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February 18, 2025

The Honorable Brian Feldman, Chair Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, Maryland 21401

Re: MES Support with Amendments

Senate Bill 732 – Sewage Sludge Utilization Permits – Per- and Polyfluoroalkyl Substances – Concentration Limits

Dear Chair Feldman and Members of the Committee,

The Maryland Environmental Service (MES) supports SB 732, with amendments offered by the Maryland Department of the Environment (MDE). The amendments allow MDE to establish a phased approach to set PFAS limits via regulation and also authorize MDE to establish testing requirements.

As introduced, this bill proposes to limit the amount of Perfluorooctane Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) (collectively, PFAS) present in sewage sludge for the purposes of agricultural land application to amounts not exceeding 1 microgram per kilogram (effectively, 1 part per billion or "1 PPB") or the levels established by either U.S. Environmental Protection Agency (EPA) or MDE. Analysis would need to be completed by an independent laboratory and within 14 days of the land application (with some exceptions). MDE may adopt regulations that have stricter concentration limits or if there are other types of substances that need to be added.

With over five decades of experience operating various types of wastewater treatment plants across the State, MES is the State's foremost expert in handling biosolids and wastewater sludge. We applaud the bill sponsors for starting this important conversation because we recognize the seriousness eliminating PFAS from our ecosystem. While there are existing methods of removing PFAS – such as pyrolysis, gasification, hydrothermal liquefaction, and supercritical water oxidation, some of which MES has expressed a desire to explore – these processes are currently cost prohibitive and can take years to bring online. Therefore, a secondary biosolids treatment facility system to reduce PFAS concentrations or eliminate PFAS entirely is not monetarily feasible in the short term.

With that said, reducing PFAS to 1 PPB in biosolids treatment is not attainable with current wastewater treatment processes. Establishing this threshold will bring several orders of impact.

First order impacts: the 1 PPB threshold would implement a *de facto* ban on land application of sewage sludge. In FY 24, MES managed approximately 2,700 dry tons of sewage sludge. Approximately 1,450 dry tons (or, 53% of MES's total for FY 24) were land applied from the three MES-operated facilities with a sewage sludge utilization permit for Class B biosolids treatment using lime stabilization. Since not all wastewater treatment plants (WWTPs) have dewatering infrastructure, the smaller systems that do not will transport this material to larger facilities with dewatering processes and further treatment. With the 1 PPB threshold, it is likely that larger WWTPs will require testing before sludge being hauled from smaller WWTPs can be accepted at larger WWTPs for further treatment. If sludge from smaller facilities has PFAS levels exceeding 1 PPB, then it is likely that the larger facilities will choose not to accept that material. This will force smaller WWTPs to absorb exponentially increased costs of hauling out of State.

The second order impact: landfill operations. Land application, landfilling and out of State transport are the only currently available options for handling sewage sludge and biosolids after treatment and dewatering. Out of State transport is severely cost prohibitive and is not currently a consideration. If land application is effectively banned, landfilling or out of State transport become the only remaining feasible options. Due to slope stability concerns landfills are limited in the amount of biosolids/sludge that can be accepted daily and is hugely dependent upon commercial solid waste inflow and space – no more than approximately 20 percent of the daily solid waste volume can be biosolids/sludge. Without land application, this results in a steep increase in volume of material needing to be landfilled without any net new landfill space. Therefore, biosolids/sludge tipping (acceptance) fees would likely increase significantly.

A third order impact: smaller WWTP systems that do not have the systems in place now to dewater, so they haul the sewage sludge to larger WWTP systems for further treatment. This will increase costs on smaller systems to (1) test for PFAS on a daily basis and (2) in the likely event PFAS levels would exceed the threshold established in the bill, increase costs on where to haul (both in-State and out of State) and dump the untreated sewage sludge, as most small systems rely on bigger facilities to accept and treat their sludge.

With this, MES urges the Committee to incorporate the proposed MDE amendments to SB 732 and grant the amended bill a favorable report.

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