



Know your environment.
Protect your health.

Comments submitted to the National Environmental Justice Advisory Council (NEJAC)

Sent via email to Nejac@epa.gov on August 27, 2020

These written comments are submitted on behalf of the Environmental Working Group (EWG), a nonprofit research and advocacy organization based in Washington, D.C. These comments are provided in response to a request made by NEJAC following the discussion of EWG public comments presented during the August 19, 2020, NEJAC public meeting.

EWG applauds the NEJAC leadership for advocating for environmental justice for communities, and for your 2019 recommendations to the EPA to strengthen the Agency's PFAS Action Plan.¹ The extent of American communities' confirmed contamination with the highly toxic fluorinated compounds known as PFAS continues to grow at an alarming rate. EWG's analysis documented that as of July 2020, 2,230 locations in 49 states are known to have PFAS contamination.² As alarming as this information is, the full extent of PFAS contamination has yet to be revealed, and tests continue to identify new locations where PFAS pollution affects water, soil, air – and the people who live in those locations.

With this letter, we would like to bring to NEJAC's attention a recent peer-reviewed article on the "Scientific Basis for Managing PFAS as a Chemical Class," published in the journal *Environmental Science & Technology Letters*.³ In this study, a group of U.S. and international scientists emphasized that the current approach to regulating and managing PFAS has failed to protect public health. The study recommended a new approach that classifies all PFAS as concerning and provided a scientific rationale for businesses and governments to eliminate non-essential uses of PFAS-based materials and develop new products that avoid PFAS altogether.

PFAS chemicals affect human health at all stages of life but pose unique risks to infants and children. A peer-reviewed study co-authored by scientists at EWG and Indiana University found that 26 different PFAS compounds for which toxicological data could be identified in peer-reviewed scientific literature all displayed at least one characteristic

¹ NEJAC Letter Regarding the PFAS Action Plan. August 14, 2019.

<https://www.epa.gov/environmentaljustice/nejac-letter-regarding-pfas-action-plan>

² Environmental Working Group. PFAS Contamination in the U.S. (July 20, 2020).

https://www.ewg.org/interactive-maps/pfas_contamination/map/

³ Kwiatkowski C.F., Andrews D.Q., Birnbaum L.S., Bruton T.A., DeWitt J.C., Knappe D.R.U., Maffini M.V., Miller M.F., Pelch K.E., Reade A., Soehl A., Trier X., Venier M., Wagner C.C., Wang Z., Blum A. *Environmental Science & Technology Letters* 2020 7 (8), 532-543.

<https://doi.org/10.1021/acs.estlett.0c00255>



of known human carcinogens.⁴ The study concluded there is strong evidence that multiple PFAS induce oxidative stress, suppress the immune system, and modulate receptor-mediated effects, as well as suggestive evidence indicating that some PFAS can induce epigenetic alterations and influence cell proliferation. Jointly, these chemical and toxicological features of the PFAS family of chemicals make them very harmful to human health.

With the phaseout of the 8-carbon fluorinated compounds PFOA and PFOS from use in the U.S., manufacturers are switching to shorter-chain PFAS alternatives, and these compounds are increasingly found in the environment – and in drinking water.⁵ The toxicity risks of short-chain PFAS remain a concern. Further, short-chain PFAS have higher aqueous solubility and mobility and are harder to remove from water, compared with longer-chain PFAS.⁶

PFAS contamination in the U.S. has become a public health and environmental justice crisis that must be urgently addressed. In EWG's assessment, in order to address the PFAS contamination crisis, the EPA should shut off ongoing sources of PFAS contamination, fully investigate the scope of existing PFAS contamination, promptly notify communities harmed by PFAS contamination, and dramatically accelerate cleanup efforts.

EWG requests NEJAC to provide the following recommendations to the EPA:

- Designate PFOA and PFOS as hazardous substances under CERCLA, and consider this designation for additional PFAS substances, as proposed by H.R. 535
- Regulate PFOA and PFOS as hazardous air pollutants under the Clean Air Act, and consider regulating additional PFAS substances, as proposed by H.R. 535
- Create water quality criteria, effluent limitation guidelines, and pretreatment standards for PFAS chemicals, as proposed by H.R. 535
- Revise and strengthen EPA's interim guidance on groundwater cleanup of PFOA and PFOS
- Finalize guidance for disposal of PFAS waste that ensures the protection of vulnerable communities from additional contamination

⁴ Temkin A.M., Hocevar B.A., Andrews D.Q., Naidenko O.V., Kamendulis L.M. Application of the Key Characteristics of Carcinogens to Per and Polyfluoroalkyl Substances. *Int J Environ Res Public Health*. 2020;17(5):1668. <https://doi.org/10.3390/ijerph17051668>

⁵ Stoiber, T., Evans, S., Temkin, A.M., Andrews, D.Q., Naidenko, O.V., 2020. PFAS in Drinking Water: an Emergent Water Quality Threat. *Water Solutions* 1:40.

⁶ Li F, Duan J, Tian S, Ji H, Zhu Y, Wei Z, Zhao D. (2019). Short-chain Per- and Polyfluoroalkyl Substances in Aquatic Systems: Occurrence, Impacts and Treatment. *Chemical Engineering Journal*. 380. 122506. <https://doi.org/10.1016/j.cej.2019.122506>



Know your environment.
Protect your health.

- Create regulations implementing section 330 of the FY 2020 National Defense Authorization Act, which required that military PFAS waste be properly stored and that incineration of military PFAS waste complies with all Clean Air Act requirements, completely breaks down the PFAS, and takes place at facilities permitted under subtitle C of RCRA, as proposed by the House-passed version of the FY 2021 NDAA
- Create drinking water standards for PFOA and PFOS, and consider regulating additional PFAS under the Safe Drinking Water Act, as proposed by H.R. 535
- Update the sludge rule under the Clean Water Act to require mandatory tests for PFAS chemicals in wastewater treatment sludge
- EPA should use its data collection authorities under sections 4 and 8 of the Toxic Substances Control Act to generate more data on PFAS chemicals. In particular, EPA should quickly finalize the section 8 data call-in required by the FY 2020 NDAA
- Issue a moratorium on new PFAS chemicals under TSCA, as proposed by H.R. 535
- EPA should review its existing 5(e) orders for PFAS chemicals under TSCA to ensure they comply with the new TSCA requirements and protect vulnerable populations
- EPA should ensure that PFAS chemicals are exempt from *de minimis* reporting exemptions under the Toxics Release Inventory, as proposed by the House-passed FY 2021 NDAA. EPA should also add additional PFAS to the Toxics Release Inventory.
- Develop new analytical test methods for PFAS to expand the number that can be tested for in drinking water, as well as methods that can measure total PFAS or total organic fluorine. EPA should also develop methods to measure PFAS in other environmental media, like air and soil.
- EPA should establish final benchmark values for GenX and PFBS, and quickly produce draft toxicity values for the five PFAS currently undergoing risk assessment: PFDA, PFNA, PFHxA, PFHxS, and PFBA.

Thank you for this opportunity to provide written comments,

With best regards

Olga Naidenko,

V.P. of Science Investigations, Environmental Working Group