

Via email

4 November 2022

Mr. Michael S. Regan, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: Proposed Rule - Comprehensive Environmental Response, Compensation, and Liability Act Hazardous Substances: Designation of Perfluorooctanoic Acid and Perfluorooctanesulfonic Acid (Docket ID no. EPA-HQ-OLEM-2019-0341)

Dear Administrator Regan,

Purdue University in West Lafayette, Indiana thanks you for the opportunity to comment on this proposed rule.

Background: EPA's PFAS Strategic Roadmap: EPA's Commitments to Action 2021–2024 (“Roadmap”) identifies research as a central directive: “...*Research. Invest in research, development, and innovation to increase understanding of PFAS exposures and toxicities, human health and ecological effects, and effective interventions that incorporate the best available science...*” Specifically, the research objectives contained in the Roadmap are:

- “...Build the evidence base on individual PFAS and define categories of PFAS to establish toxicity values and methods.
- Increase scientific understanding on the universe of PFAS, sources of environmental contamination, exposure pathways, and human health and ecological effects.
- Expand research on current and emerging PFAS treatment, remediation, destruction, disposal, and control technologies.
- Conduct research to understand how PFAS contribute to the cumulative burden of pollution in communities with environmental justice concerns...”

Purdue University is a land grant R1 institution located in West Lafayette, Indiana. The institution has a long history of collaborative work with the United States Environmental Protection Agency. There are several researchers at Purdue who study PFAS in the environment and have funding from EPA aligned with the Roadmap to do this very important work. The following PFAS—related grants at Purdue are currently active with the EPA:

EPA National Priority/Unregulated Chemicals in Biosolids: Prioritization, Fate and Risk Evaluation for Land Applications (2021 – 2024); Total \$ 1,497,907, Purdue \$585,000, Lee, PI

EPA National Priority/Evaluating PFAS Occurrence and Fate in Rural Water Supplies and Agricultural Operations to Inform Management Strategies 2020 – 2023; Total EPA \$ 1,609,344; Lee, PI

EPA Science to Achieve Results/Decreasing polyfluoroalkyl substances (PFAS) in municipal wastewater effluent and release from land-applied biosolids; 2019 – 2023 (no cost extension year); Total \$ 899,976; Lee, PI

EPA-G2022-STAR-A1/Protein Binding Affinity as the Driver for Studying PFAS Mixture Toxicity, 2022-2025, Total \$ 725,481, Sepulveda (PI), Hoverman, Lee, et al (co-PIs)

These research projects produce a variety of PFAS containing wastes that the University manages through the Radiological and Environmental Management Hazardous Materials group. Disposal costs are centrally funded from overhead derived from the researchers' grants. Some of the PFAS research wastes are solvents containing low levels of PFAS; others are large quantity (thousands of gallons) of water from microcosm

studies also containing low levels of PFAS. At this time, these wastes are either used in energy recovery or solidified and then landfilled in a Subtitle D landfill (water wastes).

Comment: The designation of PFAS as a hazardous substance under CERCLA could have the collateral impact of making companies that currently offer final disposal of PFAS wastes from research unwilling to manage PFAS wastes in the future due to fear of liability. This could have a severely detrimental effect on the progress of research by essentially disallowing production of PFAS containing research wastes. Important information is derived from controlled environmental exposure to PFAS but this work cannot be conducted without a way to dispose of wastes. We encourage EPA to consider this possible outcome in the final rule and develop a way to encourage vendors to stay in the business of managing PFAS wastes.

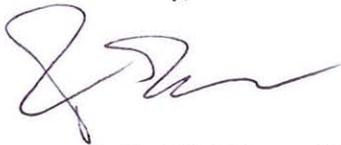
Comment: The designation of PFAS as a hazardous substance is a stepping stone on EPA's path to final designation of PFAS wastes as hazardous wastes (*ref.* EPA letter to Honorable Michelle Lujan Grisham, Governor of New Mexico, October 26, 2021). Designation of research wastes containing low levels of PFAS as hazardous wastes will add tremendous financial burden to Purdue's researchers who are trying to answer the questions contained in EPA's Roadmap.

- **Water PFAS wastes:** The water wastes generated from one research group at Purdue studying ecological impacts of PFAS produced 20,000 gallons of water waste from August 2021 to September 2022. The current cost to manage that waste is approximately \$30,000/year. If the water waste were classified as hazardous waste, this cost would increase to approximately \$350,000; a 12 fold increase.
- **Solvent PFAS wastes:** Another research group at Purdue generates approximately 200 gallons of solvent based wastes over the course of a year. This waste currently goes to an energy recovery waste disposal profile for approximately \$200/year. If Purdue then had to dispose of the solvent based PFAS wastes as hazardous waste, the cost would increase to \$2,900/year.
- **Solid debris contaminated with PFAS wastes:** An additional research group that generates solid debris wastes with PFAS currently produces the equivalent of 31 55-gallons drums of waste per year. Currently this debris cost very little to dispose of. If it were to get classified as hazardous waste, the cost for the same amount of material would increase to approximately \$4,100/year

Purdue encourages EPA to consider the fiscal impact on research waste disposal as this cost is central to these researchers' ability to conduct the kind of work that EPA needs as guidance for the Roadmap. Perhaps consideration of a partial or full exemption from the hazardous substance designation and hazardous waste regulations for these wastes and/or allowance for innovative treatment techniques.

I welcome the opportunity to discuss these comments further with EPA; I may be contacted via email at rmridgway@purdue.edu or by phone at 765-496-6405

Sincerely,



Robin Mills Ridgway, PhD, PE, CHMM

*Interim Hazardous Materials Manager
Director of Environmental Health and Safety Regulatory Compliance*