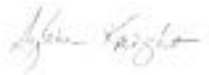


Written Testimony to Legislative Committee on Administrative Rules on Docket 22 P 06, Regulations for Control of Pesticides.

TO: Senator Mark McDonald, Chair, LCAR
Senator Virginia Lyons
Charlene Dindo, Legislative Operations

FROM: Sylvia Knight, Earth Community Advocate 
13 Claire Pointe Rd. Burlington, VT 05408

SUBJECT: Recent research on PFAS contamination of pesticides relevant to pesticide rules

DATE: December 1, 2022

1. I want to explain that as a concerned citizen I have tried to keep abreast of the LCAR hearing schedule so that I could participate fully. Unfortunately, I did not know of the additional scheduling website, so did not learn of the December 1 hearing on these regulations until Monday 11/28.

Please find a way for the website most available to the public to direct interested persons to the less obvious scheduling layer, so that citizens like myself can engage in participatory democracy in a more timely way.

2. I support the comments and requests submitted by Mason Overstreet and Chris Fastie of Conservation Law Foundation.

3. As a member of the Vermont PFAS/Military Poisons Coalition, I support the testimony by Dr. Steven Lasee of Lasee Consulting who will speak about his research.

4. New science is now available that raises the urgency of considering PFAS contaminants in pesticides and their use in Vermont. This is not addressed in the pesticide regulations.

Steven Lasee, MA, Ph.D. of Lasee Consulting and colleagues have found that some insecticides contain significant amounts of types of PFAS that are not leaching from the containers in which the insecticides were stored.¹

Alexandrino et al (2022) have found that fluorinated pesticides have become more prevalent in the last two decades. Fluorinated compounds have more potent pesticide action, yes; however, their persistent, bioaccumulative properties present increased risks for water and soil contamination and more toxic risks to non-target organisms, including humans.²

¹Lasee, Steven et al (2022). Targeted analysis and total oxidizable precursor assay of several insecticides for PFAS. *Journal of Hazardous Materials Letters*. <https://doi.org/10.1016/j.hazl.2022.100067>

² Alexandrino, D.A.M. et al (2022). Revisiting pesticide pollution: the case of fluorinated pesticides. *Environmental Pollution*. <https://doi.org/10.1016/j.envpol.2021.118315>.

Juliana Gluge and colleagues (2020) did an extensive study of PFAS uses and found that PFAS are being added as unidentified ingredients to pesticides as spreaders, anti-foaming agents, wetting agents, and agents to enable uptake by leaves and insects. They pointed out the regulatory difficulties of not knowing what toxic ingredients are contained in pesticides as they are considered confidential business information.³

5. The addition of PFAS compounds to pesticides and the risks of fluorinated pesticides gaining ground in the industry make adoption of alternative, non-toxic management methods even more urgent, considering the interplay between global warming, severe storms bringing more runoff, pesticide interference with sequestration of CO₂ in soil, changing pest populations and increased ground, water, and food contamination.

The importance of promoting alternatives for toxic pesticides in the pesticide regulations cannot be overstated. Yet, Section 6.03 of the regulations require more stringent reporting of processes and results for Experimental Permits using non-toxic alternatives than for any pesticide application. This regulatory scenario is a disincentive to use alternative non-toxic products and perpetuates the pesticide treadmill. VPAC conducted an experimental use permit for a Canadian product made from fungi that successfully reduced cut stem re-sprouting in electric rights-of-way in 2004.⁴ A successor to that product is now available from a company in Canada.⁵

Any further work to be done on the regulations should include revision of Section 6.03 to encourage use of non-toxic alternative products rather than pesticides. Just imagine: why not put the burden of describing and defending processes and results on the users of toxins, rather than on those employing non-toxic methods?

6. I urge LCAR to communicate strongly with committees of jurisdiction regarding the dangers of contaminating land and water with these persistent bioaccumulative PFAS and fluorinated compounds in pesticides, with tens of thousands of pounds used annually in Vermont.

Thank you for your consideration of my comments and recommendations.

³ Gluge, J et al (2020). Overview of the uses of per-and polyfluoroalkyl substances (PFAS). Environmental Science Processes and Impacts. See p.2367. DOI: 10.1039/d0em00291g

⁴ Kelley, R and D. Dickinson (2007). 2007 Mycotech Stump Treatment Evaluation. Experimental Permit sponsored by VT Pesticide Advisory Council 2004.

⁵ Lalcide Chondro. <https://bioforest.ca/en/canada/product-details/lalcide-chondro/>