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February 18, 2022

Jordan Latham

Research and Communications Director

Joint Committee on State Administration and Regulatory Oversight  
Massachusetts House of Representatives

Mary Wasylyk

Chief of Staff

Office of President Pro Tempore, State Senator Marc Pacheco  
Massachusetts Senate

Submitted via electronic mail to: [Jordan.Latham@mahouse.gov](mailto:Jordan.Latham@mahouse.gov) and  
[Mary.Wasylyk@masenate.gov](mailto:Mary.Wasylyk@masenate.gov)

***Re: Submission of Written Testimony for the Record in Response to  
S.2655 "An Act Establishing a Moratorium on the Procurement of  
Structures or Activities Generating PFAS Emissions" Coming before the  
Commonwealth of Massachusetts's Joint Committee on State  
Administration and Regulatory Oversight on February 18, 2022***

Dear Ms. Latham and Ms. Wasylyk:

The National Association of Clean Water Agencies (NACWA) appreciates the opportunity to provide written testimony on S.2655, *An Act Establishing a Moratorium on the Procurement of Structures or Activities Generating PFAS Emissions*, before the Commonwealth of Massachusetts's Joint Committee on State Administration and Regulatory Oversight. NACWA opposes this legislation as currently drafted due to the detrimental impact it will have on municipal clean water communities within the Commonwealth, including seven member utilities in Massachusetts, and the dangerous national precedent it could set.

NACWA represents the interests of over 340 publicly owned wastewater utilities of all sizes across the country that everyday provide the essential service of treating billions of gallons of our nation's wastewater and managing the millions of tons of biosolids generated as a byproduct of the wastewater treatment process in a manner that ensures the continued protection of public health and the environment.

NACWA member agencies in Massachusetts and across the country are facing significant challenges associated with per- and polyfluoroalkyl

substances (PFAS), including the erroneous perception that public clean water utilities are sources of PFAS. As a result, these utilities will bear considerable costs and liabilities for a contaminant they are not responsible for placing into the environment in the first place. Our members are public health and environmental stewards that have invested billions of dollars to comply with stringent and costly Clean Water Act and other requirements to help improve our nation's overall water and air quality.

PFAS are perhaps the most challenging and complex contaminant the wastewater community has ever faced. Due to the lack of sufficient scientific understanding at the moment, the mere presence of PFAS, even at extremely low parts per billion (ppb) or parts per trillion (ppt) levels, is leading some to conclude that any amount of PFAS is harmful, creating an existential threat and a possible end to how our members manage the continual byproduct of the wastewater treatment process—known as municipal biosolids. Municipal biosolids in no way resemble industrial sludges, though they may contain low levels of pollutants, including PFAS, that make their way into the nation's public sewer systems.

Prohibitions based on the mere presence of PFAS and not risk, as this legislation aims to do and as seen in other states, have left municipal clean water utilities to seek more burdensome, costly, and limited biosolids management alternatives (e.g., landfilling) that do not necessarily provide enhanced environmental benefits. This underscores the importance of developing and preserving a range of viable and environmentally beneficial biosolids management options.

Our members have expressed concern that this legislation, as currently drafted, may severely impact current municipal biosolids management options and may also stymie any innovation for future biosolids management opportunities. In addition, this proposed bill short circuits several efforts underway at the U.S. Environmental Protection Agency (EPA) that are intended to better understand the risks of PFAS to public health and the environment and make informed scientific and regulatory decisions based on a scientific understanding of actual risk.

## **Municipal Biosolids Management Options Are Limited; A Moratorium Further Reduces Residual Management Opportunities**

NACWA members and other clean water utilities nationwide are limited in selecting from a few highly-regulated biosolids management pathways—land application, land disposal (landfilling), and thermal treatment/incineration via sewage sludge incinerators (SSIs). These options have been under continued intense state and federal scrutiny, and each has its own unique tradeoffs.

Land application, long proven to be a safe, environmentally friendly and sustainable beneficial use of biosolids, is nevertheless facing prohibitions in some states in light of potential PFAS-related concerns that have mostly been caused by industrial sludge, not municipal biosolids. The use of landfills is a secondary option to simply bury biosolids when they cannot be land applied, but issues with dwindling landfill capacity, new rules prohibiting landfilling of organic materials, cost-related hurdles due to PFAS concerns and contributions to greenhouse gases (GHGs), all weigh heavily when utilities are considering this option. Utilities that take advantage of the remaining option, the use of SSIs to thermally reduce volume and treat municipal biosolids, are the most

heavily regulated, with rules under the Clean Water Act governing the practice, and stringent Clean Air Act Maximum Achievable Control Technology (MACT) standards that have led to many utilities shuttering their units due to the difficulty in meeting the required emission limits. These few options demonstrate the already limited management capacity for biosolids generated by the wastewater treatment process.

As written, this legislation proposes a moratorium on both the procurement of new structures or activities and a pause on any new use or modification of an existing use or structure that may generate air emissions that contain PFAS. NACWA has serious concerns that this legislation as drafted will effectively prevent any modifications that might be necessary to improve operations at existing POTWs using SSIs within the Commonwealth until EPA *and* the Massachusetts Department of Environmental Protection have codified pollution emission standards for PFAS under federal and state law – which could be many years, if not longer.

Essentially banning modifications for current operational activities (*e.g.*, incinerators) and/or future innovative technologies, like gasification, will only exacerbate an already narrowing field of management options and further play a role in a potentially catastrophic situation where wastewater systems have no environmentally or economically viable way to manage the tons of biosolids residuals generated from the wastewater they receive. A ban on modifications could have the unintended consequence of preventing a utility from adding necessary pollution control devices to address other, non-PFAS pollutants, or from making other upgrades to reduce overall emissions.

## EPA has not Committed to Promulgating Emission Standards Anytime Soon

EPA's PFAS Strategic Roadmap, issued in October of 2021, acknowledges the Agency is "building the technical foundation on PFAS air emissions to inform future decisions." Noticeably, the Agency has not committed itself under the Roadmap to promulgating PFAS emission standards under the Clean Air Act or providing any timeline to achieve such a regulatory outcome as it has done for PFAS through other environmental statutory frameworks. Instead of setting potentially unrealistic timeframes for itself, the Agency is working to collect and study the data it needs to make an informed decision about PFAS emissions and the need for emission standards.

The Agency continues to study how PFAS moves through thermal treatment processes and is looking for cost-effective technologies that may be available to break the strong carbon-fluorine bond that makes PFAS difficult to destroy. These technologies do not exist at the moment.

Not only is NACWA concerned that this moratorium will impact existing utility SSIs operations and potentially further limit biosolids management options, but it also effectively prohibits technologies such as gasification or pyrolysis within the Commonwealth that may offer innovative and capable mechanisms for sustainably managing biosolids. Depending on how these units are configured, these processes are providing a beneficial end product that can be used for fertilizer (biochar) and/or a renewable source of energy (a synthetic natural gas or hydrogen fuel) for utilities.

Further, early data of gasification and pyrolysis units show non-detects of PFAS in the biochar byproduct, which is a positive sign. While more research is needed, curbing this technology until standards are promulgated would be very shortsighted and detrimental.

The legislation is particularly problematic because the moratorium it creates would place these thermal treatment options in limbo for an unknown period of time. Many NACWA members are in long-term planning discussions around biosolids management options and are looking for alternative approaches, especially in situations where utilities employ incineration and their SSIs are nearing the end of their useful lives. Given the complexities, costs and limitations of switching to land application or landfill disposal, these utilities are looking at newer thermal treatment options like gasification, as potential solutions. It makes no sense to limit those options without any scientific reason to do so and limiting the modification of existing units could lead to unintended negative environmental impacts.

## U.S. EPA is Currently Looking into Gasification Under an Appropriate Regulatory Pathway and is Making Progress to Understand Potential Human Health and Environmental Risks

Recently, EPA published an Advanced Notice of Proposed Rulemaking (ANPRM) for the Potential Future Regulation Addressing Pyrolysis and Gasification Units. As EPA notes in the ANPRM, “pyrolysis and gasification technologies have been used to convert solid and semi-solid materials... into useful products such as energy, fuels, and chemical commodities,” and lists a handful of commercial scale and pilot scale gasification units intended for processing biosolids that are currently operating or near operational states in the United States.

Thermal options like gasification and pyrolysis could become increasingly viable and environmentally beneficial biosolids management options. NACWA encourages the Commonwealth, just as we did with EPA, to not unduly stifle continued innovation in this space.

Further, EPA has committed to understanding the human health and environmental risk associated with PFOA and PFOS in municipal biosolids and has completed its problem formulation—the first step in a risk assessment framework. The Agency has selected members of the scientific community to participate in the Science Advisory Board’s (SAB) review of EPA’s updated risk assessment approach to evaluating the actual risk posed to human health and the environment by pollutants in biosolids. Once the SAB completes its review, EPA will begin the process of

evaluating whether a rulemaking under Clean Water Act Section 405(d) is warranted should PFOA and PFOS concentrations in biosolids be found to pose a risk to human health or the environment. NACWA strongly encourages the Commonwealth to hold off on any legislation or regulation around PFAS in biosolids until this process by EPA is complete.

It is also important to recognize that municipal wastewater utilities and the biosolids generated from the treatment process are not the source of PFAS. POTWs are “passive receivers” of PFAS since they do not produce, manufacture, or profit from these chemicals but instead passively

receive small quantities of a range of chemicals in the raw influent that arrives at the treatment plant.

These chemicals stem from industrial and commercial sources upstream or from domestic sources including many of the products we all use on a daily basis. NACWA members are investing in existing Clean Water Act tools such as the industrial pretreatment program to help identify industrial sources and mitigate PFAS from entering the wastewater treatment process in the first place. Pretreatment programs have been successful at eliminating PFAS through source control measures, which have a subsequently reduced PFAS concentrations found in wastewater effluent and biosolids.

While pretreatment programs are proving to be effective against industrial and commercial sources, there is not much wastewater utilities can do about domestic sources like everyday consumer products found and used likely in every household to some degree (e.g., nonstick cookware, cosmetics, clothing etc.) that contribute to PFAS loading at the wastewater treatment facility. Understanding that wastewater treatment plants were not originally designed or intended with PFAS treatment capabilities in mind, and that there are no cost-effective techniques available to treat or remove PFAS, is important for federal, state, and local stakeholders when considering PFAS legislation or regulations.

NACWA members continue to prioritize source control to limit PFAS coming into our systems and subsequently into our biosolids in the first place. It is imperative that the proposed legislation not preempt the critically important scientific study and risk assessment work that goes into a new regulatory limit for a pollutant under any of the federal environmental statutes, and unnecessarily place unintended consequences, liabilities and/or costs to public utilities and their ratepayers.

Our members are strongly supportive of addressing PFAS and stand ready to adhere to any future water, air or waste rulemakings put in place to protect public health and the environment. But it is also critical that policymakers allow the appropriate scientific processes to take place to determine what the appropriate regulatory approaches should be.

NACWA appreciates the opportunity to provide written testimony on S.2655.

Sincerely,

A handwritten signature in black ink that reads "Adam Krantz". The signature is written in a cursive, flowing style.

Adam Krantz  
CEO  
NACWA

**SENATE . . . . . No. 2655**

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The Commonwealth of Massachusetts

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PRESENTED BY:

*Marc R. Pacheco*

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*To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:*

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act establishing a moratorium on the procurement of structures or activities generating PFAS emissions.

\_\_\_\_\_  
PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Marc R. Pacheco</i>	<i>First Plymouth and Bristol</i>	
<i>Carol A. Doherty</i>	<i>3rd Bristol</i>	<i>2/10/2022</i>

**SENATE . . . . . No. 2655**

By Mr. Pacheco, a petition (accompanied by bill, Senate, No. 2655) (subject to Joint Rule 12) of Marc R. Pacheco for legislation to establish a moratorium on the procurement of structures or activities generating PFAS emissions. State Administration and Regulatory Oversight.

**The Commonwealth of Massachusetts**

**In the One Hundred and Ninety-Second General Court  
(2021-2022)**

An Act establishing a moratorium on the procurement of structures or activities generating PFAS emissions.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

1 SECTION 1. Whereas, perfluoroalkyl and polyfluoroalkyl substances, known as PFAS,  
2 are highly persistent chemicals that are transported long distances in the environment; and

3 Whereas, businesses, corporations, and other entities throughout the United States have  
4 voluntarily contributed to the effort to reduce releases of long-chain PFASs due to their toxic  
5 effects on human health; and

6 Whereas, the PFAS with fewer than 8 carbon-fluorine bonds currently being used as  
7 alternatives to perfluorooctanoic sulfonate, known as PFOA, and perfluorooctanoic acid, known  
8 as PFOS, are also highly persistent and subject to long-range transport and have similar potential  
9 for harm as the long-chain PFAS; and

10 Whereas, over 200 scientists from all over the world have signed a statement calling for  
11 governments to limit the use of PFAS while studies determine the safety of these chemicals,

12 given their persistence in the environment, potential for harm, and lack of adequate data proving  
13 safety;

14 Resolved, that the policy goals of this act shall be to limit exposure of the residents of the  
15 Commonwealth, directly or indirectly, to PFAS contaminants via airborne emissions.

16 SECTION 2. Chapter 21C of the General Laws is hereby amended by inserting after  
17 Section 30 the following section:-

18 Section 31. (a) As used in this section the following terms shall, unless the context clearly  
19 requires otherwise, have the following meanings:

20 "Perfluoroalkyl and polyfluoroalkyl substances" or "PFAS" - a class of fluorinated  
21 organic chemicals containing at least 1 fully fluorinated carbon atom

22 (b) Notwithstanding any general or special law to the contrary, the Massachusetts  
23 Department of Environmental Protection shall establish and enforce as necessary a moratorium  
24 prohibiting the procurement of PFAS-emitting structures or activities and shall not grant  
25 approval to any person required to file an environmental notification form proposing a new use  
26 or structure or modification of an existing use or structure where said proposal would generate  
27 emissions containing perfluoroalkyl and polyfluoroalkyl substances

28 (c) Said moratorium shall remain effective indefinitely until the promulgation of PFAS  
29 emission standards by both:

30 (1) the United States Environmental Protection Agency; and

31 (2) the Massachusetts Department of Environmental Protection, the Massachusetts  
32 Department of Public Health, or other state agency or department otherwise charged with the



- 33 duty to promulgate regulations relative to establishing a maximum concentration of chemicals
- 34 deemed consistent with the best interests of the public health and safety of the Commonwealth.