February 20, 2026

Chair Brian J. Feldman
Education, Energy, and the Environment Committee
Maryland General Assembly
2 West Miller Senate Office Building
Annapolis, Maryland 21401

RE: Testimony in Opposition to SB 719: Sewage Sludge - Per- and Polyfluoroalkyl Substances - Regulation

Dear Chair Feldman, Vice Chair Kagan, and Members of the Maryland Senate Education, Energy, and Environment Committee:

Thank you for the opportunity to provide testimony on SB 719. Just Zero opposes this bill and urges the committee to submit an unfavorable report on the bill. While we appreciate the legislature's recognition that PFAS contamination in sewage sludge is a serious and urgent problem, this bill ultimately sets standards that are not protective of public health or the environment. By establishing thresholds that still allow PFAS-contaminated sludge to be spread on land, the bill risks creating a false sense of safety and progress while perpetuating the very harms it seeks to address.

Just Zero is a national environmental nonprofit advocacy organization that works in partnership with communities, policymakers, scientists, educators, and organizers to advance just and equitable solutions to climate-damaging and toxic production, consumption, and waste systems. We believe all people deserve Zero Waste solutions that deliver zero climate-damaging emissions and zero toxic exposures, while strengthening local economies and public health.

Just Zero is also a founding member of the Coalition for Sludge Free Land which is a national alliance of organizations working to prevent the contamination of soil, water, and food and the destruction of livelihoods caused by the land application of sewage sludge[1] and sludge-derived products. The Coalition's mission is to stop the spreading of sewage sludge on farms, fields, gardens, and other land and to advocate for responsible containment and reduction of this toxic by-product of wastewater treatment.

[1] Sewage sludge is sometimes interchangeably called "sludge" and "biosolids." For this testimony, we will be using the term "sewage sludge" and "sludge."

This testimony is submitted on behalf of Just Zero and the undersigned members of the Coalition for Sludge Free Land.

I. Sewage Sludge is a Noxious By-Product of Wastewater Treatment

Sewage sludge is marketed as beneficial and cheap "fertilizer" but understanding how sludge is made demonstrates how it should never be land applied. The process first starts with all the waste that goes into the sewer. This includes industrial waste, hospital waste, commercial waste, landfill leachate, human waste, storm water runoff, and every other kind of waste that goes down the drain. This material is then sent to a wastewater treatment facility (WWTF) where it is treated to meet water quality standards. The treated water is then discharged into rivers, lakes, and oceans. What remains is a noxious by-product referred to as sewage sludge—a mud-like material containing hundreds of known toxic contaminants. This includes heavy metals, microplastics, and synthetic chemicals such as per- and polyfluoroalkyl substances (PFAS).[2] WWTFs are not designed or equipped to remove or destroy these compounds. Any policy that allows land application of sludge containing PFAS effectively transfers contamination from wastewater systems into soil, groundwater, and food chains.

II. Land Applying Sewage Sludge Contaminates Food, Soil, and Water with PFAS—Harming Public Health and the Environment

PFAS are a group of approximately 15,000 synthetic chemicals and used in textiles, packaging, automotive, aerospace, firefighting, and electronics because of performance qualities that include heat, water, and stain resistance.[3] They are often called "forever chemicals" because their chemical structure is one of the strongest in organic chemistry and do not break down in the environment.

PFAS compounds are known to be toxic to humans in concentrations as low as single-digits parts per trillion (ppt).[4] These chemicals are associated with growth, learning, and behavioral problems in infants and children; fertility and pregnancy problems; interference with natural human hormones; increased cholesterol; immune system disruption; and, interference with liver, thyroid, and pancreatic function.[5] The U.S. Environmental Protection Agency (EPA) now designates two common and highly toxic PFAS compounds found in sewage sludge—perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS)—as hazardous substances.[6]

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[2] Jochen Heidler & Rolf Halden, *Meta-analysis of mass balances examining chemical fate during wastewater treatment*, 42 Environ. Sci & Technol. 6324 (2008).
[3] U.S. Env't Prot. Agency (EPA), CompTox Chemicals Dashboard (last updated Oct. 24, 2025).
[4] U.S. Agency for Toxic Substances and Disease Registry (ATSDR), Toxicological Profile For Perfluoroalkyls, U.S. Dep't of Health & Human Serv., 5–6 (May 2021).
[5] *Id.*
[6] 40 C.F.R. § 302; EPA, Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, (May 8, 2024).

Spreading sewage sludge on land provides a direct route for PFAS to contaminate food, soil, and water.[7] A recent EPA study determined that land applying sewage sludge with just 1 part per billion (ppb) of PFOA or PFOS can increase cancer risks and other health hazards by at least 1,000 times the acceptable limits.[8] Once spread, PFAS can then remain in soil for years, increasing PFAS concentration with multiple applications.[9]

Against scientific consensus, SB 719 allows the land application of sludge containing PFAS concentrations just below 50 ppb. This limit is arbitrary and not based on established research indicating that there are no safe levels of PFAS exposure. While SB 719 requires additional monitoring and mitigation planning for sludge with PFAS concentrations of 25 to under 50 ppb, it does not stop sludge with these levels from being land applied. This is just acknowledging the risk without stopping it. We support efforts to track and minimize PFAS from entering the wastewater treatment system but prohibiting the use of sludge as a fertilizer is critical to stemming public PFAS exposure.

PFAS from land application of sewage sludge can also migrate as far as 17 meters to underlying groundwater.[10] Recognizing the serious risks of PFAS exposure through drinking water, the EPA set enforceable drinking water limits for PFOA and PFOS at 4 ppt.[11] The agency went a step further setting a maximum contamination level goal of zero for both compounds.[12] By permitting land application of sludge with such high PFAS levels, SB 719 is allowing further PFAS contamination in Maryland's water that may reach levels higher than the federal limits.

III. Blending Sewage Sludge Does Not Reduce Risk, It Spreads It

PFAS concentrates within sewage sludge at extremely high levels.[13] A 2025 Massachusetts report showed that every sludge sample taken at 114 WWTFs in the state had high concentrations of PFAS, ranging from thousands to millions parts per trillion (ppt).[14] SB 719 perversely recognizes this tendency for sludge to have high concentrations of PFAS, by temporarily allowing sludge to be blended with other material with the aim of reducing PFAS concentration so that it can be spread on farmland as a fertilizer. However, this tactic does not

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[7] Ali Behnami et al., *Biosolids, an important route for transporting poly- and perfluoroalkyl substances from wastewater treatment plants into the environment: A systematic review*, 925 Sci. of the Total Env't 171559 (2024).
[8] 90 Fed. Reg. 3864 (Jan. 15, 2025); EPA, EPA-820P25001, Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) CASRN 335-67-1 and Perfluorooctane Sulfonic Acid (PFOS) CASRN 1763-23-1 (2025).
[9] Arjun Venkatesan & Rolf Halden, *Loss and in situ production of perfluoroalkyl chemicals in outdoor biosolids–soil mesocosms*, 132 Env't Res. 321 (2014).
[10] Gwynn Johnson, *PFAS in soil and groundwater following historical land application of biosolids*, 211 Water Res. 118035 (2022).
[11] 40 CFR § 141.
[12] *Id.*
[13] Heidler & Halden, *supra* note 2.
[14] Mass. Dept. of Environmental Protection (MassDEP), *Data Analysis Report: PFAS Testing Study for NPDES POTWs (PRF-77)*, (2025).

remove PFAS, it simply contaminates whatever material is used to blend with sludge thereby increasing the volume of toxic material that must then be managed.

Furthermore, contamination in sludge extends beyond PFAS to other harmful. Like PFAS, pharmaceuticals, industrial chemicals, and other hormone disrupting compounds in sludge also resist degradation and accumulate in the environment after being applied to land. SB 719 does not acknowledge the other contaminants in sludge, and with such a high threshold for PFAS contamination one can be sure that other contaminants harmful to human health will also be spread.

IV. SB 719 Conflicts with Maryland's Leadership on PFAS

Maryland has been a leader in the last few years in acknowledging that PFAS is a threat to public health. In the landmark George "Walter" Taylor Act, Maryland banned PFAS in firefighting foam, food packaging, carpets, and rugs. George "Walter" Taylor, was a Maryland firefighter for over three decades who passed away from cancer related to PFAS exposure through his job.[15] This law recognizes that PFAS pose unacceptable risks to our bodies and should not be in our homes or near the food we eat. Building on this progress, the legislature is currently considering a bill that would ban PFAS in a broader range of consumer products, including cosmetics, cookware, cleaning products, textiles, and paint.[16]

SB 719 stands in direct tension with these efforts. While the state is moving to eliminate PFAS from everyday products because of the risks they pose, this bill would continue to allow PFAS-contaminated sludge to be spread on land where food is grown, livestock graze, and groundwater can be affected. This creates an inconsistent and scientifically unjustifiable policy framework: PFAS are treated as too dangerous to allow household goods, yet acceptable to spread across agricultural land. This contradictory framework moves Maryland backward in the goal of PFAS reduction and exposes rural communities and farmers to bear the brunt of PFAS contamination from sewage sludge.

V. Conclusion

SB 719 correctly seeks to restrict the land application of sewage sludge but wrongly establishes parameters that will, in effect, continue the practice of spreading PFAS-contaminated sludge on land and perpetuate the significant public health threat this practice poses. This bill is not protective of Maryland farmers, food, soil, water, and health. The legislature has been leaders in reducing Maryland's PFAS exposure. This bill is not an example of that leadership. We urge the committee to submit an unfavorable report on the bill and instead end the land application of PFAS contaminated sludge.

[15] Elizabeth Shewe, *Inspired by the Death of a Veteran Firefighter, Bill Would Limit Exposure to Toxic Chemical in Fire Foam and Gear*, Maryland Matters (Feb. 10, 2022).
[16] Maryland General Assembly, 449th Legislative Session, House Bill 1022 and Senate Bill 868

Thank you for your time and consideration of this testimony. If you have any questions, please reach out to me at pblair@just-zero.org.

Respectfully submitted,

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Center for Environmental Health

Clean Air Action Network of Glens Falls (NY)

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