



October 5, 2026

Submitted Via Federal eRulemaking Portal (<http://www.regulations.gov>)

Office of Water
Environmental Protection Agency

Re: Docket ID: EPA-HQ-OW-2026-2509
Document Citation: 91 FR 41020
Document Number: 2026-13615
Federal Register: Vol. 91, No. 127. Monday, July 6, 2026. Page 41020 - 41022

*Draft Guidance for Reducing Risk from Perfluorooctanoic Acid (PFOA) and
Perfluorooctane Sulfonic Acid (PFOS) in Biosolids*

Administrator Zeldin,

American Farmland Trust (AFT) is pleased to submit feedback on the Environmental Protection Agency's (EPA) *Draft Guidance for Reducing Risk from Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS) in Biosolids*.

AFT appreciates the EPA's efforts to develop guidance for farmers, ranchers, and the general public on reducing the health risks posed by PFAS in biosolids. As part of this, AFT applauds EPA's acknowledgement of the risks of PFAS in biosolids, and its work to protect farm viability and agricultural production. In particular, AFT supports EPA's goal to provide farmers, ranchers, and the general public with the information they need to make well-considered decisions related to PFAS and biosolids, which is especially imperative in the absence of additional regulation. However, AFT believes that the Draft Guidance does not yet fully achieve this goal. This comment is focused on helping EPA strengthen the final Guidance so that it provides transparent, accurate, and actionable information that farmers and ranchers can use in determining whether to apply biosolids on their land and how to address PFAS.

Introduction

Founded in 1980, AFT takes a holistic approach to agriculture, focusing on the land itself, the agricultural practices used on that land, and the farmers and ranchers who do the work. AFT views PFAS as an existential threat to all areas of its mission, putting at risk the ability of land to safely produce food, the viability of farm and ranch businesses, and the health and wellbeing of farmers, ranchers, and their families.

AFT is a prominent voice in the agriculture sector's response to PFAS, leading the 16-organization [PFAS and Agriculture Policy Workgroup](#), which published a [set of federal policy recommendations](#) in September 2025. These recommendations urge the federal government to:

- Provide relief and support to PFAS-impacted farmers and ranchers;
- Protect PFAS-impacted farmers and ranchers from liability under CERCLA;
- Reduce additional contamination by testing biosolids for PFAS prior to land application;
- Invest in research; and
- Increase federal coordination and communication.

Although this comment represents AFT alone, it has been heavily influenced by the process of developing the Workgroup's recommendations, as well as dialogues with additional stakeholders including congressional offices and other organizations. In addition, while AFT welcomes that the Draft Guidance provides recommendations for many sectors, these comments focus primarily on its impact on farmers and ranchers.

General Recommendations for EPA:

- 1. Finalize the Draft Biosolids Risk Assessment and conduct a national survey to document the occurrence of PFAS in biosolids.** Understanding the prevalence of PFAS in biosolids, and the associated risks to farmers and ranchers, is a critical first step toward fully addressing the issue. The final Biosolids Risk Assessment should take into consideration, and make revisions based upon, the public comments made by agricultural organizations. As part of understanding the prevalence of PFAS in biosolids, EPA should also undertake a national survey to document the occurrence of PFAS in biosolids across the country. The national survey should be inclusive of a broader set of PFAS than PFOA and PFOS since other PFAS compounds also have recognized health risks. Without a complete and accurate Risk Assessment, and a full understanding of the prevalence of PFAS in biosolids, EPA will lack the foundational information to adequately address this issue and inform farmers and ranchers.
- 2. Provide greater focus on farmers and ranchers within the final Guidance.** Farmers, ranchers, and their families are at especially high risk of negative health and economic impacts related to PFAS. In addition to potentially consuming contaminated food, a farmer with PFAS-contaminated land may also drink water from a contaminated private well, breathe contaminated air, or even absorb PFAS through their skin when in contact with contaminated soil or water. Additionally, farmers and ranchers face significant and unique economic risks from PFAS, ranging from making expensive operational changes (e.g., installing water filtration systems) to the potential loss of their farms. Recognizing this, the EPA's Draft Biosolids Risk Assessment focused on risks posed by PFAS in biosolids to farmers, farm families, and those eating large quantities of food from specific farms. While the Draft Guidance expresses concern that the Risk Assessment did not sufficiently focus on the general public, AFT believes that any efforts to broaden the focus of the Draft Guidance should not diminish farmers and ranchers as a key concern and that the final guidance should provide additional resources for farmers and ranchers, such as outlined later in this comment.

3. **Prioritize actions that will limit additional PFAS contamination of agricultural land in the Draft Guidance.** AFT appreciates that the Draft Guidance recognizes the opportunities for farmers to "adapt" to PFAS contamination of soil by growing non-food crops (e.g., corn for ethanol), crops with lower PFAS uptake (e.g., certain fruits), or avoiding higher-uptake crops (e.g., leafy greens). Such adaptation measures for contaminated land have been effective in Maine, and AFT endorses this pragmatic approach that allows for some contaminated lands to remain safely in agriculture.

However, this "adaptation approach" should only be recommended for lands with existing PFAS contamination, rather than being used to justify the risks of future contamination from biosolids. Because PFAS cannot presently be removed from soil at scale, additional PFAS contamination may last for decades, if not centuries. This means that additional contamination must be avoided. In addition to the human and environmental health risks of this contamination, an "adaptation approach" that encourages future application of biosolids risks locking farmers into a narrow set of production options (e.g., corn for ethanol), depriving them of the ability to pivot their operations to meet future market opportunities, and limiting their ability to sell their land.

4. **Work with USDA and agricultural stakeholders to create farmer-specific guidance for land application of biosolids.** Agricultural production systems are highly complex and variable. At present, the Draft Guidance does not provide the detailed information farmers and ranchers need to understand the risks of biosolids, avoid contamination, or adapt to existing contamination. With USDA's help, the EPA could provide supplemental guidance that provides more detailed information about the use of biosolids on agricultural land and how farmers can reduce the risks posed by PFAS while maintaining viable businesses. For example, more information on PFAS uptake in different crops and livestock would help farmers decide what to produce on contaminated land. The supplemental guidance could also reference USDA programs and other resources that could help farmers and ranchers better understand and manage PFAS, including ways to stay up to date on new research relevant to their operations. At a minimum, the Guidance should refer farmers and ranchers to [USDA's existing website on PFAS](#).

5. **Add additional information to the Draft Guidance on the topics below to help farmers, ranchers, and the general public make informed decisions related to PFAS and biosolids:**

- ***Make clear to farmers and ranchers that the federal government, and most states, offer little or no support to farmers or ranchers with contaminated lands or waters.*** The Draft Guidance references opportunities to "adapt" to PFAS (e.g., growing low-uptake crops) without acknowledging that these adaptations often require financial support and technical assistance, or suggesting sources for that assistance. In addition, the Draft Guidance should be explicit that PFAS contamination has forced some farms to close permanently and that there is presently no safety net available to farmers and ranchers (unless their operation is in Maine, or they are eligible for USDA's

Dairy Indemnity Payment Program) should their land and/or products be contaminated by PFAS.

- ***Include information about additional PFAS compounds that may be found in biosolids, and commit to updating the final Guidance to account for these new chemicals.*** Domestic manufacturers have largely phased out PFOA and PFOS, and now use many new PFAS chemicals. While PFOA and PFOS are still found in biosolids—and still pose serious health risks—the EPA should also include additional PFAS in its research and guidance since some of these chemicals likely also threaten human and environmental health. This additional information would help farmers and ranchers make better informed decisions. AFT recommends that EPA examine the list of PFAS being regulated in states such as Michigan or Maine or the list of PFAS that FDA and USDA test for in food products.
- ***Ensure that information in the Draft Guidance is accurate and not prone to misinterpretation.*** There are several instances where the Draft Guidance is misleading or leaves out vital information, such as:
 - The Draft Guidance specifies that “only biosolids, which are treated prior to use, can be land-applied on farm fields...”. Given its context in the broader document, this phrasing could be taken to imply that current treatment mitigates PFAS. However, the Federal Register notice that accompanied the release of the Draft Guidance states that “traditional wastewater treatment technology does not remove nor destroy PFOA or PFOS, and these chemicals typically accumulate in the sewage sludge.” It is important that this sentence be included in its entirety in the Draft Guidance so that farmers, ranchers, and other stakeholders fully understand that treatment does not address or mitigate PFAS in biosolids.
 - The Draft Guidance states that “most farms land applying sewage sludge grow crops for energy generation or other crops that are not meant for human consumption.” This can be misleading for three reasons. First, while the top use of biosolids is for energy crops, the other two top uses are for feed and forage ([Biosolids Data Project](#)). Because PFAS can bioaccumulate in animals and contaminate meat, milk, and eggs, these uses still can pose risks to human health. Second, farmers rarely control how their crops are used, since commodities like corn are generally not purchased directly by the end user. This means that a farmer cannot easily ensure that their crop be used exclusively for energy. Third, farmers often rotate their crops – in Iowa, for example, three quarters of cropland is rotated between corn and soy ([Iowa State University](#)). So even if a crop grown in potentially contaminated soil is used exclusively for energy, the next year that field might grow a crop used for food or animal feed.
 - Finally, the Draft Guidance states that biosolids “generally are used on crops where edible parts are not in contact with the soil,” implying that soil contact is determinative of risk. However, this is misleading since soil contact alone does not dictate PFAS uptake. In fact, some farms have adapted to contamination by planting potatoes, which are known to have very low PFAS uptake.

- ***Include information and recommendations related to PFAS contamination of animal products and on-farm wells.*** Private wells are not regulated under the Safe Drinking Water Act. At present, mentions of water contamination within the Draft Guidance focus largely on impacts to the general public. It should be explicit about the risk of contamination of private, on-farm wells and include recommendations and resources to protect these drinking water sources. In addition, land-applied biosolids may contaminate animals and animal products such as milk, meat, and eggs through sources such as contaminated drinking water, grazing land, or feed. These animal products may inadvertently either be sold to the general public or consumed by a farm family. As currently written, the Draft Guidance does not acknowledge that PFAS-contaminated biosolids may impact animal products. The Draft Guidance should make farmers aware of these exposure pathways and make actionable recommendations to help avoid contamination.

Responses to Questions

1. Are the recommendations for farmers and bulk land appliers of biosolids sufficient to provide clarity? What other information should the agency consider?

AFT believes that there are opportunities to add additional information to make the recommendations more clear, actionable, and impactful. In addition to the recommended changes to the Draft Guidance included above, suggestions have been listed below the relevant recommendations.

- *Avoiding land application of sewage sludge near fishable waters, lakes or reservoirs that are used as a source of drinking water, or areas that may have higher risks for potential groundwater impacts.*

AFT agrees that not applying biosolids near waterways is an important baseline action for protecting the public from PFAS. For this reason, EPA regulation part 503 guidance already requires a 10-meter setback between land where biosolids are applied and waters of the U.S. AFT encourages EPA to ensure that the existing regulations under part 503 are communicated, maintained, and enforced. AFT agrees that it is also important to avoid contamination of groundwater, but believes that farmers and ranchers need additional information, and access to additional resources, in order to understand potential risks and make informed decisions.

- *Avoiding applying sewage sludge in areas where children under the age of 5 have access or may have access in the future. Landowners should also be aware that there are other potential sources of PFAS that could impact or be present on their land.*

AFT agrees that it is imperative to protect children from PFAS since they are at increased risk for negative health effects. However, farmers cannot predict where children will have access in the future, especially considering the high rates of farmland conversion and the persistence of PFAS in soil. In addition, while children may be at high risk, it is important to note that adults—especially farmers who have greater and consistent exposure through multiple pathways such

as contaminated food, water, and soil—are also at risk of negative health impacts from PFAS exposure. AFT urges EPA to ensure that its recommendations are actionable, and to include additional focus on the health and safety of farmers, ranchers, and farm families since they are at higher risk from PFAS than the general public. In addition, EPA should add language to the Guidance that clarifies what these “other potential sources of PFAS” are, and directs farmers and landowners to related resources about them.

- *Conducting land application on farms with lower risk crops for human exposure, like farms growing grain, fiber crops, or corn for ethanol production, and*
- *Avoiding land application for agricultural practices that have higher risks for human exposures.*

AFT agrees that there are opportunities to take an "adaptation approach" to PFAS that allows farms and ranches with existing PFAS contamination to continue safely producing food and other agricultural products through operational changes, such as by growing crops with lower PFAS uptake or non-food crops. However, there are several important points to be made. First, the reference to "human exposure" seems to refer to the general public, not farmers and ranchers. Farmers are uniquely at risk from PFAS. For instance, a farmer changing production from leafy greens (a higher-uptake crop) to potatoes (a lower-uptake crop) may reduce risk for consumers, but the farmer may still be exposed to very high levels of PFAS every time they drink water from their well, or touch the soil. In revising this recommendation, AFT urges EPA to consider the risks to farmers, ranchers, and farm families in addition to that of the general public.

Second, adapting to PFAS on farmland should primarily be used to retain value of lands with existing contamination, rather than to justify the risk of future contamination. Fundamentally, lands with PFAS contamination: (1) Pose some risk to the health of farmers, ranchers, and farm families on that land, and (2) May restrict what can be safely produced. Not only does this make contaminated land a potential liability, it also threatens the future value of the land and its operation. AFT believes that while it is important that farmers and ranchers are able to adapt to contamination in order to continue safely producing on contaminated soil, this is not a justification for putting additional land at risk, and EPA should work to actively avoid future contamination.

Third, farmers need significantly more detailed and actionable information if they are to pivot their operations to capitalize on an "adaptation approach" to PFAS contamination. This is because every case of PFAS contamination requires a unique approach. For instance, adaptation options will differ depending on whether the contamination is in surface water, ground water, or soil; what specific PFAS compounds are prevalent; soil characteristics; or the existing agricultural production system. In addition, farmers need more detailed information about what adaptation techniques are available to them beyond the advice to avoid leafy greens or grow non-food crops. Such guidance must also take production system realities into account, such as the fact that many farms rotate crops (e.g., growing corn for a year, and then soy). This means that directing a farmer to "grow corn for ethanol production" is not in touch with standard agricultural practices and may not account for future market conditions. AFT

recommends that EPA work closely with USDA to develop specific guidance for farmers and ranchers on how to reduce both personal health risks, and risks to the general public.

In addition to the suggestions above, AFT proposes that the final Guidance include the following specific, actionable recommendations for farmers and ranchers. These recommendations will help farmers better understand the risks of PFAS and what actions they should take to address these risks:

- Review the history of biosolids used on your land to determine if there may already be PFAS present in the soil or water. If biosolids have been used in the past, consider avoiding future applications because of the potential cumulative impact.
- Research the supplier of the biosolids to obtain information about possible PFAS content. This would include (1) reviewing any PFAS test results from the wastewater treatment facility (WWTF); and (2) asking whether the WWTF accepts wastewater from industrial sources, what those industrial sources are, and whether those sources conduct any pretreatment to reduce PFAS entering the WWTF.
- Consult with your local USDA NRCS office and/or your local land-grant university for advice about the benefits, risks, and economics of the different nutrient sources, including land application of local biosolids.
- Consider testing your soil and water to see if PFAS already exists on your farm or ranch. However, it is important to recognize that finding PFAS may force the farm or ranch to significantly change or cease production, and there are only very limited options for state or federal support.
- Review the most recent information on crop species/varieties with the highest levels of PFAS uptake to determine whether there are opportunities to reduce potential exposure to PFAS from consumption. This information might be available from USDA, your state government, or your local land grant university.
- Avoid land application of biosolids on lands grazed by livestock, where animal feed is grown, or near to water sources used by livestock.
- Avoid land application of biosolids near private wells that are used for drinking water or irrigation.
- Contact your state environmental or agricultural agency to determine if they have data or information about PFAS in locally produced biosolids and if they have any restrictions limiting PFAS in land-applied biosolids.

2. Are the recommendations related to surface disposal and incineration of sewage sludge sufficient to provide clarity to stakeholders? What other information should the agency consider?

AFT believes that it is critically important to dispose of biosolids in a way that does not cause unwanted secondary impacts, such as runoff into surface waters, contamination of groundwater or drinking water, contamination of land, airborne PFAS, or other negative impacts on farmers and farm families or the general public.

3. Are the recommendations related to the protection of public health and pollution prevention sufficient to provide clarity to states, Tribes, and utilities about how to reduce

concentrations of PFOA and PFOS in sewage sludge and biosolids? What other information should the agency consider?

AFT encourages EPA to strongly consider the responses and recommendations received by states, Tribes, and utilities on this matter.

4. Several states have taken an approach to reducing PFAS concentrations in sewage sludge that is not risk-based but instead focuses on achieving practical reductions of PFOA and PFOS by addressing discharges from industrial facilities through the implementation of source identification and targeted source reduction. The EPA is seeking feedback and data demonstrating whether and how these approaches can reduce concentrations of PFOA and PFOS in biosolids and sewage sludge, and feedback and data on the effectiveness of these reductions in mitigating risks to public health.

AFT is supportive of any efforts to reduce PFAS in biosolids, including requirements for pre-treatment of industrial wastewater. This is particularly important in the absence of broader biosolids testing and regulation. However, AFT feels that an ideal approach would be risk-based, and include the establishment of a health-based threshold for PFAS in biosolids and regular monitoring of PFAS levels in biosolids. AFT does not believe that a practical reduction of PFAS in biosolids will provide sufficient protections to farmers, ranches, farm families, and agricultural land. In addition, AFT urges EPA to consider the potential risks from a broader range of PFAS compounds than PFOA and PFOS.

5. The EPA is seeking feedback on practices not included in the draft guidance that can reduce risk when land applying biosolids. Please provide any conditions, controls, monitoring, best management practices, or permitting practices and any examples of implementation from State, Tribal, or local programs.

In order to reduce risk when land applying biosolids, AFT urges EPA to first finalize the Draft Biosolids Risk Assessment to better understand the risks associated with biosolids, especially for farmers, ranchers, and farm families. Once the Risk Assessment is complete, EPA should use the Risk Assessment to set a threshold for allowable PFAS in biosolids applied to agricultural land and require that biosolids be tested for PFAS levels prior to land application. EPA can consider different thresholds depending on the quantity and frequency of biosolids applied.

EPA should also consider research into other contaminants present in biosolids that may pose a risk to farmers and farm families, agricultural land, and the general public, such as (but not limited to) pharmaceuticals and microplastics. AFT also encourages EPA to work closely with USDA and other research institutions (including land-grant universities) to stay abreast of novel technologies and emerging research.

6. The EPA is seeking feedback on practices not included in the draft guidance that can reduce risk when surface disposing or incinerating sewage sludge contaminated with PFOA and PFOS. Please provide any conditions, controls, monitoring, best management

practices, or permitting practices and any examples of implementation from State, Tribal, or local programs that the EPA should consider.

AFT believes that it is critically important to dispose of biosolids in a way that does not cause unwanted secondary impacts, such as runoff into surface waters, groundwater or drinking water contamination, contamination of land, airborne PFAS, or other negative impacts on farmers and farm families or the general public.

7. What next steps should the EPA take regarding the Draft Risk Assessment, and how would this help provide clarity about potential risks from use and disposal of biosolids and sewage sludge? Should the agency also reevaluate the underlying framework for the Draft Risk Assessment, and if so, how? What specific data or other information is available that may help inform the agency's potential next steps on the Draft Risk Assessment and other potential future actions related to PFAS in biosolids and sewage sludge?

AFT strongly encourages EPA to update and finalize the Draft Biosolids Risk Assessment so as to better understand the risks posed by PFAS in biosolids to farmers, ranchers, and the general public. As part of this, AFT recommends that EPA thoroughly review the public comments received in response to the Risk Assessment in order to ensure that it is accurately modeling and estimating risk in different scenarios. AFT also recommends that EPA conduct a nationwide survey of biosolids to better understand average concentrations of total PFAS in biosolids, as well as determine what are the most common PFAS compounds. In addition, AFT recommends that EPA collect updated information about average application rates and frequency, what crops are most likely to receive biosolids, and application quantities by state. Finally, AFT reminds EPA that farmers and farm families are at significantly higher risk of negative health impacts from PFAS than the general public, and as such, the final Biosolids Risk Assessment should continue to make them a key focus.

8. Given that risks can depend on land use decisions (e.g., risks are different for growing textile crops than produce), should the EPA evaluate policy options that would consider current and future land use practices (e.g., different land use or planted crops after a change in ownership)? What strategies should the EPA consider for protecting public health, future land uses, landowners, and property values?

AFT believes that, fundamentally, PFAS cannot be fully addressed through the voluntary actions of private citizens. The only way to truly protect the health of farmers, farm families, and the general public, while also protecting the value of land and its ability to safely produce food, is by taking a proactive approach to understanding and regulating PFAS. AFT recommends that EPA, in close coordination with USDA, take the following steps:

1. Finalize the Draft Biosolids Risk Assessment to better understand the risks of PFAS to farmers, farm families, and the general public.
2. Conduct a nationwide Sewage Sludge Survey to better understand the occurrence of a broad range of PFAS in biosolids.

3. Establish a health-based upper threshold for PFAS in land-applied biosolids and require testing of all biosolids before land application, properly disposing of (e.g., lined landfill, incineration) biosolids exceeding the threshold.
4. Consider additional pathways for keeping PFAS out of the waste stream, such as phasing out additional PFAS compounds attributed to negative health impacts, banning non-essential uses of PFAS, and requiring industrial pre-treatment.
5. Fund research into soil remediation, affordable water filtration, and additional adaptation techniques that will help farmers to continue safely producing food on contaminated land.

Conclusion

AFT appreciates the opportunity to submit our comments on how EPA can best protect farmers, farm families, farmland, the environment, and the general public from the risks posed by PFAS in biosolids. We look forward to working with EPA on this important issue.

Respectfully submitted,

American Farmland Trust