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Jane Nishida,

Acting Administrator.

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ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OW–2024–0504; FRL 12451–01–OW]

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

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

SUMMARY: As part of the Environmental Protection Agency's (EPA's) commitment to safeguarding the environment from per- and polyfluoroalkyl substances (PFAS), the agency is announcing the availability of the ''Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS)'' for a 60-day public comment period. This draft risk assessment reflects the agency's latest scientific understanding of the potential risks to human health and the environment posed by the presence of PFOA and PFOS in sewage sludge that is land applied as a soil conditioner or fertilizer (on agricultural, forested, and other lands), surface disposed, or incinerated. The draft risk assessment focuses on those living on or near impacted sites or those that rely primarily on their products (*e.g.,* food crops, animal products, drinking water); the draft risk assessment does not model risks for the general public. This draft risk assessment underwent independent external peer review, and the EPA revised the document accordingly. Once finalized, the risk assessment will provide information on risk from use or disposal of sewage sludge and will inform the EPA's potential future regulatory actions under the Clean Water Act (CWA).

DATES: Comments must be received on or before March 17, 2025.

ADDRESSES: The EPA has established a docket for the ''Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS)'' action under Docket ID No EPA–HQ–OW–2024–0504. You may send comments, identified by Docket ID No. EPA–HQ–OW–2024–0504, by any of the following methods:

- *Federal eRulemaking Portal: https://www.regulations.gov/* (our preferred method). Follow the online instructions for submitting comments.
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Office of Water Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- *Hand Delivery or Courier:* EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. to 4:30 p.m., Monday through Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to *https://www.regulations.gov/,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Public Participation—Written comments'' heading of the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: David Tobias, Health and Ecological Criteria Division, Office of Science and Technology, Office of Water, Environmental Protection Agency; email address: *biosolidsprogram@epa.gov.*

SUPPLEMENTARY INFORMATION:

This notice of availability is organized as follows:

I. Public Participation—Written Comments

The EPA is seeking comments, particularly on scientific and technical issues, on its ''Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS).'' Submit your comments, identified by Docket ID No. EPA–HQ–OW–2024–0504, on the draft sewage sludge risk assessment at *https://www.regulations.gov* (our preferred method), or the other methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, cloud, or other file sharing system). For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

II. Background

A. Clean Water Act Authorities

Consistent with CWA section 405(d)(2), 33 U.S.C. 1345(d)(2), the EPA periodically reviews its existing regulations for the purpose of identifying additional toxic pollutants that may be present in sewage sludge and assesses whether those pollutants may adversely affect public health or the environment based on their toxicity, persistence, concentration, mobility, and potential for exposure. In December 2022, the EPA completed its latest review of the sewage sludge regulations as published in the EPA's *Biennial Review of 40 CFR part 503 To Fulfill Clean Water Act Section 405(d)(2)(C), Biosolids Biennial Report No. 9* (*see https://www.epa.gov/biosolids/biennial-report-no-9-reporting-period-2020-2021*). This notice of availability for the draft risk assessment is in accordance with CWA section 405(g)(1), 33 U.S.C. 1345(g)(1), which authorizes the EPA to conduct scientific studies and provide public information to promote the safe and beneficial management or use of sewage sludge.

B. What is the purpose of this action?

The purpose of this action is to request public comments, particularly regarding scientific and technical aspects, on the EPA's ''Draft Sewage Sludge Risk Assessment for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS).'' The EPA is most interested in receiving comments regarding the draft risk assessment modeling (*e.g.,* the scenarios, sewage sludge application rates, environmental fate and transport parameters, human exposure assumptions). The draft risk assessment reflects the agency's latest scientific understanding of the risks to human health and the environment posed by the presence of PFOA and PFOS in sewage sludge that is land applied as a soil conditioner or fertilizer (on agricultural, forested, and other lands), surface disposed (*e.g.,* placed in a sewage sludge-only landfill called a monofill), or incinerated. The draft risk assessment focuses on those living on or near impacted properties where sewage sludge has been used or disposed. The intent of the draft risk assessment is to evaluate whether there may be risks to human health or the environment for the wide range of possible sewage sludge use and disposal scenarios. Not all the scenarios described in the draft risk assessment may be common practice or applicable to the general public. The EPA uses sewage sludge risk assessments to help evaluate whether risk reduction actions, including regulation, are warranted to protect those who may experience elevated risks from sewage sludge use or disposal. The draft risk assessment reflects external peer review and incorporates revisions from the peer review process. The EPA will consider public comments and prepare a final risk assessment for publication. The EPA will announce the availability of the final risk assessment in the **Federal Register**.

C. What is sewage sludge?

When domestic sewage is transported and conveyed to a wastewater treatment plant (WWTP), it is treated to separate liquids from the solids, which produces a semi-solid, nutrient-rich product known as sewage sludge. In some instances, industrial wastewater is also conveyed to a WWTP and combined with domestic sewage. The terms ''biosolids'' and ''sewage sludge'' are often used interchangeably by the public; however, the EPA typically uses the term ''biosolids'' to mean sewage sludge that has been treated to meet the requirements in the EPA's regulation entitled, ''Standards for the Use or Disposal of Sewage Sludge,'' promulgated at 40 CFR part 503, and intended to be applied to land as a soil conditioner or fertilizer. In the U.S., there are generally three options for use or disposal of sewage sludge. Based on available data, (1) approximately 56 percent of the nation's sewage sludge is land applied as a soil conditioner or fertilizer (roughly 31 percent is applied to agricultural land and 25 percent is applied to other lands, such as reclamation sites, home lawns and gardens, or golf courses), (2) approximately 27 percent is disposed of in a sewage sludge monofill or municipal solid waste (MSW) landfill, and (3) approximately 16 percent is incinerated.[1] Land application of sewage sludge can have environmental benefits including improved soil health, carbon sequestration, and reduced demand on non-renewable resources like phosphorus. Land application also generates reduced emissions of greenhouse gases compared to other management practices.

D. What are PFOA and PFOS?

PFOA and PFOS are two chemicals in a large class of synthetic chemicals called PFAS. PFOA and PFOS persist in the environment for long periods of time and have been linked to a variety of adverse human health effects. In 2024, the EPA classified both PFOA and PFOS as *likely to be carcinogenic to humans* and concluded that these chemicals are also likely to cause a range of non-cancer effects in humans, including hepatic, immunological, cardiovascular, and developmental effects, depending

[1] An additional 1 percent of sewage sludge is disposed of using other management practices (*e.g.,* deep-well injection).

on exposure conditions (*see* the EPA's *Final Human Health Toxicity Assessment for Perfluorooctanoic Acid (PFOA) and Related Salts,* available at: *https://www.epa.gov/sdwa/human-health-toxicity-assessment-perfluorooctanoic-acid-pfoa,* and *Final Human Health Toxicity Assessment for Perfluorooctane Sulfonic Acid (PFOS) and Related Salts,* available at: *https://www.epa.gov/sdwa/human-health-toxicity-assessment-perfluorooctane-sulfonic-acid-pfos*).

PFAS have been manufactured and used by a broad range of industries since the 1940s, and there are estimated to be thousands of PFAS present in the global marketplace that are used in many consumer, commercial, and industrial products. PFOA and PFOS have been widely studied, and they were once high production volume chemicals within the PFAS chemical class. PFAS manufacturers voluntarily phased out domestic manufacturing of PFOS by 2002 and of PFOA by 2015, and the EPA restricted their uses by Significant New Use Rules (SNURs) issued under section 5(a)(2) of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2604(a)(2) (*see https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-and-polyfluoroalkyl-substances-pfas*).

E. What are the potential sources of PFOA and PFOS to sewage sludge?

Although domestic manufacturing of PFOA and PFOS have been phased out and their uses restricted, multiple activities still result in PFOA, PFOS, and their precursors being released to WWTPs. Current and historical activities include industrial releases (*e.g.,* aqueous film-forming foam, pulp and paper plants), commercial releases (*e.g.,* car washes, industrial launderers), and down-the-drain releases from homes (*e.g.,* use of consumer products like after-market water resistant sprays, ski wax, floor finishes, and laundering of stain or water-resistant textiles with PFOA or PFOS coatings) (*see* the *Preliminary Effluent Guidelines Program Plan 16,* available at *https://www.epa.gov/eg/preliminary-effluent-guidelines-program-plan,* and the *Multi-Industry Per- and Polyfluoroalkyl Substances (PFAS) Study—2021 Preliminary Report,* available at *https://www.epa.gov/system/files/documents/2021-09/multi-industry-pfas-study_preliminary-2021-report_508_2021.09.08.pdf*). If products containing PFOA or PFOS are disposed of at a lined MSW landfill, because the most common off-site management practice for landfill leachate is to transfer it to a WWTP, then that landfill's leachate could be a source of PFOA and PFOS to a WWTP. At different WWTPs across the country, any of these release mechanisms may play a role in PFOA or PFOS entering the plant and contaminating the sewage sludge.

Statewide surveys have found PFOA and PFOS in sewage sludge originating from industrial and non-industrial sources that are discharging to WWTPs. Traditional wastewater treatment technology does not remove or destroy PFOA or PFOS, and these chemicals typically accumulate in the sewage sludge. Appropriate pretreatment solutions at industrial dischargers exist, are cost-effective, and have been shown to be effective in reducing high concentrations of PFOA and PFOS; however, studies have found that PFOA and PFOS are consistently detected at varying levels in sewage sludge even at WWTPs that do not receive wastewater from industrial users of the chemicals (*i.e.,* they only receive wastewater from residential and commercial users).

F. What is a risk assessment?

Risk assessment is a scientific process that is used to characterize the nature and magnitude of health risks to humans (*i.e.,* children and adults) and ecological receptors (*i.e.,* aquatic and terrestrial plants and wildlife) from pollutants (*see https://www.epa.gov/risk/about-risk-assessment#whatisrisk*). An environmental risk assessment considers three primary factors: (1) presence (*i.e.,* how much of a pollutant is present in the environment), (2) exposure (*i.e.,* how much contact humans or wildlife have with the pollutant), and (3) the toxicity of the pollutant (*i.e.,* the health effects the pollutant causes in humans or wildlife).

The concentration of pollutants found in sewage sludge varies across space and time, depending on industrial and other inputs to individual WWTPs. The presence of a pollutant in sewage sludge alone does not necessarily mean that there is risk to human health or the environment from its use or disposal. The EPA estimates potential exposures to humans and environmental receptors by modeling the fate and transport of a pollutant through the environment, taking into account different environmental conditions and exposure scenarios, and then estimates risk by comparing those potential exposures to toxicity values.

III. Description and Preliminary Findings of the EPA's Draft Risk Assessment

A. Scope of the Draft Risk Assessment

The EPA's draft risk assessment describes the potential human health and environmental risks associated with land application, surface disposal, and incineration of sewage sludge containing PFOA or PFOS, which are the use and disposal practices regulated under CWA section 405(d) and the EPA's accompanying regulation at 40 CFR part 503, Standards for the Use or Disposal of Sewage Sludge. The draft risk assessment does not assess human health or environmental risks associated with sewage sludge disposal in MSW landfills, a common management practice for disposal of sewage sludge, because that practice is regulated under the Resource Conservation and Recovery Act (RCRA) and the EPA's accompanying regulations at 40 CFR part 258, Criteria for Municipal Solid Waste Landfills.

The draft risk assessment is scoped to model risks to human populations because available data indicate that humans are more sensitive to PFOA and PFOS exposures than aquatic or terrestrial wildlife or livestock. For the land application scenarios, the EPA modeled potential PFOA and PFOS exposures and estimated human health risks to those living on or near impacted properties under three hypothetical scenarios: (1) application to a farm raising dairy cows, beef cattle, or chickens (pasture farm scenario), (2) application to a farm growing fruits or vegetables (food crop farm scenario),[2] and (3) application to reclaim damaged soils such as an overgrazed pasture (reclamation scenario). For the surface disposal scenarios, the EPA modeled potential PFOA or PFOS exposures via groundwater to those living near a lined or unlined surface disposal site (*e.g.,* sewage sludge monofill). For the incineration scenario, the EPA provides a qualitative description of the potential risks to communities living near a sewage sludge incinerator (SSI). The draft risk assessment does not provide quantitative risk estimates for the incineration scenario due to significant data gaps related to the extent to which

[2] The EPA acknowledges that the majority of food crops grown in the United States do not use sewage sludge as a soil conditioner or fertilizer and some states have restricted the land application of sewage sludge to food crops. However, this practice is not consistent across all states. Furthermore, because of the extreme persistence of PFOA and PFOS in soils, a property with previous sewage sludge land application that has been repurposed as a food or feed crop farm could still have multiple relevant human exposure pathways.

incineration in an SSI destroys PFOA and PFOS and the health effects of exposure to products of incomplete combustion.[3]

B. Modeling Approaches

The EPA first performed a screening-level risk analysis for PFOA and PFOS in sewage sludge using a high-end deterministic exposure model for a hypothetical farm. This screening approach assumed high starting concentrations of PFOA and PFOS in sewage sludge (approximating a 95th percentile concentration based on available data), high-end consumption rates for each exposure pathway (*e.g.,* 90th percentile consumption rates for drinking water intake, milk consumption), and other high-end factors. The high-end screening model resulted in risks exceeding the EPA's acceptable thresholds for every individual human exposure pathway (*e.g.,* drinking water, consumption of fish, milk, beef, vegetables). Given that the risk estimates greatly exceeded the agency's acceptable thresholds in the screening-level assessment, the EPA next moved on to a refined risk assessment. In this assessment, the EPA refined the modeling approach and assessed risks under median (*i.e.,* central tendency, 50th percentile), rather than high-end exposure conditions, to better understand the potential scope and magnitude of risks under different use and disposal scenarios. To complete the central tendency deterministic modeling steps of the refined risk assessment, the EPA (1) identified available fate and transport models to select the best models for assessing PFOA and PFOS, and (2) parameterized the models with inputs and exposure factors to reflect median U.S. conditions and consumption behaviors. For example, when calculating risks from egg consumption in the central tendency approach, the model assumes that an adult living on a farm consumes, on average, 1 egg per day from the impacted property for ten years, which represents the median egg consumption rate reported in the EPA's *Exposure Factors Handbook* for households who farm (*see https://www.epa.gov/expobox/about-exposure-factors-handbook, Table 13–40*). The model further assumes that when the adult lives on the impacted farm, they have no sources of PFOA or PFOS exposure other than the contaminated eggs and that for the remainder of the adult's life, they have no exposure to PFOA or PFOS through any pathway.

C. Preliminary Findings of the Central Tendency Modeling

The findings summarized here and presented in the draft risk assessment are preliminary. The EPA expects to publish a final risk assessment after reviewing public comments and revising the draft risk assessment accordingly. Based on the modeling results of the refined risk assessment for the central tendency (median) exposure scenarios, the EPA has found that draft risk estimates exceed the agency's acceptable human health risk thresholds[4] for some pasture farm, food crop farm, and reclamation scenarios when assuming that the land-applied sewage sludge contains 1 part per billion (ppb)[5] of PFOA or PFOS. The EPA also finds that there are human health risks associated with drinking contaminated groundwater sourced near a surface disposal site when sewage sludge containing 1 ppb of PFOA or sewage sludge containing 4 to 5 ppb of PFOS is disposed in an unlined or clay-lined surface disposal unit.

Not all farms or disposal sites where sewage sludge containing PFOA or PFOS have been used or disposed of are expected to pose a risk to human health. For example, human health risks are expected to be lower when sewage sludge is applied to areas with protected groundwater, sites that are distant from surface waters used for fishing or as a drinking water source, and when applied to non-food crops, such as grain, fuel, or fiber crops. However, the EPA's modeling results from the draft risk assessment suggest that under certain scenarios and conditions, land-applying or disposing of sewage sludge containing a detectable level (*i.e.,* 1 ppb or more) of PFOA or PFOS could result in human health risks exceeding the agency's acceptable thresholds for cancer and non-cancer effects. At this low level (1 ppb) of PFOA or PFOS in sewage sludge, the EPA modeled land application scenarios for either a single application at a rate of 50 dry metric tons (dmt) per hectare (reclamation scenario) or 40 annual applications at a rate of 10 dmt per hectare (approximately the median application rate of U.S. sewage sludge; used for pasture and food crop farm scenarios). Each of these modeled scenarios resulted in exceedances of risk thresholds for several exposure pathways (*e.g.,* consumption of drinking water, fish, beef, milk, eggs, certain fruits and vegetables). The EPA's modeling indicates that, for a subset of the modeled scenarios and pathways, there may be potential risks exceeding acceptable levels following a single application of sewage sludge contaminated with 1 ppb of PFOA or PFOS, applied at a rate of 10 dmt per hectare (median rate).

The presence and magnitude of human health risks from sewage sludge use and disposal to those living on or near impacted properties or primarily relying on their products is expected to vary across regions and among properties depending on the concentration of PFOA and PFOS in sewage sludge; the number of land applications; the volume of sewage sludge land applied; the climate, geology, and hydrology at the use or disposal site; agronomic practices; human behavioral patterns (*e.g.,* drinking water ingestion rates, consumption rate of impacted products); and many other site-specific factors.

Draft risk estimates for the modeled scenarios are presented in the risk assessment as cancer risk levels and hazard quotients (HQs). Cancer risk levels represent the number of expected excess lifetime cancer cases due to exposure to the carcinogenic pollutant in a given population size. For example, a cancer risk level of 1 in 1,000 indicates that lifetime exposure to the carcinogenic pollutant would be expected to cause one additional case of cancer for every one thousand people in the exposed population. Risk for non-cancer effects are expressed as HQs that represent the ratio of the potential exposure to a pollutant to the level below which adverse non-cancer effects are not expected. In other words, an HQ of less than 1 means adverse non-cancer health effects are unlikely and thus risk can be considered negligible; an HQ greater than 1 means adverse non-cancer

[3] Based on currently available information, sewage sludge incinerators may not operate at high enough temperatures and long enough residence times to fully destroy PFOA and PFOS in sewage sludge (*see* the *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances—Version 2 (2024),* available at: *https://www.epa.gov/pfas/interim-guidance-destruction-and-disposal-pfas-and-materials-containing-pfas*).

[4] The risk threshold for non-cancer human health effects is a hazard quotient equal to one, *i.e.,* when the exposure is equal to the reference dose (RfD). The threshold for cancer effects is a lifetime excess cancer risk of 1×10^{-6}, *i.e.,* when the lifetime average daily dose results in one extra cancer case per million people above the background cancer incidence.

[5] Though EPA Method 1633 recommends that laboratories develop their own limit of quantification (LOQ) and method detection limit (MDL) when measuring PFAS in sewage sludge, most laboratories running this method achieve LOQs and MDLs of 1 ppb or lower for PFOA and PFOS (*see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas*).

effects are possible and thus risk is indicated.

Modeling for land application scenarios suggests that, when the majority of the consumer's dietary intake of a product comes from a property impacted by the land application of sewage sludge contaminated with PFOA or PFOS, the highest risk pathways include (1) drinking milk from pasture-raised cows consuming contaminated forage, soil, and water, (2) drinking water sourced from contaminated surface or groundwater on or adjacent to the impacted property, (3) eating fish from a lake impacted by runoff from the impacted property, and (4) eating beef or eggs from majority pasture-raised hens or cattle where the pasture has received impacted sewage sludge. The risk calculations assume each of these farm products (*e.g.,* milk, beef, eggs) or drinking water consumed comes from the impacted property but does not combine risks from each of these products. The EPA did not estimate risk associated with occasionally consuming products or drinking water impacted by land application of contaminated sewage sludge nor foods that come from a variety of sources (*e.g.,* milk from a grocery store that is sourced from many farms and mixed together before being bottled). Additionally, the majority of food produced in the U.S. is not grown on fields where sewage sludge is land applied.

Risk estimates for the highest risk pathways can exceed the EPA's acceptable thresholds by several orders of magnitude. For example, for the land application scenarios, cancer risk levels associated with drinking the modeled amount of contaminated milk (*i.e.,* 32 ounces per day for adults) can exceed 1 in 1,000, and HQs for non-cancer effects associated with eating the modeled amount of contaminated fish (*i.e.,* 1 to 2 servings per week for adults) can reach up to 45. For the food crop farm scenario, there are limited scientific studies available regarding the uptake of PFOA and PFOS from sewage sludge-amended soils into certain fruits and vegetables; however, the draft risk assessment suggests that cancer risks from consuming the modeled amount of these contaminated foods (*e.g.,* 1 serving per day for adults for certain categories of fruits and vegetables) can exceed 1 in 100,000 for PFOA. Because the draft risk assessment indicates risks associated with individual exposure pathways, there may be potential risks to populations beyond the farm family (*e.g.,* people living near a use or disposal site who use contaminated groundwater as a source of drinking water or people who primarily consume produce, dairy, or meat from a farm that has applied contaminated sewage sludge under the modeled conditions).

For the surface disposal sites, there are no exceedances of the EPA's risk thresholds for PFOA or PFOS in drinking water sourced from groundwater near composite-lined surface disposal sites. However, for unlined and clay-lined surface disposal sites, there can be exceedances of the risk thresholds for the drinking water pathway; for unlined sites, the cancer risk levels can exceed 1 in 1,000 and HQs are as high as 12; for clay-lined sites, the cancer risk levels can exceed 1 in 1,000 and HQs are up to 9. As mentioned above, the draft risk assessment does not include quantitative risk estimates for incineration due to data limitations.

The draft risk calculations are not conservative estimates because they (1) model risks associated with sludge containing 1 ppb of PFOA or PFOS, which is on the low end of measured U.S. sewage sludge concentrations, (2) reflect median exposure conditions (*e.g.,* 50th percentile drinking water intake rates) rather than high exposure conditions, (3) do not include non-sewage sludge exposures to PFOA or PFOS (*e.g.,* consumer products, other dietary sources), (4) do not account for the combined risk of PFOA and PFOS together, and (5) do not account for exposures from the transformation of PFOA or PFOS precursors. As such, risk estimates that account for multiple dietary exposures (*e.g.,* consuming impacted milk, water, and eggs), multiple sources of exposure (*e.g.,* exposure to PFOA or PFOS-containing consumer products), or exposure to other PFAS would be greater than those presented in this draft risk assessment. Further, the EPA's draft risk assessment relies on models where risks scale linearly with the starting concentration of PFOA or PFOS in sewage sludge. As such, sewage sludge containing ten times more PFOA or PFOS (*i.e.,* 10 ppb) would yield risk estimates that are ten times greater than those presented in the draft risk assessment, assuming all other factors are constant.

The EPA did not complete Monte Carlo probabilistic modeling because risks exceeding acceptable thresholds were identified in multiple scenarios and pathways in the central tendency deterministic modeling results. Further refinement of the draft risk assessment from the central tendency deterministic models to Monte Carlo probabilistic models would result in an increased risk finding because the EPA's goal for a probabilistic assessment is to identify a high-end (*e.g.,* 95th percentile) threshold protective of the impacted population (*e.g.,* farm families), while a central tendency approach, which the EPA used in this case, models a person at the 50th percentile exposure level of the impacted population. Since risk is indicated under this central tendency scenario, Monte Carlo probabilistic modeling, which would examine the entire distribution of potential exposures to PFOA or PFOS and report the 95th percentile of the risk distribution, is not warranted at this time. For this reason, the EPA is focused on the central tendency modeling results and identifying actions that could be taken to mitigate risks.

IV. Next Steps

A. Risk Reduction

The draft risk assessment indicates that there are potential risks to human health to those living on or near impacted properties or primarily relying on their products from land application and surface disposal of sewage sludge containing detectable levels of PFOA or PFOS. That risk is dependent on (1) the concentration of PFOA and PFOS in sewage sludge, (2) the specific type of management practice (*e.g.,* type of farm or presence of a liner in a monofill), (3) the local environmental and geological conditions (*e.g.,* climate and distance to groundwater), (4) the share of each product (*e.g.,* food crop, drinking water) that is sourced exclusively from the impacted property, and other factors noted above. Risks are possible, though not quantified due to data limitations, from the incineration of PFOA and PFOS-containing sewage sludge. Site-specific factors should be considered when identifying risk mitigation and management practices to reduce human exposures associated with PFOA and PFOS in sewage sludge.

Regardless of the management practice to use or dispose of sewage sludge, exposure and risk reduction is possible through pretreatment at industrial facilities discharging to a WWTP. By monitoring sewage sludge for PFOA and PFOS, WWTPs can identify likely discharges of PFOA and PFOS from industrial contributors, require pretreatment, and achieve significant reductions in PFOA and PFOS concentrations in their sewage sludge. In some state programs, WWTPs with industrial sources have achieved a 98 percent reduction in PFOS sewage sludge concentrations through industrial pretreatment initiatives. The EPA recommends that states, Tribes, and WWTPs monitor sewage sludge for PFAS contamination, identify likely

industrial discharges of PFAS, and implement industrial pretreatment requirements, where appropriate. Doing so will help reduce downstream PFAS contamination and lower the concentration of PFOA and PFOS in sewage sludge (*see* Section C of the EPA's December 2022 memorandum *Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs,* available at: *https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution*).

B. Related Actions

The EPA is planning to conduct the next National Sewage Sludge Survey (NSSS) in collaboration with the publicly owned treatment works (POTW) Influent PFAS Study (*see https://www.epa.gov/biosolids/sewage-sludge-surveys*). This NSSS will focus on obtaining current national occurrence and concentration data on PFAS in sewage sludge. The data generated by the NSSS will help inform future risk assessments and risk management actions for sewage sludge.

Additionally, the EPA continues to evaluate opportunities to limit PFAS discharges from multiple industrial categories through the Effluent Guidelines Program. The specific actions include revising the Organic Chemicals, Plastics, and Synthetic Fibers Effluent Limitations Guidelines (ELGs) to address wastewater discharge from PFAS manufacturing facilities; revising the Metal Finishing and Electroplating ELGs to address wastewater discharge from metal finishing and electroplating operations focusing on facilities using PFAS-based fume suppressants and wetting agents; and revising the Landfills ELGs to address PFAS discharges from landfill leachate. The upcoming POTW Influent PFAS Study will also help the agency prioritize industrial point source categories for future study and, as appropriate, ELGs (*see https://www.epa.gov/eg/study-pfas-influent-potws*).

C. Final Risk Assessment and Potential Future Actions

After the public comment period has closed, the EPA will consider the comments received, revise the draft risk assessment as appropriate, and prepare a final risk assessment. The EPA will announce the availability of the final risk assessment in the **Federal Register**. If the final risk assessment indicates that there are risks above acceptable thresholds when using or disposing of sewage sludge, the EPA expects to propose a regulation under CWA section 405 to manage PFOA and/or PFOS in sewage sludge to protect public health and the environment. The EPA may also consider developing regulations under other statutory authorities to further reduce PFAS discharged to WWTPs. During the risk management deliberation process, the results of the final risk assessment may be integrated with other considerations, such as economic costs and treatment feasibility, to reach decisions regarding the need for and practicability of implementing various risk reduction activities. If the EPA proposes regulatory standards for PFOA and/or PFOS in sewage sludge, the public will have an opportunity to provide comment.

Bruno Pigott,

Principal Deputy Assistant Administrator.

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FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0392; FR ID 272605]

Information Collection Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act (PRA) of 1995, the Federal Communications Commission (FCC or the Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees.

The FCC may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid Office of Management and Budget (OMB) control number.

DATES: Written PRA comments should be submitted on or before March 17, 2025. If you anticipate that you will be submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

ADDRESSES: Direct all PRA comments to Nicole Ongele, FCC, via email *PRA@fcc.gov* and to *nicole.ongele@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Nicole Ongele, (202) 418–2991.

SUPPLEMENTARY INFORMATION:

OMB Control Number: 3060–0392.

Title: 47 CFR 1 Subpart J—Pole Attachment Complaint Procedures.

Form Number: N/A.

Type of Review: Extension of currently approved collection.

Respondents: Businesses or other for-profit.

Number of Respondents and Responses: 1,760 respondents; 1,760 responses.

Estimated Time per Response: 0.50 hours (30 minutes)–75 hours.

Frequency of Response: On occasion reporting requirements.

Obligation to Respond: Required to obtain or retain benefits. Statutory authority for this information collection is contained in 47 U.S.C. 224.

Total Annual Burden: 2,759 hours.

Total Annual Cost: $15,000.

Needs and Uses: Currently, OMB Collection No. 3060–0392, tracks the burdens associated with requests for access to a utility's poles, notifications between utility pole owners and attachers needed for the shared use of utility poles, as well as the filing of complaints and petitions for stay against the actions of said utilities. The Commission will use the information collected to assess whether the petition or complaint can proceed as a docketed case.

Federal Communications Commission.

Marlene Dortch,

Secretary, Office of the Secretary.

[FR Doc. 2025–00645 Filed 1–14–25; 8:45 am]

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