



MASSACHUSETTS WATER ENVIRONMENT ASSOCIATION

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Dear Commissioner Suuberg

We are writing out of concern for a potential environmental and economic disaster that is visible on the horizon. That disaster is the inability of Massachusetts wastewater treatment facilities to manage their biosolids, the solid organic matter that results from modern wastewater treatment processes. Wastewater treatment facilities have been a great public health and environmental success story. This is especially true since the passage of the Clean Water Act in 1972, which brought all facilities up to the secondary treatment standard that has produced some amazing environmental results. The largest river in New England, the Connecticut, once referenced by Jo Beth Mullens and Robert S. Bristow in a 2003 research study as formally "The Nation's Best Landscaped Sewer" is now enjoyed by boaters, fishers, swimmers, and other water enthusiasts. Many locations along the river are now homes to families of eagles and other wildlife. Rivers across Massachusetts have likewise benefitted and been remarkably improved thanks to modern wastewater treatment.

In order for wastewater facilities to do their job they must be able to manage the biosolids they produce. There are two major wastewater processes, primary treatment and secondary treatment that produce these biosolids. Larger facilities dispose of their biosolids daily while smaller facilities may dispose of theirs once or twice a week. Regardless of size, no facility can hold their biosolids for long periods of time. To do so would result in poor process performance and regulatory violations.

There is a three-legged stool of biosolids management options for Massachusetts facilities – incineration (43%), land application/recycling (38%), and landfilling (18%, almost all out

of state).¹ Currently, the total capacity of these three options is pretty much full – nearly equal with the total biosolids produced by wastewater facilities. There is currently little room for error. If one leg of the stool fails, the results would be devastating for our Massachusetts facilities. Even if one major biosolids outlet goes down – such as an incinerator – the disruptions and costs impact community budgets and threaten the environment.

Presently, two legs of the stool – recycling/land application and landfilling – are being restricted due to concerns about PFAS compounds and landfill instability. “PFAS” is short for per- and polyfluoroalkyl substances. Chemicals in this class of more than 5,000 substances are found in products like nonstick pans, food packaging, waterproof jackets, and carpets. They’re also used in firefighting foam often used on military bases and at commercial airports. Even personal care products like waterproof mascaras and eyeliners, sunscreen, shampoo, and shaving cream can contain PFAS. Some research suggests possible links between PFAS compounds and various health impacts. It is very unclear at what concentration or dose of PFAS these impacts occur. Further complicating the issue is that there are thousands of different PFAS compounds with varying chemistries. To date only a handful have been studied. The best known PFAS compounds, called PFOA and PFOS, show the most probable links to negative health impacts but have also been banned from use or production in the United States and are showing a declining trend in human blood levels across the nation.

PFAS are so prevalent in our daily lives that it’s easy to see how PFAS compounds would also be in the influent to wastewater facilities. Wastewater facilities do not use or add PFAS; they are receivers of them. Some of the PFAS accumulate in the biosolids. This has been confirmed by recent research around the world, including at the University of New Hampshire.

The Massachusetts Department of Environmental Protection (MassDEP) is now requiring wastewater facilities test for PFAS in their influent, effluent, and biosolids. There are already calls to stop the recycling or land application of biosolids and, in some instances, landfill operators have stopped accepting biosolids that test positive for PFAS at any concentration. And, because of stricter slope stability concerns, landfills are accepting less wet waste, including biosolids. Two legs of the biosolids management stool are failing. And there is nowhere near enough incineration capacity to take up displaced biosolids. Prices for biosolids management have already increased at a rate much higher than inflation as those managing biosolids price in the liabilities of PFAS pollution and uncertainty and the capacity crisis. Costs to dispose of biosolids will continue to skyrocket as options dwindle.

¹ Massachusetts Sludge Survey: 2018 Wastewater Solids Generation and Management in Massachusetts Survey and Report by North East Biosolids and Residuals Association (NEBRA) for the Massachusetts Clean Energy Center September 2019.

As those costs increase so will sewer rates and costs for sewer services to Environmental Justice Communities, elderly homeowners and others who already have a difficult time paying their sewer bills. Those not on public sewer systems will also be impacted since PFAS finds its way to on-site septic systems. Septage pumped from septic tanks is usually disposed at wastewater treatment plants. If PFAS and biosolids disposal limitation continue to impact wastewater plants many will have no option but to curtail acceptance of septage. What options are then available to homeowners trying to maintain their on-site systems as urged by MassDEP and Boards of Health?

I am writing to you to make you aware of this issue of emerging concern in the Massachusetts wastewater community.

What do we recommend?

- The first and most important thing that can be done immediately is to reduce or ban non-essential uses of PFAS. Is our desire to have our eggs slide easily off our non-stick frying pan greater than our need for clean water? I think not.
- We in the wastewater treatment profession are already voluntarily working with businesses and industries upstream of treatment facilities to reduce the largest discharges of PFAS into sewers. We urge policy-makers and MassDEP to provide strong support for these pretreatment and source control efforts.
- Further regulation of PFAS chemicals must consider unintended consequences. Already, MassDEP has imposed some of the strictest drinking water and groundwater standards anywhere in the world. Those standards may already be lower than background levels of PFAS in waters and soils. All biosolids contain PFAS, and their management can sometimes cause trace releases that impact groundwater close to the very low MassDEP standards. We urge more careful consideration of impacts to wastewater and biosolids management before any further regulations are imposed.
- PFAS are being added to lists of hazardous chemicals, which means that liability is being put on anyone who manages anything containing PFAS. Wastewater treatment facilities only receive PFAS and cannot control background levels that are ubiquitous in wastewater. These public utilities and their ratepayers and communities cannot be expected to take on liability and pay for managing PFAS they receive. Wastewater treatment facilities and all of the services they contract should be exempted from liability for the background levels of PFAS in wastewater and biosolids they manage.
- The Commonwealth of Massachusetts is in a PFAS panic. At every turn there is new PFAS legislation and regulation being proposed. Most of them are well-intentioned but many are not well thought out. PFAS have been around since the 1950's, they are not new to our world. What is new is our ability to detect PFAS at levels as low

as 1 part per trillion. Our ability to find PFAS far exceeds our ability to understand the impacts, if any, they may have on our planet and its people. We urge elected officials and regulators to stop, take a breath and think things through before making further decisions on PFAS. To continue on the current track will lead to solutions that may be far worse than the problem.

Should you have any questions, please feel free to contact us to discuss this issue.

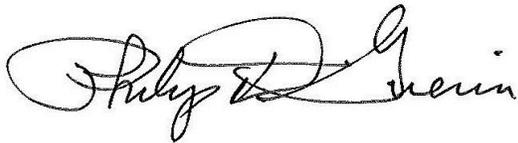
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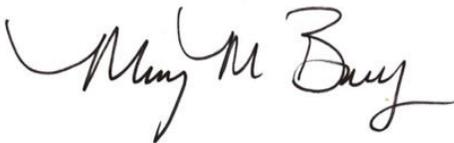
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