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April 28, 2025

Honorable Denise Tepler, Senate Chair
Honorable Victoria Doudera, House Chair
Joint Legislative Committee on Environment & Natural Resources
100 State House Station
Augusta, ME 04333

Re: LD 1604, An Act to Protect Groundwater and Surface Waters from Perfluoroalkyl Polyfluoroalkyl Substances from Landfill Leachate

Senator Tepler, Representative Doudera, and members of the ENR Committee:

I appreciate the opportunity to provide comments in respectful Opposition to LD 1604.

About myself: My name is Amanda Wade. I am a current resident of the City of Gardiner and a lifelong resident of the state of Maine. I am also a licensed Professional Engineer with an Environmental focus who has been working in the solid waste field for nearly 25 years. For full transparency, I started my career as an engineer at the Maine Department of Environmental Protection (DEP) in the Solid Waste Engineering Unit providing technical support for permitting, inspection, and compliance of numerous landfills, processing facilities, transfer stations, and recycling facilities. I was the DEP's project engineer for the Juniper Ridge Landfill (initially the Old Town Landfill) and the Dolby Landfill from 2000 to 2015. In 2015, I left the DEP, have been a consulting engineer for approximately 10 years, and am currently a Solid Waste Program Manager for TRC. TRC was recently hired by the Bureau of General Services (BGS) to complete a study evaluating the amount of bulking waste required to, and available for, co-disposal with Maine's biosolids within our landfills. I am also the current President of the Northern New England Chapter of the Solid Waste Association of North America (SWANA). I am not here on behalf of any of these organizations, however, and only provide this information to show my level of experience regarding the topics before you today.

Bill Discussion: As you are aware PFAS are a class of chemicals (nearly 15,000 compounds) found in many of our everyday items and because of their properties do not easily break down in the natural environment. These chemicals have been used in fabrics, cosmetics, electronics, food packaging, fire suppression, etc. for over 70 years. The reason I present this list is to reinforce that neither landfills nor wastewater treatment plants are responsible for the production of PFAS. However, because these facilities collect and dispose or treat the

waste produced by the citizens of our state, they have become passive receivers of PFAS chemicals. Both of these facility types are highly engineered, heavily monitored, and regulated often by local, state, and federal regulations. In the last few years, these facilities, in addition to the work they are already performing to upgrade facilities and improve operations, have been asked to perform additional sampling and transition biosolids management from reuse to disposal. These early actions, while understandable, have added costs and handling concerns that have had to be absorbed within existing budgets.

Studies of PFAS disposed of within modern secure lined landfills have found that greater than 90% of the PFAS from wastes disposed within the landfill remains in the solid portion of the waste. EPA's recent guidance for disposal of PFAS waste includes disposal within a lined landfill as being protective of the environment. PFAS waste has not been classified as hazardous waste and will continue to be disposed of within Maine landfills for decades to come, even after it has been removed from manufacturing because many of the products it has been used in including carpeting and furniture will remain in circulation.

All liquid that comes in contact or is released from waste is classified as leachate. Today's lined landfills collect all leachate for treatment and are designed to protect ground and surface water from contaminants.

The disposal of biosolids within our landfills, which is comprised of 80% liquids, has only increased the quantity of leachate produced at each of these facilities.

PFAS treatment does exist and is evolving as states and the federal government evaluate the potential risks posed by these chemicals. Many landfills and WWTPs have already begun educating themselves regarding the availability and requirements of these developing technologies. The levels of PFAS chemicals (part per trillion) that are being tested for, and for which treatment is being designed, are far less than those typically treated (part per million). This requires that treatment be specifically designed to meet the needs of each facility based on its influent characteristics and effluent standards. Treatment is not a one-size-fits-all. Additionally, as discussed above, there are over 15,000 PFAS compounds and the current recommended testing methodology (EPA method 1633) only allows for accurate testing of 40.

While landfill leachate can be a source of PFAS within the flows accepted by WWTP, it is certainly not the only source and may not be the largest source. Since PFAS is a part of all residential wastewater as well as other industrial facilities, a total mass balance would need to be conducted at each WWTP to determine whether PFAS concentrations within accepted leachate increases overall levels within the facility's effluent. WWTPs are already trying to understand the sources of PFAS within their influent, to better understand their flows.

While I understand that the intent of LD 1604 is to be protective of the citizens of Maine, the timeline established within the bill does not provide adequate time for completion of the following items:

- Effluent standards to be established by MDEP (especially since drinking water standards have only been set for a small subset of PFAS compounds),

- Wastewater Treatment Plants to evaluate current PFAS levels within their influent and effluent flows to determine the appropriate treatment needs,
- Funding to be obtained by all WWTPs for design and construction,
- Design of treatment for each WWTP, and
- Construction/ installation of treatment technology.

Additionally, since WWTPs and landfills must operate collaboratively, landfills may also be tasked with providing treatment for their leachate to assist the WWTPs in achieving any imposed effluent limits. This will require that all landfills complete the same assessment, design, and construction as the WWTPs. It must also be understood that many of these landfills are owned and operated by the same municipalities that currently operate WWTPs resulting in additional fees for the users of these facilities.

Conclusion: Thank you for your time and consideration in listening to my testimony today. As an Environmental Engineer in the state of Maine, I take pride in the work that I do to design options for safe environmentally protective waste management. I also understand that the individuals who have stepped up to manage our waste (both solid and liquid) are dedicated to the protection of our residents and take their jobs seriously. Without allowing time for more science and health-based guidance from our state and federal agencies, this bill imposes added costs that could result in treatment that may be over or under designed. I respectfully request that you vote LD 1604 "ought not to pass" and allow time for the science to guide the decisions regarding PFAS treatment.

Sincerely,

A handwritten signature in cursive script that reads "Amanda S Wade". The signature is written in black ink and is positioned above the printed name.

Amanda S Wade, PE