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Robert W. Ferguson, Attorney General of Washington Counsel for Environmental Protection 800 Fifth Avenue, Suite 2000 TB14 Seattle, WA 98104 Page 1 of 3

ATTEN: William Sherman, Assistant Attorney General, Aurora Janke, Special Assistant Attorney General RE: State of Washington v. Navy Case 2:19-cv-010509

Dear Attorney General Ferguson,

The State's willingness to stand up to the Navy on behalf of its people, wildlife, and environment is appreciated. Expressed concerns about the impacts of noise on people, wildlife and historic properties are appropriately addressed in the Attorney General's National Environmental Policy Act (NEPA) lawsuit. However, the harms and threats posed to people and wildlife by the Navy's releases of per- and polyfluoroalkyl substances ("PFAS") to public waters were ignored.

The State's lawsuit identifies the *noise* threats to the habitat for various bird species, other terrestrial wildlife, and marine mammals. The lawsuit does not, but should also address the discharges of toxic PFASs to their habitat. At least six PFASs are being discharged—and will be discharged to waters classified by the State as "extraordinary" for aquatic life uses, protected shellfish harvesting, and threatened and endangered Orcas.

The State's lawsuit addresses health harms to people and wildlife caused by F-18 Growler noise. The lawsuit should address the harms and risks to people and wildlife from exposure to toxic PFASs coming from the aqueous film-forming foam ("AFFF") the Navy continues to use.

As pointed out in a similar legal action, PFAS are toxic to humans in very small concentrations. They are suspected carcinogens and have been linked to growth, learning and behavioral problems in infants and children; fertility and pregnancy problems, including pre-eclampsia; interference with natural human hormones; increased cholesterol; immune system problems; and interference with liver, thyroid, and pancreatic function. PFAS have been linked to increases in testicular and kidney cancer in human adults. The developing fetus and newborn babies are particularly sensitive to PFAS.

PFAS are persistent in the environment, bio-accumulative, and highly mobile in water. They accumulate in animals in the food chain. Top-level predators concentrate PFAS in their blood and muscle tissues, causing harmful effects including reproductive harm. The EIS fails to discuss, address or analyze the effects of PFAS on wildlife, including marbled murrelets and southern resident orcas, other marine mammals, and other wildlife in the aquatic food chain.

Clearly, the Navy's Environmental Impact Statement (EIS) did not adequately analyze and disclose the environmental impacts and consequences of the Proposed Action with respect to PFAS. The reality of those impacts are evidenced by the contamination of a whole Town's water supply, an untold number of private and public wells, and the surface waters going to Dugualla Bay.

Please consider the information in this letter and attachments. Find a way to address the water contamination issue, either by amending the State's Complaint or by filing another action. Any settlement discussions with the Navy should address both noise and water impacts. The Navy's legacy of PFAS pollution will be with us long after the problematic jet noise has stopped.

## **PFAS Impacts and Threats to Groundwater**

Adding 36 aircraft and increasing annual airfield operations at the Whidbey Island Complex to more than 112,000 operations annually will increase the possibility of an aircraft accident and the use of PFAS containing AFFF. The EIS fails to adequately analyze measures to mitigate the impacts of PFAS releases that would occur at an accident site. The 1982 crash and burning of a Navy jet next to the Coupeville OLF and a more recent 2016 accident on an Ault Field runway demonstrate that accidents can and do happen.

- The impacts of PFAS contaminated groundwater are well documented. The PFAS in the foam that residents witnessed being sprayed at the OLF runway ended up in private and public wells. They also ended up in the water going to Coupeville residents, businesses, Coupeville District Schools Whidbey General Hospital. They have also accumulated in the blood of contaminated well owners at levels many times higher than EPA's Health Advisory Level.
- There are approximately 100 wells in one-mile plus radius surrounding the OLF, some serving multiple residences. Although the Navy is now paying to filter the Town of Coupeville's drinking water, an accident at or near the OLF could contaminate the aquifer and further impact public and private wells.
- There are approximately 600 wells at risk within a three-mile radius of Oak Harbor's Ault Field, some serving
  multiple residences. An accident in the area could contaminate the aquifer and further impact public and
  private wells.
- The Navy has represented that an aircraft accident site involving the use of AFFF would be immediately cleaned up. However, it takes time to conduct the required investigation of an accident site—during which PFASs will seep through soils, especially those that are sandy and wet, and make their way to groundwater.
- The EIS does not address how a contaminated accident site will be cleaned up or how it will be tested and
  monitored to assure a cleanup was thorough. Neither does it address how contaminated soil and debris will be
  disposed so as not to be re-introduced PFASs to the environment at another location.
- The increased operations at the Navy's Whidbey Island complex will increase the potential for a petroleum-based fires unrelated to an aircraft crash. Such fires could occur at fuel storage areas or in hangers were aircraft are kept and maintained. The potential for such fires is referenced in Navy documents and evidenced by the existing AFFF fire suppression systems within the Navy complex.

## **PFAS Impacts and Threats to Surface Water**

In October of 2018 the Navy revealed that *two* PFASs had been found in Clover Valley Creek and Lake. However, it was not until mid-October 2019, a year later, that reports were posted on a Navy website showing that *six* PFASs had actually been found—and were found in every monthly sample from September 2018 to September 2019. The levels of PFASs exceeded the EPA's Health Advisory Level many times over. (See Attachments 1, 2)

There are 114 properties in the Clover Creek and Lake area where water is still used for irrigating. Cattle graze on grass flooded by PFAS containing water. Swans, Geese and Ducks can be seen in those fields and in the PFAS contaminated water nearby. Clover Valley Creek and Lake empties to Dugualla Bay and a Salmon Restoration Area. Test results of private water wells in the Clover Creek Area from January 2019 revealed the contamination of three wells with PFOA, PFHXS and/or PFBS. The family with the most contaminated well didn't receive results until October 21, 2019, nine months later.

The Navy has attributed the PFAS in its storm water to historically contaminated groundwater entering its sewer system. However, the following has come to my attention regarding the Navy's own investigation into the discharges.

- Releases occurred during the "testing of hanger and other fixed systems" and from the collecting and storing
  of "spent AFFF solution". AFFF systems are referenced at Hanger 6, Hanger 8, Hanger 9 Hanger 11, and the
  C-40 hanger.
- PFAS was found in the storm water sewer line leading from a ground support maintenance shop towards Hanger 6.
- Samples collected in November 2018 "indicate contamination is not limited to Hanger 6. Elevated PFAS levels were found in the two laterals leading from Hanger 8/10 and 11 at levels of 843 ppt (parts per trillion) and 31 ppt respectively."
- PFASs were found at 122,000 ppt in an oil water separator on the north side of the hanger that formerly served the interior trench drains.
- PFAS were found at 639 ppt in a storm sewer line leading from building 995 ground support maintenance shop towards hanger 6.

- PFASs above EPA's advisory limit were also found in a in a Clover Creek tributary leading from the former
  Area 6 landfill to the runway ditches. In addition to PFAS, Area 6 landfill contains 1,4 Dioxane,
  Trichloroethylene, Dichloroethene, Trichloroethane, and Vinyl Chloride. The Navy refuses to say if sampling
  for these chemicals took place, even though they could be in stormwater discharges to Dugualla Bay.
- A May 2017 Navy document noted, "Currently approximately 70,000 gallons of AFFF-contaminated water is being stored in tanks that are not designed for long term storage and may be leaking to the environment."
- Navy recently altered its stormwater drainage system by dredging portions of Clover Valley Creek and using
  the PFAS contaminated dredged materials to build a berm on one side of the Creek. The effect of doing this
  redirected contaminated stormwater water onto wetlands and private property during times of high water.
- The EIS fails to address appropriate controls or measures to prevent the above referenced releases. History tells us these releases will not be addressed by regulatory agencies.

The EPA drafted a NPDES and Storm Water Permit for discharges to Clover Valley Creek and Dugualla Bay. The public comment period on the proposed permit ended November 14, 2019, much of it having passed without the public knowing about the PFASs. EPA permit writers acknowledged that the proposed Permit was prepared without knowledge of the PFAS contaminated discharges.

Ironically, the proposed Permit called on the Navy to educate the public about "Resident Killer Whales"—but it didn't require monitoring for the PFASs that are known to accumulate in marine mammals and fish. The EPA has considered revising and re-publishing its NPDES Permit for comment. However, EPA officials point to their limited authority to address PFAS releases. (See Attachments 3, 4)

The citizens of Whidbey Island have learned from experience that they can't count on the Navy for a timely and adequate response to PFAS contamination. Navy PFAS investigations are flawed by design so as not to identify the true extent of its contamination. PFASs that do not meet the Navy's threshold limit for action are left in place with no follow up action planned. There is little or no meaningful oversight by state or federal regulatory agencies. (Attachment 5)

I fully understand the limited recourses provided by NEPA. But it is clear the Navy EIS failed to consider the very real threats to our public waters, perhaps more so than it failed to consider the impacts from noise. Please consider this an open letter and address the issue. Feel to contact me with questions.

Sincerely,

Richard Abraham

Cc: Interested Parties