LD 2013 March 15, 2022

Testimony of Christine Real de Azua, Sedgwick, Maine

I am Christine Real de Azua, in Sedgwick. I have a small vegetable garden and a few young fruit trees, and some woods under forest management plan. I am a member of MOFGA, of a CSA and of our local coop, and a consumer of Maine-grown, organic produce that the coop and CSA help market, for which we are lucky and thankful. Organic practices (for example, sludge spreading is not used in organic farming, according to MOFGA), have helped greatly to keep harmful toxins including PFAs out of the produce and food chain. Organic practices have once again been providing a way forward, and help keep our earth and people productive and healthy in benign and regenerative ways. Even so, no farmer, even organic farmer, is immune to PFAs, and all deserve support in responding to this crisis that is not of their own making.

I submit this testimony in support of LD2013 and the funding it would provide to address PFAs contamination on agricultural land, with the following observations and amendment proposals to ensure the focus of the bill is on immediate and long-term remediation and restoration of the land and on providing a safety net for farmers (and potentially homesteaders), organic or not, who are affected.

The purposes of the fund as listed in the bill are a first step but seem incomplete or misprioritized. Here therefore are my observations and suggestions upon reading the bill:

4. Purposes

(page 1 line 30) "A. Monitoring the health of a person, and members of that person's household, whose agricultural land is found to be contaminated by PFAS". Yes, this purpose is indeed vital. OBSERVATION: If testing has shown presence of PFAs on their land, why not also make funds available to monitor the health of affected gardeners and homesteaders as well? Would that fall under another agency?

(page 1 line 32) B. "Relocating a person whose agricultural land is found to be contaminated by PFAS;" This purpose may be backwards. Shouldn't remediation/decontamination come first? Research already points to innovative decontamination solutions in the case of agricultural land (see for example National Institutes of Health, https://pubmed.ncbi.nlm.nih.gov/31071516/ or Bangor Daily News, Cannabis may be a surprising solution to Maine's 'forever chemicals' problem ""<a href="https://bangordailynews.com/2022/01/16/homestead/cannabis-may-be-a-surprising-solution-to-maines-forever-chemicals-problem-joam40zk0w/"). Existing and new research suggest that contamination could in many cases be solved (depending on crop, degree and type of contamination, nature of soil, and other factors). Such remediation, monitoring over time, could return the soil to acceptably healthy levels and make it possible for hard-won farmland to continue to operate. Research on this front will continue in Maine — indeed this bill calls for it under purpose J (page 2 line 15) and at the national level. Consider therefore amending by inserting "temporarily" "until land has been remediated or if levels of PFAs are found to be too high to be remediated after best attempts at remediation."

(page 1 line 33) C. "Buying and selling agricultural land found to be contaminated by PFAS;" Again, this purpose fails to put remediation first. Worse, it sounds like it provides an opening and incentive for a land rush, before research has even been properly carried out as recommended in other parts of this bill, and before remediation has even been attempted (see B above). Indeed, even though in some cases only few of the many PFAs may be present on

the land, or in amounts or patches moderate enough to be remediated, a farmer might nonetheless be pressured to sell the land at a "bargain" price because of the purported contamination. Then a remediation method might be found (or already exists) and is applied for cleanup, and the land is sold again, at a profit, to a developer. Every effort should be made to support the farmer and the land first, instead of incentivizing and rushing to sell. At a minimum, therefore, consider amending this purpose by inserting "highly and irremediably" before "contaminated."

Page 1 line 34 and following, D. "Investing in equipment, facilities and infrastructure to ensure that an agricultural enterprise with land found to be contaminated by PFAS maintains profitability while the agricultural enterprise transitions to a new cropping system. "Yes, this emphasis on transition to new crops is important. Since some forms of remediation may go beyond a new cropping system, consider amending by inserting "or implements remediation systems" after "transitions to a new cropping system".

Page 2 - line 1 E. "Assisting an agricultural enterprise with land found to be contaminated by PFAS with developing enterprise budgets for alternative cropping systems or transitioning to alternative agricultural enterprise revenue streams, including but not limited to land use systems combining agricultural use of the land with solar energy production;" Again, include an emphasis on remediation of the land as well.

Consider therefore amending to include "<u>for land remediation programs</u>" before "alternative cropping systems...." Please also add "and other renewable" after "solar".

Page 2 line 8 G, and line 15 J about "conducting research that informs the development of infrastructure to increase testing capacity statewide, such as establishing state testing laboratories, and data management." The first and most essential purpose of the fund should indeed be to ensure there is <u>sufficient capacity for testing and monitoring of soils and water on agricultural lands.</u> From that flows whether the landowners or consumers are at risk and warrant testing and monitoring. The knowledge provided by consistent, rigorous testing and monitoring is KEY, indeed a prerequisite, to effective implementation of the entire agricultural PFAs program and to disbursement of the funds. It is also essential in order to monitoring assess the success of remediation strategies.

Please strengthen this purpose accordingly by requiring that "the function of ensuring sufficient capacity for testing and monitoring of soils and water on agricultural land be among the first to be implemented."

Page 2 line 15 J. Conducting research on soil and water remediation systems and the viability of those systems;" Yes, this is indeed very important, and should be highlighted as a primary purpose. Consider amending to state "Conduct research, <u>development</u>, <u>and rapid deployment</u> on soil and water remediation systems, and report on the viability of those systems."

Page 2 line 17 K." Assessing current uses of PFAS"

This purpose is surely a valid one overall, but should probably be addressed by other agencies and programs. PFAs infect our entire industrial and consumer product system, and most uses (cosmetics, fast-food packaging, wax for skis, nonstick cookware...) are not germane to agricultural production (and, I would add, are not essential). Valuable funding allocated under this bill (LD2013) should focus on its intent, which is to address PFAs on agricultural lands. Consider therefore deleting this purpose K from this bill, and instead passing another bill altogether directing the DEP to assess current uses with a view to identifying unessential uses, those for which safe alternatives exist, and, for those few uses that may be deemed essential, identifying a process for transitioning to safer alternatives, and to share its research results with other departments including Agriculture.

Page 2 line 18 L. "Funding for educational programs for landowners, including but not limited to determining best practices for informing residents about the potential of being near or on a biosolids application site, and providing information and guidance on buying or selling agricultural lands that have had biosolids applied". Again, why emphasize buying and selling land, before any effort is made about remediation practices? Consider therefore amending so that this purpose reads:

"Funding for educational programs for landowners, including but not limited to determining best practices for informing residents about the potential of being near or on a biosolids application site, <u>and providing information and guidance on existing and new remediation practices</u>, alternative cropping, and other measures to reclaim the land, as well as the support they are entitled to while such remediation is under way, and on buying or selling agricultural lands that have had biosolids applied but are unsuitable for remediation."

Line 22 M. "Long-term monitoring of contaminated sites and establishing a corresponding centralized data repository." Yes, this is part and parcel of a much-needed testing and monitoring program. The bill could go further, again, to address PFAs on agricultural land. Consider amending to include "testing and monitoring of PFA uptake in crops and produce, and to the short and long term monitoring and assessment of mitigation strategies (such as but not limited to hemp cultivation to clear the soil of PFAs) in order to avoid perverse consequences of unnecessarily putting land out of production."

Indeed, according to Michigan Department of Environment, Great Lakes and Energy, "Plant uptake of PFAS appears to vary according to a number of factors, such as: a) the concentration of PFAS in the soil and water; b) the type of soil; c) the type of plant being grown; d) the plant part that is used for food or feed; and e) other nutrients and components in the soil. "This is common sense itself.

What's more, "Studies have shown that as soil organic matter increases plant accumulation of PFAS decreases" according to the same Michigan Dept.

Let's make sure therefore that we rely on what organic farming has been teaching us, and support healthy farming in the state with rigorous testing and monitoring, and deployment of regenerative remediation practices while supporting affected farmers.

As to the cost of this bill, while it is right for the state of Maine to lead with this assistance since the state permitted the use of contaminated sludge, the state will need to hold the manufacturers and sellers of PFAs accountable for the harm they have caused. Companies have long been aware of the harmful impact of PFAs (see information and timeline regarding what companies knew and when at

https://www.ewg.org/pfaschemicals/what-are-forever-chemicals.html) Therefore, to supplement the class action lawsuits being organized with the support of the state of Maine, the Committee should direct the State Attorney General and DEP to prepare and file a petition to the Federal EPA to require those who placed PFAs into commerce to pay for their removal as EPA is authorized to do under the Toxic Substances Control Act, to conduct a consultation with EPA before a formal filing to refine the petition, and to pursue that and other remedies under Federal, state and common law.

Thank you for your consideration of this testimony.