

U.S. Environmental Protection Agency EPA Docket Center Office of Water Docket Mail Code 28221T 1200 Pennsylvania Avenue NW Washington, DC 20460

March 1, 2025, due April 16, 2025

Re: Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS)

Docket ID No EPA-HQ-OW-2024-0504

The Wastewater Advisory Committee to the MWRA (WAC) appreciates the opportunity to provide comments on EPA's Draft Sewage Sludge Risk Assessment for PFOA and PFOS.

It's clear that these two legacy PFAS, which as a class are known as "forever chemicals" because they are so difficult to destroy, are everywhere. They also appear to be dangerous to the environment and human health, as EPA notes in the risk assessment.

But the Risk Assessment looks at just one source of PFAS exposure. Wastewater residuals—sludges and biosolids—are an easy target, although wastewater treatment plants do not create pollution; they remove certain pollutants from wastewater. Treatment plants receive PFAS in effluent from industry, which they can control through the Toxics Reduction and Control program, and from commercial and residential sources, over which they have no control.²

For instance, at MWRA's Deer Island Treatment Plant, residential-only sources in some cases have higher PFAS detects than in combined effluents (background) or sources of high extraneous water (I/I).

¹ Levels of "forever chemicals" reaching Antarctica have been increasing

² Among the sources are cookware, food containers, clothing,

PFAS averages and ranges for Deer Island and Local Limits sites

Sample Type (ng/L = ppt)	PFOA average (range)	PFOS average (range)	PFAS6 average (range)	PFAS40 average (range)
DITP Influent	9	10	25	89
	(2.7-14.5)	(ND-16.5)	(7.3-42.6)	(42.3-137.9)
DITP Effluent	9	8	23	62
	(6.5-11.4)	(4.9-13.6)	(11.4-36.8)	(44-83)
Residential (8	6	39 (62
	(ND-85)	(ND-98)	(11.5-277.4)	(23.7-138.6)
Background	7	21	62	95
	(ND-19)	(ND-870)	(13.1-470.9)	(21.8-378.5)
1&1	7	8	59	47
	(ND-18)	(ND-19)	(22.1-94.1)	(32-68)

ND = nondetect

PFAS6 = PFOS, PFOA, PFHxS, PFNA, PFHpA, PFDA

PFAS40 = 40 analytes under method 1633, as required in NPDES permits DITP influent = South System (AB00) and North System (AD00) averaged

Residential = no commercial or industrial input; 4 sites (2 North, 2 South) averaged for this table

Background = includes some commercial, but not permitted industries, ie stores, restaurants, banks, but can also have some residential; 4 sites (2 North, 2 South) averaged for this table

I&I sites = locations that Operations indicated have high I&I flows (3 sites, North system)

While WAC agrees that sludges and effluent should be monitored for contaminants, an examination of PFAS inputs in soil and water that only studies wastewater residual sources is likely to raise concerns about their land application. What are the PFAS levels in manures and artificial fertilizers? We don't know.

The Risk Assessment outlines three known ways to manage wastewater residuals: landfilling, incineration, and land application (which accounts for nearly half of US output). Recycling nutrients back into soils is an ancient and sustainable method, and has the lowest carbon footprint and cost, while recovering precious plant nutrients phosphorus and nitrogen.

WAC is concerned that EPA's draft risk assessment, released without context—i.e. a comparison of PFAS in manures and artificial fertilizers and a comparison of PFAS exposure via incineration--may be misinterpreted by the public. The result may be bans on land application or reluctance to use biosolids on private land, when as far as EPA risk assessments have indicated, landfilling and incineration may be as or more harmful to human health and the environment.

Because such a high proportion of the roughly 164,000 dry U.S. tons of residuals generated in Massachusetts³ are land applied, Massachusetts DEP studied the availability of alternate management methods. They found that both landfill and incineration facilities in New England and nearby states are at- or near-capacity.

³ MassDEP Part 1 study on the future of wastewater sludge management

And to date, WAC has seen no clear, feasible and affordable PFAS removal or destruction method that would work for any of the three residual management methods.

WAC therefore urges EPA to delay finalization of this Draft Risk Assessment until it has determined the PFAS present in other fertilizers, and has a PFAS risk assessment for incineration of residuals. WAC also agrees with EPA that the most effective way to reduce PFAS exposure is to reduce and, where possible, eliminate the further production and dissemination of PFAS. WAC urges EPA to focus its regulatory power on ways to reduce and eliminate PFAS production.

Again, thank you for your attention to our comments and requests.

Sincerely,

Kannan Vembu, Chair For the Wastewater Advisory Committee