New York Water Environment Association, Inc.

The Water Quality Management Professionals

525 Plum Street, Suite 102 • Syracuse, New York 13204
(315) 422-7811 • Fax: 422-3851 • www.nywea.org

March 19, 2025

Senator Pete Harckham
State Legislative Office Building
Room 315
Albany, New York 12247

Assemblymember Anna Kelles
State Legislative Office Building
Room 538
Albany, New York 12248

Re: Senate Bill S5759 and Assembly Bill A6192
Relates to the management of PFAS in biosolids in the state by establishing a moratorium on land application of biosolids and requiring testing and reporting of certain groundwater, biosolids, and soil

Dear Senator Harckham and Assemblymember Kelles,

The New York Water Environment Association (NYWEA) is a professional organization of 2,500 members that serves the best interest of the public by promoting sustainable clean water quality management through science, education, and training. Many NYWEA members work at or support water resource recovery facilities (WRRFs, i.e. wastewater treatment facilities) big and small across New York State. These critical facilities – and the professionals that operate, maintain, and improve them – have enhanced water quality, protected public health, and service the needs of our local communities 24-hours a day, 7-days a week.

Stakeholders representing many interests are rightly concerned about contaminants like PFAS, including NYWEA. NYWEA and its members take their roles in protecting the environment and public health seriously and recognize there are troubling effects related to PFAS contamination.

We are committed to addressing PFAS concerns related to the clean water industry in a scientific manner. Through that lens, NYWEA has reviewed proposed bill S5759/A6192 and has several concerns about unintended consequences should this bill be passed. While various comments are presented herein, the most significant relates to **an overarching request that you consider eliminating any reference to a moratorium on land application, due to the significant negative impacts it could have on multiple levels**. Accordingly, we respectfully offer the following:

1. <u>General Comment: a moratorium on biosolids land application could adversely impact public health and the environment</u>

WRRFs accept and treat wastewater from society to remove pollution generated by all of us, and thereby protect public health and aquatic environments. These facilities have been essential in reversing the terrible conditions of waterways of the United States prior to passage of the Federal Clean Water Act. WRRFs have saved lives by eliminating waterborne pathogens.

Biosolids are critical in wastewater treatment – a necessary byproduct of producing clean effluent. Biosolids must be removed from the biological processes by all WRRFs in New York State. If biosolids are not properly managed, biological processes integral to the breakdown of

contaminants in wastewater will not function properly. This often results in reduced pollutant removal, increased discharge of suspended solids in the effluent, loss of the efficacy of disinfection systems, and more. This ultimately impacts the ability of WRRFs to meet their permit limitations, and protect the water quality of waterbodies.

Proposed bill S5759/A6192 could adversely affect public health and the environment because there are only three (3) biosolids disposal options available: beneficial reuses such as land application, landfills, and sewage sludge incinerators. While proposed bill S5759/A6192 includes a "moratorium" on land application, in essence it is a five (5) year ban.

The lack of biosolids management options directly impacted WRRFs when a land application ban was implemented in Maine. The severe lack of viable options left WRRFs no alternative but to increase their solids inventories and/or store biosolids onsite.

Given the limited landfill capacity in Maine and limits on out of state landfilling, a crisis ensued. There were times the biosolids disposal firms and landfills could only manage limited volumes of biosolids due to the unavailability of disposal sites, insufficient trucking and rail capacity. Ultimately disposal firms had to prioritize which WRRFs they serviced on a particular day based on the WRRF's difficulties meeting discharge permit limitations due to their solids inventory[1]. The solution included hauling significant quantities of biosolids to Canada, which may become more difficult in the future due to the changing status of relations between our two countries.

As noted in the table below, New York State WRRFs dispose approximately 7-times more biosolids via beneficial reuse than Maine (prior to their ban). A moratorium on land application in New York at this scope and magnitude could cause a ripple effect throughout the entire industry – potentially adversely impacting the operation of wastewater treatment facilities throughout the State.

Comparison of Biosolids Quantities – Maine and New York

Annual Quantity of Biosolids (dry US tons)[2]	Maine*		New York	
Beneficial Reuse (primarily land application)	9,379	38.6%	63,676	16.9%
Landfill	14,591	60.1%	262,817	69.6%
Incineration	0	0.0%	50,000	13.2%
Other/Unknown	316	1.3%	1,170	0.3%
TOTAL	24,286	100.0%	377,663	100.0%

* - data are prior to Maine's land application ban

Representatives in the solid waste management industry have indicated to NYWEA there is inadequate capacity in New York State landfills for this volume of additional biosolids, as many have limited space and biosolids often must be mixed with other debris to provide structural integrity within the landfill operational cells. Several incinerators in New York State have closed due to challenges with meeting very stringent air regulations enacted by the USEPA within recent years, and hence the capacity of this disposal option has dwindled in the last two decades. Even where there may be alternative disposal options locally, municipalities often have long-standing disposal solutions and to make a change takes time for contracts to be generated and new permits to be obtained. A land application moratorium will make it difficult for many WRRFs to remove biosolids from their facilities, before process upsets impact water quality.

[1] Maine Department of Environmental Protection. An Evaluation of Biosolids Management in Maine and Recommendations for the Future. Issued December 1, 2023. Prepared by Brown and Caldwell.
[2] National Biosolids Data Project. Consulted on: March 5, 2025. Available at: https://www.biosolidsdata.org/.

From these simple facts it is reasonable to assume that reduced disposal options and the inability to remove biosolids from biological treatment process will directly result in discharges to waterways that will adversely impact the environment. In consideration of the scale of biosolids management between Maine and New York, the question is not "will this happen?", but rather "where will it happen" and "what will be the environmental ramifications?"

2. General Comment: the New York State Department of Environmental Conservation (NYSDEC) is addressing potential PFAS and biosolids risks

In September 2023 the NYSDEC released DMM-7 / "Biosolids Recycling in New York State – Interim Strategy for the Control of PFAS Compounds". The purpose of this document was to "reduce the risk associated with biosolids recycling by setting criteria that will identify biosolids that are impacted by industrial PFAS sources and requiring those sources be identified and addressed"[3]. DMM-7 acknowledges the inherent variability of biosolids from facility-to-facility and hence requires sampling and reporting of PFAS levels from all sources disposed of via land application. Depending on the concentration of PFAS sampled, certain actions will be required up to and including a prohibition of land application from that particular source.

The Maine land application ban was largely due to concerns at specific locations where legacy PFAS contamination occurred because of industrially impacted biosolids and paper mill sludge. NYWEA wholeheartedly agrees in these specific instances (i.e. where PFAS concentrations are high), the biosolids from these individual facilities should not be land applied. That being said, NYWEA disagrees with a statewide moratorium / ban. WRRFs are not PFAS generators, rather they are passive receivers of these contaminants. Thus, the concentration of PFAS in biosolids will vary from facility to facility based on the WRRF's upstream sewer connections, including if there are industries that utilize PFAS as part of their manufacturing process. A blanket moratorium on land application does not reduce PFAS risks when there are not high concentrations of PFAS in the first place. Not all biosolids are the same and DMM-7 employs a scientific approach towards this issue by using site specific data to determine whether land application is appropriate or not.

3. General Comment: PFAS compounds are ubiquitous

Due to the persistence and widespread use of these compounds in numerous consumer, commercial, and industrial applications, PFAS is ubiquitous. Unfortunately, all of us have PFAS in our blood, it can even be found in rainwater.

Because PFAS is everywhere, including the water and other items that go down the drain and into the sewer system, these compounds are also found in biosolids. While no concentration of PFAS is deemed 'good', it is important to keep the relative levels in context. A September 2024 Biocycle article[4] provides a comparison of the PFAS concentration in various items to an average concentration in biosolids:

[3] New York State Department of Environmental Conservation. DMM- 7/ Biosolids Recycling in New York State – Interim Strategy for the Control of PFAS Compounds. Issued September 7, 2023. Consulted on March 5, 2025. Available at: https://extapps.dec.ny.gov/docs/materials_minerals_pdf/dmm7.pdf

[4] Biocycle E-Newsletter, September 3, 2024. "Connections: Facts Versus Fear Mongering". Consulted on March 6, 2025. Available at: https://www.biocycle.net/connections-facts-versus-fear-mongering/

- Dog poop: has three times more PFAS than average biosolids
- Dust in your home: has 20 times more PFAS than average biosolids
- Lipstick: has 58 times more PFAS than average biosolids
- Take-out food packaging: has 260 - 324,300 times more PFAS than average biosolids

Because of highly publicized issues (such as farms with industrially impacted biosolids), generally biosolids have incorrectly been seen as 'major' sources of PFAS. The data noted above shows that people have higher exposures through many other more common pathways. There are specific instances where higher PFAS concentrations are found in biosolids due to industry impacts or similar reasons; for those circumstances, DMM-7's approach can be used to mitigate the risks. Therefore, a moratorium is not required.

4. General Comment: New York State's efforts to address PFAS positively influence biosolids

The September 2024 Biocycle article highlighted the levels of PFAS in common items encountered in everyday life. This is also acknowledged in the justification section of Senate Bill S5759, where it is noted that New York State "has already recognized the risk of PFAS and banned their use in outdoor apparel, food packaging, firefighting equipment, and firefighting foam." These past actions by the State Legislature in banning these intentional uses of PFAS compounds make a difference with biosolids since the products will no longer introduce PFAS into sewer systems. Because WRRFs are passive recipients of PFAS contamination, the focus should continue to be removing PFAS sources, not to ban land application.

The NYSDEC released the draft "Publicly Owned Treatment Works (POTWs) Permitting Strategy for Implementing Guidance Values for PFOA, PFOS, and 1,4-Dioxane" in 2024 to continue removing sources. This document outlines a scientific approach whereby the NYSDEC collects/reviews data and, where warranted, WRRFs are required to develop Pollutant Minimization Programs (PMPs). PMPs have been successfully used for mercury and other contaminants of concern in the past, through better controls of industrial discharges and enhanced use of municipal pretreatment programs, in line with USEPA guidance. These coordinated efforts use data and prioritization to identify the most likely sources as a mitigation strategy. Again, a land application moratorium is not required if PFAS continues to be eliminated from upstream sources in the sewer system.

5. General Comment: cost considerations must also be considered

Information from the Maine Department of Environmental Protection details an average doubling for biosolids disposal due to the state's land application ban[5]. Because of the limited options and the need to haul biosolids to Canada and other locations, prices escalated for biosolids in this manner virtually overnight. With the larger volumes of New York land applied biosolids, these cost impacts could be even greater.

These financial burdens would be borne by the public wastewater utilities, which receive their revenues from local ratepayers. Those local ratepayers are your constituents. For some utilities this would leave a hole in the budget that may need to be filled by deferring investments in infrastructure or other cuts. For most it would mean raising rates.

[5] Maine Department of Environmental Protection. An Evaluation of Biosolids Management in Maine and Recommendations for the Future. Issued December 1, 2023. Prepared by Brown and Caldwell.

If due to DMM-7 protocols high levels of PFAS are detected and alternate biosolids disposal means must be employed, then there is a justification for the additional cost. However, a blanket moratorium has a financial impact on all, even in instances where PFAS levels are below applicable thresholds. In a more general sense, the result would be that the costs associated with PFAS contamination would be pushed onto the public, instead of the companies that profited from manufacturing these compounds.

Finally, farmers that utilize biosolids will face higher costs due to the need to switch to chemically based fertilizers, as well as increasing irrigation rates because of the water retention benefits biosolids provide in agricultural applications. Costs may also be incurred to mitigate against negative environmental impacts associated with nutrient runoff from these fertilizing/irrigation practices to prevent exacerbating issues such as harmful algal blooms.

6. General comment: Greater carbon emissions will result

A key component of New York State's strategy related to the "Climate Leadership and Community Protection Act" (CLCPA) is encouraging biosolids land application because of its benefits related to carbon sequestration. Not only would a moratorium eliminate the benefit of carbon sequestration, but carbon emissions will also increase from transporting biosolids to landfills. Landfilled biosolids will generate methane as well. The 2017 New York State Methane Reduction Plan[6] identifies diversion of organic materials (biosolids) from landfills as an action the NYSDEC would undertake to reduce methane emissions.

7. Specific comment: §27-0803 should be deleted from the proposed bill

It is for the above reasons that NYWEA reiterates its overarching request that you consider eliminating any reference to a moratorium on land application proposed bill S5759/A6192 through the deletion of §27-0803. If a moratorium were to proceed, there are concerns with adverse impacts to WRRFs that could lead to degradation of public health and water quality protections. The need for a moratorium is not required because the NYSDEC has already enacted DMM-7 to employ a scientific approach by targeting biosolids with high concentrations of PFAS compounds and prohibiting those higher risk biosolids from being land applied. PFAS compounds are ubiquitous, with most biosolids concentrations less than many items commonly encountered in society. New York State has already taken steps to decrease the amount of PFAS compounds that may be passively received at WRRFs, which continues to lower PFAS concentrations in biosolids. Finally, there are negative cost and carbon emission impacts associated with a land application moratorium.

If §27-0803 were deleted, proposed bill S5759/A6192 would still meet the stated purpose "to address the threat of PFAS contamination through sewage sludge, or biosolids, on New York state farmland and water supplies." The bill would enact a *Soil Health and PFAS Agriculture Response Program* to assist farmers, and through the formation of the *New York State Biosolids Task Force* the issue will be analyzed in detail to formulate the best plan to address the potential risks in a responsible manner. These are both positive steps to address this complicated issue. Further, additional proposals such as proposed bill S3972/A216 to assist private well users with PFAS

[6] New York State Department of Environmental Conservation, et al. Methane Reduction Plan. Issued May 2017. Consulted on March 7, 2025. Available at: https://extapps.dec.ny.gov/docs/administration_pdf/mrpfinal.pdf

treatment equipment (regardless of the PFAS source) would also go a long way to help impacted people in the State.

8. Other specific comments on text in proposed bill S5759/A6192

- Justification (Senate Version): there are some exaggerated and/or inaccurate generalizations noted regarding the potential constituents within biosolids, and other claims. Biosolids have Federal and State standards that must be met for land application, including eliminating several of the contaminants referenced.
- § 27-0803. MORATORIUM ON LAND APPLICATION OF BIOSOLIDS.: as noted previously, it is recommended this entire section be deleted and references elsewhere in the proposed bill be revised accordingly (including §151-p, 2. (e)). If this section remains, please consider the following:
    - 1.: In lieu of a full moratorium, the proposed moratorium only applies to new permits
    - 4.b: The soil thresholds listed are lower than background concentrations and hence would be found in virtually any area in New York State.
        - Also, these soil (with biosolids) thresholds are below the established reportable levels (RL) of Method 1633 with this matrix. EPA's interlaboratory report identifies the Limit of Quantitation/Minimum RL at approximately 2 µg/L.
- § 27-0805. TESTING AND REPORTING. 2.: there are concerns this section may conflict with §27-0805.1. (a).
- § 27-0805. TESTING AND REPORTING. 3.: it is recommended that this requirement only apply to wastewater treatment facilities with permitted capacities greater than 10 million gallons per day and who land apply. DMM-7 already requires sampling for any facilities land applying biosolids. The cost associated with the sampling of smaller facilities, particularly those that do not land apply, does not seem justified, and in many cases their biosolids are treated at larger facilities that would test.
- §27-0601.NEW YORK STATE BIOSOLIDS TASK FORCE: it is suggested that the word "maximally" be eliminated.
- §27-0603. DEFINITIONS: it is suggested that the term DEPARTMENT be added, noting when used on its own it is defined as the NYSDEC.
- §27-0605.TASK FORCE COMPOSITION: it is suggested more representation is needed from wastewater treatment utilities, solid waste and organics recycling, and farming interests as these would be the stakeholders most impacted by any changes regarding land application. Representation from the Soil and Water Conservation Committee may also be warranted.
- § 27-0607. POWERS AND DUTIES. 1. (C): it is suggested more specificity would be helpful in this clause, noting that the evaluation of best available science (i) maximizes the quality, objectivity, and integrity of information, including statistical information; (ii) uses peer-reviewed and publicly available data; and (iii) clearly documents and communicates risks and uncertainties in the scientific basis for such projects;
- § 27-0607. POWERS AND DUTIES. (O): will the location be in Albany, rotated through the state, virtually, or undetermined?
- § 27-0607. POWERS AND DUTIES. (Q): the two-year period for the task force does not seem to align with the proposed five-year moratorium. It is suggested that the task force's findings should inform any next steps.

NYWEA welcomes the opportunity to discuss these comments. Please contact our Executive Director Khris Dodson at (315) 422-7811 x2 should you have any questions or would like to meet.

Sincerely,

Dan Rourke, P.E.
NYWEA President

Cc: Governor Kathy Hochul
Ashley Dougherty – Assistant Secretary for Environment
Acting Commissioner Amanda Lefton – NYSDEC
Assemblymember Deborah Glick – Chair, Committee on Environmental Conservation
Assemblymember Gabriella Romero – Co-Sponsor
Robert Ostapczuk, P.E. – NYWEA Government Affairs Committee