PEER
PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY

June 27, 2022

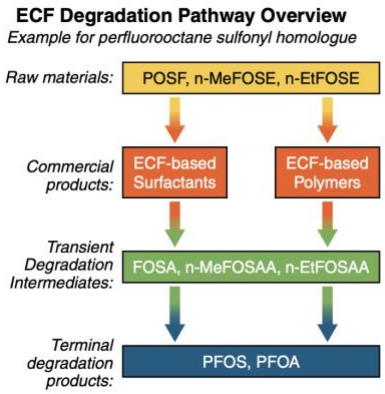
Radhika Fox
U.S Environmental Protection Agency
Assistant Administrator
Office of Water
Mail code: 4101M
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Assistant Administrator Fox:

Thank you for following the science in your new Health Advisories (HAs) for perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), two of the thousands of per-and polyfluoroalkyl substances (PFAS). Public Employees for Environmental Responsibility (PEER) believes that the U.S Environmental Protection Agency's (EPA) decision to set the Health Advisories at 4 parts per quadrillion (ppq) for PFOA and 20 ppq for PFOS are warranted and most likely protective of human health and the environment.

However, given that we now know there is virtually no safe level of PFOA and PFOS in drinking water, it is important that EPA also address the many PFAS whose terminal end products are PFOA and PFOS. As you are aware, there are a number of PFAS that transform in the environment into PFOA and PFOS via biotic and abiotic processes. This is supported by numerous studies on the physical-chemical properties (e.g., hydrolysis), environmental fate and transport (e.g., stability in environmental media) and human health and ecotoxicity studies (e.g., metabolism). Some methods of disposal (e.g., incineration) and treatment (e.g., chlorination, ozonation) can also transform a variety of PFAS into terminal end products including PFOA and PFOS. See, for example, the degradation pathway in Figure 1 that yields the terminal degradation products PFOA and PFOS.

Figure 1[1]



[1] https://pfas-1.itrcweb.org/fact_sheets_page/PFAS_Fact_Sheet_Naming_Conventions_April2020.pdf

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By failing to issue Health Advisories or regulate these PFAS that result in PFOA and PFOS as terminal degradation products, EPA is frustrating its own regulatory approach. While it is unclear how many PFAS of those currently in commerce yield PFOA and PFOS as terminal degradation products, this analysis is something that could be done, starting with generating a list of PFAS that contain PFOA and PFOS as substructures, and where the perfluoroalkyl acids for which there is a health advisory are included in the structure via a hydrolytically labile ester bond. Finally, given the complexity of PFAS chemistry, together with the incredible toxicity of some of these compounds, PEER believes that regulating PFAS as a class is the only way to avoid regrettable substitutions, and protect human health. Indeed, in a recent Advanced Notice of Proposed Rulemaking, EPA stated:

> The EPA is considering an Advance Notice of Proposed Rulemaking in which the Agency will seek public input on further PFAS-related designations under CERCLA. As examples, ***the Agency may request input regarding the potential hazardous substance designation of precursors to PFOA and PFOS***; hazardous substance designation of additional PFAS; and designation, or designations of classes or sub-classes of PFAS as hazardous substances (emphasis added).[2]

Therefore, we are asking EPA to determine the universe of PFAS currently in commerce that have PFOA and PFOS as terminal end products, and place additional Health Advisories on those chemicals as well. Failure to address these other PFAS will result in additional risk to both human health and the environment.

Thank you for your attention to this matter.

Sincerely,

Timothy Whitehouse
Executive Director

[2] https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202204&RIN=2050-AH25