

Solutions for a Toxic-Free Tomorrow

Testimony of Sarah Woodbury, Director of Advocacy, Defend Our Health In SUPPORT of LD 1911, "An Act To Prohibit the Contamination of Clean Soils with So-called Forever Chemicals" Before the Environment and Natural Resources Committee January 24, 2022

Senator Brenner, Representative Tucker and members of the Environment and Natural Resources Committee: My name is Sarah Woodbury, and I am the director of advocacy for Defend Our Health. Defend works to create a world where all people are healthy and thriving, with equal access to safe food and drinking water, healthy homes, and products that are toxic-free and climate-friendly. Please accept this testimony in support of LD 1911 which would close loopholes that currently exist that allow farms and gardens to continue to be contaminated by toxic PFAS chemicals.

By now this committee has heard the stories of PFAS contamination across the state including stories over Thanksgiving telling people in Fairfield to not eat the meat from deer many had caught to feed their families. There has been story after story from impacted farmers and landowners who are worried about the financial and health impacts on their families from this contamination. You will hear even more of these heartbreaking stories today. Studies continue to show links between PFAS and negative health impacts, including certain cancers, fertility issues and decreased immune response. Yet, we still have policies in place that are allowing more contamination of our farms and gardens from contaminated sludge and compost. This is unacceptable. LD 1911 would help to close loopholes in the current policies that are allowing PFAS contaminated sludge and compost to be spread on farms and gardens across the state.

One major source of PFAS contamination in Maine is the application of industrial or municipal sludge, sometimes called biosolids, on farmland. The application of sludge has led to the contamination of at least four family farms and hundreds of residential wells across the state. Due to legislation passed last session, the state is now ramping up testing of farmland across the state where sludge has been spread. As the testing moves forward, we unfortunately expect that this number will rise, and we will have even more impacted farms and communities dealing with the issue of PFAS contamination.

After the contamination of Stoneridge Farm became public in 2019, the Department of Environmental Protection (DEP) halted the spread of sludge until it was tested for three types of PFAS (PFOA, PFOS, & PFBS).¹ When DEP tested sludge for those three PFAS, over 95% of the sludge tested exceeded the Department's screening levels for at least one of those compounds, showing just how extensive the contamination is in biosolids. Following these results, the volume of sludge land applied dropped. Yet, despite documenting the contamination

¹ Maine DEP. "Requirement to Analyze for PFAS Compounds." March 22, 2019. https://www1.maine.gov/dep/spills/topics/pfas/03222019_Sludge_Memorandum.pdf



of the sludge, DEP has not fully stopped it from being utilized as fertilizer. The state's policy has two large loopholes that continue to allow contaminated sludge to be spread on our farms and gardens across the state.

The first loophole allows for clean soil to be polluted with contaminated sludge. If a licensee wants to apply the dirty sludge, they have to first test the farm soil it is going to be delivered to. If the soil tests "clean," the dirty sludge may be mixed with the clean soil so long as it doesn't bring the resulting mix over the established screening level. Which basically means that farmers are allowed to pollute clean soil with dirty sludge to the very brink of exceeding the standard. Deliberately polluting clean soil to within a hair of the maximum allowable amount in order to "beneficially use" toxic sludge is illogical and not a viable solution. Especially as we continue to identify health concerns for PFAS at lower levels as time goes on. The screening standard that is being used for the sludge is currently based on the same underlying assumptions of harm as a drinking water standard of 70 ppt, which is the federal advisory level. Recognizing that 70 ppt for PFAS in drinking water is not health protective. Maine passed legislation last session, which is already being implemented, setting a screening level of 20 ppt, and the department has not adjusted the screening levels for PFAS in sludge to accommodate these new standards. The USEPA recently submitted to its scientific advisory committee for review evidence that would support substantially lower acceptable limits.² In a few short years, if not already, the fields that DEP has allowed to be polluted as "below the standard" may actually be considered too toxic to farm.

The second loophole is that contaminated sludge may be sent to composting facilities. The composting of the sludge may reduce the presence of pathogenic bacteria or viruses, but does nothing to eliminate the PFAS contamination. As shown in the table at the end of my testimony, state data shows the levels in resulting compost often exceeds the screening standards, sometimes even by as much as 18 times higher. This compost is sold to farmers, landscapers, and even at retail to home gardeners, leaving them to inadvertently contaminate their land. DEP justifies this is by saying since they don't know or regulate where compost is going to be used, they assume it will be going to soil with a "background" level of PFAS – essentially clean soil.³ The Department then models the mix of clean soil and the dirty compost to see if exceeds the screening standard. In practice, since the volume of fertilizer assumed to be used is small relative to the volume of soil, this means that compost is given a free pass, and compost with levels well above the state's standards may be sold for use in fields and gardens across the state.

While we strongly believe that polluting clean soil with dirty compost is a bad idea for all the reasons previously discussed, it is also worth critically assessing the assumptions DEP uses as cover for allowing the dirty compost to be distributed. The first being that farmers and gardeners are using the compost only on areas that have never had PFAS contaminated

²USEPA. "EPA Advances Science to Protect the Public from PFOA and PFOS in Drinking Water." November 16, 2021. <u>https://www.epa.gov/newsreleases/epa-advances-science-protect-public-pfoa-and-pfos-drinking-water</u> - the suggested reference doses are thousands of times lower, driving a health-based drinking water standard to fractions of a ppt.

³ DEP currently uses a very low level based on an out of state study. It is worth noting that DEP staff have suggested in conversations with us that this bill is pre-mature since they are in the process of completing a new "background level" study that will provide a more accurate assessment of average PFAS levels in Maine soils. For the reasons further detailed above, we believe reliance on any average "background" is an unrealistic and clearly faulty assumption, so a proposal of waiting for new data to support a bad assumption should clearly be rejected.



compost used on them previously. PFAS are called "forever chemicals" for a reason. They stay in our land and water for years and build up over time. The past applications matter, and DEP is simply assuming without any data that there were no past applications and everywhere is starting with a "background" level. The idea that farmers or home gardeners have not spread similar materials on the same fields year after year is laughable. There is not an inexhaustible source of farmland, and people are creatures of habit, returning to the same sources of fertilizers year after year. All good businesses, compost and fertilizer sellers included, rely on repeat business and build their brands specifically to encourage that. While we are unaware of any specific public data, we certainly think the assumption that a purchaser of a particular compost is a repeat customer is a better, and certainly more protective assumption, than every purchaser of compost is a brand-new customer. Second, DEP also assumes in their calculations, that a compost user is following the recommendations for correct application. Anyone who has ever tried to figure out the correct setting on a spreader for their own lawn knows this is prone to error, even if you actually read the labels and try to follow them. And a wide body of research has shown that people struggle to understand or follow safety instructions. Some may suggest that limiting sale to professionals may address this, but the fact of the matter is that "professionals" will remain unregulated in their use of this compost. It is simply illogical that DEP has strict requirements for monitoring what happens, including approval of the location and tracking of amounts, for the direct application of PFAS contaminated sludge, but then has no requirements or tracking for the application of identically contaminated compost.

LD 1911 would close both loopholes, prohibiting the land application of contaminated sludge and require that the sludge-mixed compost meet the state screening levels. We've already had at least four family farms destroyed by PFAS contamination due to sludge spreading and the state is spending millions of dollars to test farmland across the state that may be contaminated; it makes no sense to continue to allow contaminated sludge and compost that contains sludge to be spread on our farms and gardens.

In addition to closing the loopholes, LD 1911 also directs the Department to update its regulations to reflect the growing body of knowledge of the harms from PFAS. As previously noted, last year the legislature mandated drinking water standards that apply to six different PFAS compounds, and set a standard lower than the outdated health advisory level. DEP currently only has screening standards for two of these six compounds, and their derivation is from the same outdated studies that were the basis for the former advisory. Under 1911, the Department would be required to update the existing standards as well as add standard for the four additional compounds that constitute the drinking water standard. As one of the goals of addressing contaminated sludge is to avoid the contamination of ground water used for drinking purposes, it is only logical that DEP's environmental standards at a minimum address the identified drinking water contaminants.

We understand the Department may be concerned with the tight time frame in the bill for completing these regulatory updates. While we recognize that DEP has much work with a limited staff, it is important that the legislature, as our policy setting body, provide clear instruction to the Department on priorities and set clear and hard deadlines for action when there is work that needs to be done. Given the widespread impact of PFAS contamination and the substantial investment of state dollars already underway, avoiding further contamination preventable with appropriate standards must be a priority. The reality we have seen time and



time again is that when not faced with a strict deadline for accomplishing regulatory action, rulemaking is neglected or crawls at a snail's pace. Even in the area of PFAS, the legislature instructed the Department to draft regulations to prohibit the toxic chemicals in food packaging in 2019. DEP has yet to undertake any substantial action on that law, and Maine will fall far behind implementing protections compared to states like Vermont and New York that actually passed their laws long after Maine. It is critical that the legislature ensure the law provides a clear and quick deadline to move rulemaking forward.

We also recognize that the question of what to do with the sludge that had been composted or land applied is a tough one that may increase the costs for some sewer districts. There are no perfect solutions but, currently, landfilling is the least bad option. While there is research going on at the federal level to try to come up with alternatives, those alternatives will likely take several years to come to fruition. Until there are other viable options, we must continue to landfill sludge. In fact, since the 2019 testing requirements came into play, there has already been a large movement of sludge from land application and compost to landfill already. We are already most of the way there. Data from the state-owned landfill, Juniper Ridge, shows that, currently, about 7.7% of all materials landfilled in 2020 was sludge. If sludge currently composted or land applied was sent to Juniper Ridge, this number would still be under 10%. While we are concerned about capacity too, this can be managed and is a necessary cost of preventing the costly pollution of land across the state.

We also understand that composting is cheaper than landfilling. Our waste water treatment facilities may see an increase in fees for landfilling. It is our hope that those costs will be minimal, especially considering much of the sludge is already being landfilled. We also hope the recent influx in federal funds for wastewater will be able to assist in capital equipment that may reduce volumes or otherwise offset some of the burden. However, as much as we don't want to add more costs to sewer districts, we must look at the broader picture. Any additional costs due to landfilling will be far less than what it would cost to clean up contaminated farmland, not to mention healthcare costs and loss of livelihood for impacted communities.

Finally, it has come to our attention that the wording of the bill may not clearly capture the intent. The phrase, "The department may not license" in the opening of sub. 13-E was intended to apply to both currently licensed and any newly licensed facilities, as clearly indicated in the bill's summary. Some have suggested this language could be interpreted as only applying to new licenses issued. We therefore urge the committee to amend this as may be necessary to clarify the intent and ensure the requirements are applicable to existing and new licensees.

Maine's farms and gardens are important to our way of life. Whether it's family farms who sell the products they grow on their land, or those that use their land to grow crops to feed their own families, we need to do everything we can to protect people from exposure to these toxic chemicals. We must do everything we can to stop exposure so we will no longer hear heartbreaking stories about health impacts and the loss of livelihood that many are experiencing because of PFAS contamination. Therefore, we urge this committee to unanimously support LD 1911.



| | PFOS | PFOA | Test Date |
|--------------------------------------|---------------|------|------------|
| Screening levels | 5.2 | 2.5 | - |
| PFAS results from selected compostin | g facilities* | | |
| Craig Rd-Presque Isle Compost Site | 61.8 | 15.8 | 4/24/2019 |
| Evergreen Recycling Enterprises, LLC | 53.7 | 29.8 | 3/5/2020 |
| Hawk Ridge Compost Facility | 11 | 16 | 4/1/2020 |
| LAWPCA Composting Site | 5.88 | 3.7 | 10/28/2019 |
| Rumford-Mexico Sewerage District | 3.4 | 14 | 6/15/2021 |
| Skowhegan Water Pollution Control | 95.9 | 2.17 | 11/19/2020 |
| Fertilizer sold in Maine* | | | |
| EarthLife Natural Fertilizer | 17.3 | 2.75 | - |
| EcoScraps Slow Release Fertilizer | 16.9 | 1.20 | - |

Results of most recent test. Values in red exceed Maine screening standard. Source: Maine DEP (2021). Maine PFAS Data (2007-2021) https://www.maine.gov/dep/spills/topics/pfas/.
Both fertilizers are derived 100% from biosolids. Source: Ecology Center & Sierra Club. (2021). Sludge in the Garden: Toxic PFAS in Home Fertilizers Made from Sewage Sludge.

