



July 11, 2017

Secretary John Wiesman  
Washington State Department of Health  
PO Box 47890  
Olympia, WA 98504-7890

Dear Secretary Wiesman:

A serious public health threat has emerged in Washington that needs your immediate attention. As you know, perfluorinated chemicals (PFAS), which are linked to multiple health effects including cancer, have been detected in the drinking water of several Washington communities, including Whidbey Island, Issaquah, and Airway Heights. We thank the Department of Health (DOH) for taking actions to test and help address this contamination. However, we are concerned that Washington state does not have a drinking water standard for these chemicals and that state residents are not adequately protected.

PFAS levels in residential wells near the naval air station on Whidbey Island were found at more than triple US EPA guidelines, most likely due to the use of firefighting foams. Issaquah also faced PFAS contamination from use of firefighting foam, requiring the installation of a filtration device for its municipal drinking water supply. And in May, a number of wells in Airway Heights community near the Fairchild Air Force Base in Spokane were found to be contaminated.

Without drinking water standards for these toxic chemicals, municipalities are not required to test residential water systems for PFAS chemicals or report test results to DOH. Thus there is no oversight and enforcement for chemicals that we know are harmful to our health. Residents should not be drinking water contaminated with these chemicals. Drinking water standards will ensure that they are not.

State action is needed because there is no federal regulatory drinking water standard. The EPA only has a non-binding health guideline of 70 parts per trillion (ppt) in drinking water for two forms of the chemical (for either PFOS or PFOA or both combined).

There is scientific evidence that the EPA guideline is not protective enough. Some states, including Minnesota, Vermont and New Jersey have adopted guidelines that are more protective for PFOA or PFOS, between 14 and 35 ppt.

It is also becoming clear that additional chemicals need to be included. Four leading scientists recently published a paper in *Environmental Science & Technology* titled “A Never Ending Story of Per- and Polyfluoroalkyl Substances (PFASs)?” making the case that these compounds need to be considered as a broader class.<sup>1</sup> In their article, they state the following:

- “More than 3000 per- and polyfluoroalkyl substances (PFASs) are, or have been, on the global market, yet most research and regulation continues to focus on a limited selection of rather well-known long-chain PFASs . . . .”
- “Among the thousands of PFASs still being produced and used, there are many overlooked ones that are structurally similar to PFOS, PFOA, or their precursors, and are produced in high volumes . . . .”
- “Even though some PFASs may partially degrade in the environment and biota, they will all ultimately transform into highly stable end products . . . . Thus, when assessing and managing PFASs, all their precursors (which can be challenging to identify) need to be considered as relevant sources and managed as well.”
- “The very high persistence of PFASs leads to poorly reversible exposure to these substances in the global environment and some local/regional environments including groundwater. Past and ongoing production and use will lead to the accumulation of PFASs in the global environment . . . .”

Exposure to these compounds has been linked to a number of health concerns:

- **Cancer:** PFASs induce several types of tumors in laboratory animals, and the International Agency for Research on Cancer has designated PFOA as a possible carcinogen based on epidemiological evidence linking exposure to kidney and testicular cancer.<sup>2-4</sup>
- **Hormone disruption:** laboratory animals exposed to certain PFASs show abnormal levels of hormones, including thyroid hormones and testosterone. Children exposed to greater levels show reduction in hormone levels and delayed puberty.<sup>5</sup>
- **Liver toxicity:** PFASs are associated with liver enlargement in laboratory animals.
- **Harm to the immune system:** recent research has identified the immune system as sensitive to PFASs in both laboratory and epidemiological studies. A 2012 study of 587 children found those with greater exposure to PFASs had significantly poorer responses to vaccines.<sup>6</sup>
- **Reduced birth weight:** a number of large epidemiological studies have related higher maternal exposure to PFASs to lower birth weight. These are consistent with laboratory findings of developmental toxicity.<sup>7</sup>

We understand that there are numerous sources of these chemicals in the environment, from firefighting foam to food packaging. This is why we are very supportive of the state moving forward swiftly with developing and implementing a chemical action plan.

Given the growing scientific evidence and concern in Washington with respect to drinking water contamination, we request that the DOH take the needed steps to establish drinking water standards for PFAS chemicals. We would also request a meeting to discuss these issues further

with you. Please contact Laurie Valeriano, Executive Director, Toxic-Free Future to arrange a meeting. Her contact information is 206-200-2824 or [lvaleriano@toxicfreefuture.org](mailto:lvaleriano@toxicfreefuture.org).

Thank you very much for your attention to this critical matter.

Sincerely,

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## References

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