drinking water wells located within one mile from potential or known release sites of AFFF on the base. Water results were compared to the 2016 EPA health advisory level for PFOA and PFOS. Subsequent sampling rounds have “stepped out” in a half-mile radius in the direction of groundwater flow from exceedances of PFOS and/or PFOA in drinking water.”

“As a result of this new information, the Navy expanded its off-base drinking water sampling near Ault Field, specifically within one-half mile of Clover Valley Stream and Dugualla Bay. No exceedance of the EPA health advisory was identified.”

Page 326:

“The Navy provides bottled water to residents whose results for PFOA and/or PFOS exceed the EPA health advisory until a long-term solution is developed and implemented.”

“In addition to private wells, two Group A public water systems in the area were found to have PFAS detections. One of these systems is the Town of Coupeville’s water system, which is located near OLF Coupeville. Coupeville’s water system blends water from multiple wells, most of which are not impacted, so tap water has remained below the EPA health advisory for PFOA and PFOS (Hinds, 2017). Water testing results from two specific wells in March 2019 showed PFOA concentrations ranged from 0.022 – 0.061 µg/L (Anatek Labs Inc., 2019).

<p>solution to address PFOA above the EPA’s health advisory in eight private wells, the Navy recently installed a granulated activated carbon treatment system to remove PFAS from the Town’s blended water system. The treatment system is routinely tested to ensure that these PFAS are removed. The second Group A public water system with PFOA and PFOS combined above the EPA health advisory is a mobile home park near Area 6. The long-term solution being considered for this system is connection to the Oak Harbor Water System. The Navy also sampled the Admiral’s Cove Water District. The water district had no detections of PFOS and PFOA at the time of sampling.”</p>	<p>Detectable levels of PFHxS and PFHpA were also present (see Table 69). As part of the long-term solution to address PFOA above the EPA’s health advisory in eight private wells, the Navy recently installed a granulated activated carbon treatment system to remove PFAS from the Town’s blended water system <u>and connected impacted private well owners to the Town’s water system (Navy, 2018)</u>. The treatment system is routinely tested to ensure that these <u>PFOS and PFOA</u> are removed <u>below the EPA’s health advisory</u>. The second Group A public water system with PFOA and PFOS combined above the EPA health advisory is a mobile home park near Area 6. The long-term solution being <u>conducted</u> for this system is connection to the Oak Harbor Water System <u>(Navy, 2020)</u>. The Navy also sampled the Admiral’s Cove Water District <u>and Crockett Lake Water District</u>. <u>Both</u> water districts had no detections of PFOS and PFOA at the time of sampling.”</p> <p>References added are below (please contact reviewer for copy of these documents):</p> <p>Navy, 2018. Final Action Memorandum, Town of Coupeville Water System Improvements, Naval Air Station Whidbey Island, Outlying Landing Field, Coupeville Washington, July.</p> <p>Navy, 2020. Final Action Memorandum, Ault Field and Area 6 Drinking Water, Naval Air Station Whidbey Island, Oak Harbor, Washington, June.</p>
<p>Appendix 7: Health, 7.4.2 NAS Whidbey Island, 2016-2019, page 326, last paragraph in section</p>	<p>Please add the following at the end of the last paragraph in this section:</p> <p>The NAS Whidbey Island PFAS website, https://navfac.navy.mil/NASWIPFAS, contains additional information on the on-base and off-base PFAS investigations.</p>

Appendix 7: Health, 7.4.10 Washington state testing site summary, Table 69. First table below includes current contents in Table 69 for Whidbey Island. The second table below includes recommended changes (see underlined changes).

NAS Whidbey Island ^b	2016 to 2019	Town of Coupeville; Evergreen Mobile Home Park; 20 private, 4 Group B wells	0.006 – 7.7 ^e	0.004 – 9.9	PFOS PFOA PFHxS PFHxA PFHpA PFNA PFBS	Bottled water or PUR filter provided when tap water is above health advisory level until long-term solution installed
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NAS Whidbey Island ^b	2016 to 2019	Town of Coupeville; Evergreen Mobile Home Park; 20 private wells; 4 Group B wells	0.006 – <u>8.08^e</u>	0.004 – <u>9.68</u>	PFOS PFOA PFHxS PFHxA PFHpA PFNA PFBS	Bottled water or <u>kitchen sink filter system</u> provided when tap water is above health advisory level until long-term solution installed
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