



April 15, 2025

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***Submitted via Federal eRulemaking Portal: [www.regulations.gov](http://www.regulations.gov)***

**RE: National Tribal Water Council-Tribal PFAS Working Group (NTWC-TPWG)  
Comments on EPA's Draft Sewage Sludge Risk Assessment for PFOA and PFOS  
Docket ID No. EPA-HQ-OW-2024-0504**

Dear Mr. Tobias,

In 2020 the National Tribal Water Council (NTWC) formed an ad hoc working group named the Tribal PFAS Working Group (NTWC-TPWG) to assist in outreach on Per- and polyfluoroalkyl substances (PFAS) to Tribes and tribal members and to advocate for inclusion of Tribes and tribal lifeways in federal policy decisions on PFAS risks and risk management. The NTWC-TPWG is supported by and works in collaboration with the National Tribal Toxics Council (NTTC), the Tribal Science Council (TSC), the Tribal Waste and Response Steering Committee (TWRSC), Tribal Pesticide Program Council (TPPC), and the National Tribal Air Association (NTAA). These tribal partnership groups (TPGs) are all supported by the U.S. EPA.

The NTWC-TPWG members are pleased to submit comments on EPA's Draft Sewage Sludge Risk Assessment for PFOA and PFOS. The working group supports the development of the sewage sludge risk assessment for PFOA and PFOS using the latest scientific knowledge, which will serve to inform states and Tribes when they are making decisions about water quality and public health impacts related to use of sewage sludge in a wide range of settings and help them to understand EPA decision making and rulemaking in the context of sewage sludge.

Tribes have unique lifeways that present them with different risks due to multiple exposure pathways not experienced by the general population. For example, these lifeways include differences in:

- Diet, such as significantly higher consumption of fish and other aquatic life that is typically harvested locally.
- Higher consumption of deer, elk, and other wildlife that is harvested locally and may be contaminated from industrial releases to tribal lands, or from wildlife spending portions of their lives on contaminated non-tribal lands.
- Water used for:

- Drinking, which can be from untreated and unregulated small systems (less than 15 homes), including well water, surface haul water, and spring water systems that are sourced by waters that may be on or off tribal lands
- Hygienic use through daily steam baths and/or immersion in surface water flows
- Ceremonial use through steam baths and full body immersion in surface water flows
- Multiple cultural activities (e.g., reed harvesting, mouthing, weaving)
- Subsistence activities (e.g., hunting, fishing, gathering)
- Recreational activities (e.g., swimming in natural water, hot springs)
- Other unique lifeways.

The NTWC-TPWG recognizes and supports EPA's approach in that it is based on the latest toxicological data and bioaccumulation studies and uses multiple risk assessment approaches for different PFAS. The exposure analysis accounts for multiple sources – drinking water, food, air, and dust.

### **Tribal Lifeways**

The Draft Sewage Sludge Risk Assessment for PFOA and PFOS considers a farm family living on a pasture or crop farm. While this addresses that segment of the Indian Country population that are farm families, it does not encompass tribal and indigenous lifeways that are not rooted on a family farm. Many tribal members are involved to varying degrees and at varying times with subsistence hunting, gathering, and fishing either for their own sustenance needs or for the sustenance of others in their family or community. As an example, deer that are hunted may spend time on one or both of tribal trust and fee lands; or they may spend part of their lives on lands adjoining tribal trust and/or fee lands. These deer may consume crops, crop residues or other plant materials that are grown on or grow on or near lands fertilized with wastewater treatment plant biosolids or sewage sludge. Additionally, these deer may consume water that originates partly or fully from rainfall or snowmelt water that runs off from, or that ponds on such fertilized lands. The NTWC-TPWG encourages EPA to speak to this Indian Country population as part of the risk assessment, or to prepare a complementary risk assessment that addresses biosolids-sourced PFOA and PFOS exposures to the population segment in Indian Country through the course of their tribal and indigenous lifeways. Such a complementary risk assessment could of course consider other populations across the U.S. that are exposed to PFOA and PFOS that originate in the environment as a result of land application of biosolids in agricultural settings, but who are exposed by virtue of their harvesting of animals, plants, fish and other life forms that exist in the presence of such PFOA and PFOS and are exposed to these chemicals through ingestion, inhalation or other forms of contact.

In this context, as stated in the February 20, 2025, NTWC-TPWG letter to EPA (Re: Protection of Human Health for PFOA, PFOS, and PFBS -- Docket ID No. EPA-HQ-OW-2024-0454), EPA uses a fish consumption rate for the general adult population of 22.0 g/d in their calculation of recommended protective criteria. The use of a general population fish consumption rate fails to provide adequate levels of protection for sensitive high-fish-consuming subpopulations within tribal communities. The EPA should specifically provide information on fish consumption rates of sensitive subpopulations in the document, so that states and Tribes can use these to establish protective human health criteria. Exposure to PFAS from subsistence and oftentimes treaty-protected practices of hunting, fishing, and gathering of foods creates additional risks to tribal populations and EPA has a trust responsibility to protect tribal health and natural resources.

There appears to be a paucity of data and information on utilization of biosolids on or near tribal trust and fee lands, especially as concerns subsistence hunting, gathering, and fishing practices by tribal communities and members, but also as concerns conventional agricultural and related land uses. The NTWC-TPWG encourages EPA to develop estimates as to the extent to which biosolids have been applied to tribal trust and fee lands, and to lands near tribal trust and fee lands, and determine the probable extent to which those biosolids were or may have been contaminated with PFOA, PFOS or other PFAS. Also, the NTWC-TPWG encourages EPA to develop estimates as to the extent to which tribal members are exposed to PFAS through the course of their daily lives to determine which PFAS chemicals figure prominent in those exposures.

### **Inadequate Central Tendency Based Risk Assessment**

The draft risk assessment assessed risks for median (i.e., central tendency, 50<sup>th</sup> percentile) exposure rather than high-end exposure conditions for the reason to “better understand the potential scope and magnitude of risks under different sewage sludge use and disposal scenarios.” The assessment used inputs and exposure factors to only reflect median U.S. conditions and consumption behaviors. It is unclear how evaluation of central tendency exposures helps define the “potential scope and magnitude of risk” from sewage sludge use and disposal and this was not described in the assessment. This NTWC-TPWG contends that the risks that PFOA and PFOS presents to tribal populations are significant and are simply not adequately captured in the 50<sup>th</sup> percentile or central tendency analyses that were included in the risk assessment. While the assessment does find that the central tendency risk estimates exceed acceptable human health risk thresholds for the farm scenario and for populations living near impacted properties, the NTWC-TPWG believes that the purpose of a risk assessment is to not only determine the need for risk management actions but also to determine the extent of the risk management that is required for all people. This is not possible unless the most highly exposed (i.e., 95+%) populations including Tribes and Tribal members are evaluated in this assessment.

### **Expanding Relevant Exposures**

The draft risk assessment reports that risks exceeding acceptable human health thresholds were identified using the central tendency for exposure to PFAS through biosolids applications. Subsequently, risks are considered only in isolated exposure scenarios (e.g., consuming one egg per day). The magnitude of the identified risks associated with exposure to PFAS through biosolids applications containing even 1 ppb suggest that a precautionary exposure model would be most appropriate to protect public health. Cumulative exposure, even from multiple biosolids-related sources, is essential for realistic risk assessments of any PFAS chemicals as exposure is ubiquitous. This is especially relevant for tribal populations, who, as discussed above, may be exposed to PFAS from a variety of agricultural and other sources, including fish and game as well as culturally significant plants. We appreciate that this assessment was geared toward characterizing risks associated with specific exposures, but we recommend broadening the assessment to consider cumulative impacts and potential synergism from PFAS mixtures. We wonder what these findings might imply for off-farm exposures to the examined media. For example, this risk assessment predicts elevated PFOS and PFOA concentrations in, exposures through, and risks associated with fish in many farm scenarios, compared to other media. How might the risk differ for individuals who fish in lakes and rivers proximal to biosolids applications?

Additionally, the draft risk assessment does not account for potential impacts on agricultural workers, who may experience different exposures to land-applied sludge than those consuming

products or drinking water. Occupational exposure to contaminants in biosolids, like other workplace hazards, may be chronic and at low levels. Because they are not included in the “farm family,” workers who may have frequent, direct contact with hazardous PFAS concentrated in biosolids and treated soil, through varying exposure routes, are left out of these risk assessments. Subsequently, this draft risk assessment overlooks an integral and vulnerable portion of the agricultural community.

## Summary

Generally, Native Americans are at higher risk from chemical releases to the natural environment due to aggregate exposures via multiple pathways, many of which have greater frequency and duration than those of the general population or other human receptor populations. While each Tribe has unique exposures due to its unique culture, it is possible to distinguish broad categories of tribal exposure scenarios that Tribes are likely to face and that differ from those of the general population.

On behalf of the NTWC-TPWG, we thank you for the opportunity to comment on the Draft Sewage Sludge Risk Assessment for PFOA and PFOS. Should you have questions or comments regarding our letter, please contact Page Hingst, TSC, at 402-644-1627 or Dianne Barton, NTTC Chair, at 503-238-0667. Or you may contact Elaine Wilson, NTWC Manager, at [Elaine.Wilson@nau.edu](mailto:Elaine.Wilson@nau.edu) for any questions regarding the NTWC-TPWG.

Sincerely,



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National Tribal Water Council



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