To: Board of Pesticides Control  
From: Patricia Rubert-Nason, Sierra Club Maine  
Date: January 11, 2022  
Re: Chapter 20, PFAS in Pesticides

As a part of our fight to protect both people and the environment, especially the most vulnerable among us, Sierra Club advocates for restrictions on harmful chemicals. On behalf of our over 22,000 members and supporters here in Maine and over 4 million across the country, we would like to thank the Board for their work on implementing the first part of LD 264 directing the Board of Pesticides Control to gather information relating to perfluoroalkyl and polyfluoroalkyl substances in the state. We support the proposed definition of PFAS substances and urge the Board to ensure that the affidavits about the presence of PFAS substances include all ingredients (active and inert) and known contaminants of the pesticide formulation. Finally, the affidavits should be shared with the public to allow farmers and citizens to make informed decisions about what materials they apply to their land.

PFAS are a class of chemicals “used to make fluoropolymer coatings and products that resist heat, oil, stains, grease and water.”¹ They contain strong carbon-fluorine bonds that keep them from degrading, leading them to accumulate in the environment over time. They also bind to blood proteins, so they tend to accumulate within human and animal bodies, rather than being eliminated.²

According to the FDA:

The widespread use of PFAS and their ability to remain intact in the environment means that over time PFAS levels from past and current uses can result in increasing levels of contamination of groundwater and soil. This same accumulation also can occur in humans and animals, with PFAS found in the blood of humans and animals worldwide. While the science surrounding the potential health effects of PFAS is developing, current evidence suggests that the bioaccumulation of certain PFAS may cause serious health conditions.³

¹ https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html  
² https://ehp.niehs.nih.gov/curated-collections/pfas  
The research supporting the impacts of PFAS on human health is steadily accumulating. The National Institute of Health and Environmental Sciences\(^4\) has documented links between human exposures to PFAS and adverse health outcomes including altered metabolism, decreased fertility, reduced fetal growth, increased risk of being overweight or obese and reduced ability of the immune system to fight infections.

Maine is seeing widespread impacts of PFAS contamination of our land and waters. In recent years at least 3 Maine farms have had to stop selling milk and/or beef due to PFAS contamination\(^5\) including one farm with shockingly high levels of PFAS documented in their milk, a Fort Fairfield dairy farm with PFAS levels over 150 times the allowable level.\(^6\)

PFAS contamination is not limited to farms. At least 191 wells and water sources have so far been identified as contaminated by PFAS;\(^7\) a do not eat advisory has been issued for deer harvested in the Fort Fairfield area;\(^8\) and the DEP (and other agencies) are investigating over 700 sites for potential PFAS contamination.\(^9\) Clearly, we have a problem with PFAS contamination in Maine. While the best available evidence seems to indicate that the major source of this problem was spreading of contaminated sludge on fields, given PFAS’s high persistence and tendency to accumulate in soils, water and biological systems, it is vital that we understand and control sources of PFAS contamination moving forward.

With regards to the specific language of the proposed regulation, we support the proposed definition of PFAS substances as a good reflection of the most current science.\(^10\) We urge the Board to keep the definition as is.

With regards to the required affidavits, we believe that it is vital that reporting on PFAS chemicals in pesticides include inert ingredients and any known contaminants in addition to active ingredients. It does not matter how PFAS got into a pesticide. Whether it is an active ingredient, inert ingredient or a contaminant, the impact is the same. The PFAS chemicals will accumulate on the land where the pesticides are applied, ultimately rendering it unusable for agriculture. We also believe that the affidavits should be available to the public so that farmers and other citizens can make informed decisions about what products they apply to their land until we are able to appropriately regulate the inclusion of PFAS in pesticides.

\(^4\) https://www.niehs.nih.gov/health/topics/agents/pfc/index.cfm
\(^6\) https://www.maine.gov/dacf/ag/pfas/index.shtml
\(^7\) https://www.maine.gov/health/2021-10-22/maine-dep-identifies-34-towns-with-high-priority-sites-pfas-chemicals-testing
\(^8\) https://www.maine.gov/ifw/hunting-trapping/hunting-resources/deer/index.html
This is just the first step. To protect our land, our farmers and the wider population, the next step must be to limit, and preferably eliminate, PFAS in pesticides and other products within the state of Maine. We look forward to the Board’s upcoming report on what is needed to regulate PFAS in pesticides in the State and how to impose a prohibition on the distribution or application of pesticides or adjuvants containing perfluoroalkyl or polyfluoroalkyl substances in the State.

I would like to thank the Board of Pesticides for their work on implementing LD 264. We urge the Board to ensure that all ingredients and known contaminants are included in the affidavits and that those affidavits are shared with the public. We look forward to your continued work on this topic.

Sincerely,
Patricia Rubert-Nason
Sierra Club Maine Volunteer
Testimony of Sarah Woodbury, Director of Advocacy
Defend Our Health
before the
Maine Board of Pesticide Control

Regarding Rules Proposed in Response to LD 264 “Resolve, Directing the Board of Pesticides Control To Gather Information Relating to Perfluoroalkyl and Polyfluoroalkyl Substances in the State”

January 14, 2022

Good morning, Members of the Board of Pesticide Control,

My name is Sarah Woodbury. I live in Freeport and serve as Director of Advocacy for Defend Our Health. Defend is a Maine-based non-profit that works to make sure that everyone has equal access to safe food, safe drinking water, healthy homes, and toxic-free, climate friendly products.

I am here to submit comments on the draft rules under Section 20, Special Provisions in response to LD 264 “Resolve, Directing the Board of Pesticides Control To Gather Information Relating to Perfluoroalkyl and Polyfluoroalkyl Substances in the State”. Section 20 seeks to define PFAS as “Perfluoroalkyl and Polyfluoroalkyl Substances” or “PFAS” means substances that include any member of the class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.” We urge the board to adopt this draft definition.

This is undoubtedly the only definition consistent with the legislative intent. This definition has repeatedly been used by the legislature and appears in multiple statutes written by multiple legislatures. For example, it is used at 32 MRSA §1732, which deals with PFAS in food packaging passed in 2019 by the 129th legislature, as well as at 38 MRSA §1612, which deals with the presence of PFAS in products passed last year by the 130th. It is only reasonable to presume that the legislature means “PFAS” to encompass the entire range of PFAS with this same definition as it has consistently used the term throughout its history of legislation on the topic. Further, since pesticides addressed under this rule would also be subject to the requirements of the products law passed last year, creating a definition different than that would create confusion. Maine should have a single definition of PFAS, and that definition should be the same one already in use in statute, which is now the one proposed in the draft rule as well.

Section 20 also requires that “In conducting review of registration or reregistration pursuant to 7 M.R.S.A §607-A, the Board shall require submission of the confidential statement of formula and the following affidavits:

1. a completed and signed form provided by the Board at the time of application for product registration review or reregistration which attests that the pesticide has or has never been stored, distributed, or packaged in a fluorinated high-density polyethylene container; and
2. a completed and signed form provided by the Board at the time of application for product registration review or reregistration which attests that the pesticide formulation does or does not contain perfluoroalkyl or polyfluoroalkyl substances as defined by the Board for this purpose of this section.

This section requires clarification. First, we strongly encourage the board to clarify that the formula or formulation as referenced here is the complete formula that includes both inert and active ingredients. While the intent of the resolution mandating this rule was clearly all encompassing, and Maine’s statute clearly provides authority for the Board to require the complete formulation, the fact that the proposed rule does not clearly indicate that formula and formulation encompasses both inert and active ingredients creates unnecessary confusion.

While we do not contest that the “statement of formula” could be considered confidential, this should be clearly differentiated from the affidavits. The rule should unequivocally state the affidavits are public and accessible records. While this may be the intent of the proposed language, ambiguity should be eliminated by separately listing the three required items or adding a sentence explicitly clarifying the public nature of the affidavits.

Since PFAS represents a large class of thousands of chemicals, publicly disclosing the presence or absence of PFAS would under no reasonable interpretation disclose a trade secret or confidential formula. There is no reasonable claim for the need to prohibit disclosure of the affidavits to protect confidential business information since no one could derive a formula simply based on the presence or absence of thousands of potential ingredients. Making the affidavits public, however, has immense benefits to the public, who can use that information to make more informed choices about what products they select. It can also provide reassurance to the public that their fears of potential PFAS presence are without justification. With industry representatives consistently saying to the public and to press that their products do not contain PFAS, putting these statements into legally binding and public commitments will go a long way to regain consumer trust in the safety of pesticide products.

Additionally, we would suggest two important additions to the affidavits. While we recognize the resolution specifically called out “fluorinated high-density polyethylene,” containers based on what was identified by the US EPA as a potential source of contamination at the time the resolution was discussed, other types of plastic containers may be fluorinated.\(^1\) The board should use its existing authority to expand upon the minimum and require the affidavit to request if the pesticide was stored in any fluorinated container, not simply HDPE ones. This would clearly be consistent with the purpose of the resolution to identify pesticides with potential PFAS contamination.

Rather than only inquire about the presence of PFAS in the formulation, the board should also require the affidavit to require the identification of PFAS that is a known contaminant or byproduct – that is, not an intentionally added component of the formulation. While we recognize that some sources may not be known to the company and thus not be able to be disclosed, should a registrant have knowledge of a PFAS contamination they should be

\(^1\) For example, MJS Packaging, a company that sells packaging, notes on their website, “…you can select from opaque or clear plastic, LDPE, HDPE, PP, PVC, and other plastics that can be fluorinated.”

[https://www.mjspackaging.com/blog/what-is-fluorination-your-solution-to-the-perfect-plastic-container/](https://www.mjspackaging.com/blog/what-is-fluorination-your-solution-to-the-perfect-plastic-container/)
accountable for that to be disclosed. After all, this legislation was the result of what industry now says was the accidental contamination from the fluorinated plastic containers. The very situation that motivated the resolution requiring these rules could fall through a loophole without this addition.

The Board is taking good first steps to limit exposure to PFAS in pesticides, but we need to go further. Nearly every person in the US – from newborns to seniors – have toxic Per- and Polyfluoroalkyl Substances or PFAS in their blood. PFAS are persistent chemicals that do not break down and can remain both in the human body and in the environment for years. They are called “forever chemicals” for a reason. We are exposed to these toxic chemicals in a variety of every day products. They have been linked to interference with normal brain development in children, diminish response to vaccines and harm the immune system, may increase the risk of some cancers, may lower a woman’s chance of getting pregnant, and have been associated with liver problems and increased cholesterol levels.

Maine is already experiencing issues with PFAS contamination both in soil and in drinking water. The cleanup costs for the current contamination levels has the capacity to cost the state hundreds of millions of dollars. Maine cannot afford more PFAS contamination. There have been PFAS found in our water, land, in deer, and in fish. When you spray pesticides containing PFAS, they don’t just stay in one place. PFAS may travel through water and air. We need to limit exposure whenever possible. As the BPC considers next steps, we urge the BPC to recommend to the legislature the phase-out of PFAS in pesticides and in pesticide containers to help stop further PFAS contamination across the state to avoid more costly contamination and cleanup.

Thank you.
Comments of Sharon Treat for the Institute for Agriculture and Trade Policy
Submitted to the Maine Board of Pesticides Control
On Proposed Rule Amending Chapter 20
Implementing LD 264, Resolve, Directing the Board of Pesticides Control To Gather Information
Relating to Perfluoroalkyl and Polyfluoroalkyl Substances in the State
January 14, 2022

These comments are submitted by Sharon Treat, Senior Attorney at the Institute for Agriculture and Trade Policy on the Maine Board of Pesticides Control (“Board”) Proposed Rule Amending Chapter 20 to address PFAS in pesticides as directed by Legislative Resolve LD 264. IATP is a 501(c)(3) nonprofit headquartered in Minneapolis, Minnesota with an office in Hallowell, Maine and other locations. IATP works closely with farmers and seeks to promote local, sustainable and environmentally beneficial agriculture and trade policies.¹ We have been following PFAS issues both across the country and in Maine, and we testified in support of the Resolve LD 264, that these proposed rules are intended to implement.

IATP wants to emphasize the importance of the proposed amendments to Chapter 20 and to encourage the Board of Pesticides Control to exercise the full extent of its legal authority --of which it has a great deal-- to protect the public, the state’s natural resources, and our farms and food from PFAS contamination.

Since LD 264 was enacted, even more residential drinking water wells and a third farm, this one in Unity, have been found to be contaminated. In addition, a “do not eat” deer consumption advisory has been issued by the Department of Inland Fisheries and Wildlife for a large geographic area in central Maine.

Farmers have had their livelihoods destroyed or significantly impacted, and they and others have been exposed to toxic substances in their water and food. At the same time, Maine’s reputation for clean, healthy and sustainably produced food is taking a beating. And we know that the contamination that’s been measured so far is just the tip of the iceberg. Most of the soils, water and farmland in the state hasn’t been tested. It is imperative to get PFAS out of our products, our food, and our environment without delay. As a reminder, PFAS exposure has been linked to health problems including kidney and testicular cancer, thyroid disease, infertility and compromised immune systems.

The Board’s proposed amendments to Chapter 20 are an important first step, but more needs to be done, and could be done, within the Board’s current statutory authority. There are also some ambiguities in the proposed language that should be clarified. Our specific comments are as follows:

¹ IATP also has offices in Washington, D.C. and Berlin, Germany (IATP Europe). Since 1986, IATP has provided research, analysis and advocacy on a wide range of agriculture-related issues including farm to school; climate; agroecology; soil health and water quality and access; farmworker health and economic security; and trade and market policies. For more information, see www.iatp.org.
• **Definition of PFAS.** We strongly support the definition of PFAS in Section 1.A, which is consistent with other Maine law and will assist in coordinating policy and enforcement with other agencies, including the Department of Environmental Protection. Unless the full panoply of PFAS chemicals is addressed in the regulation, the Board will be forced to constantly review its policy to update it and will likely miss addressing new PFAS chemicals that should be covered by the regulation.

• **Requirement of affidavits.** We are asking the Board to make several clarifications in the rule to align with the intent of the Resolve and improve the effectiveness of the rule.

  o **Public disclosure of information.** As a preliminary matter, the Board should clarify in the rule that the affidavits required in Section 1.F, paragraphs 1 and 2 are *public records* under Maine’s Freedom of Access Act that will be readily available to the public (preferably on the website, not as a document that must be accessed through a formal freedom of access request).² The affidavit required in Section 1.F.2 does not reveal percentages of ingredients or even whether, if PFAS is present, it is part of the active or inert ingredients or a contaminant. There is no legal requirement to keep this general affidavit confidential under either state or federal law. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) limits the types of data that may be claimed as confidential. Public disclosure of the PFAS affidavits required by the proposed rule do not appear to fall into any of the exceptions to the general rule of disclosure laid out in FIFRA in 7 U.S. Code § 136h (which is cross-referenced by Maine pesticide law), since the affidavits don’t include any specific data or reveal any detail about manufacturing processes or testing methods.³

  o Moreover, since the Board doesn’t propose in this rulemaking to prohibit registration of pesticides containing PFAS, keeping the affidavits secret will negate much of the public benefit of the regulation. Neither farmers, home gardeners nor members of the public will have the information they need to avoid purchase and use of PFAS-containing pesticides if these affidavits are confidential, nor will there be any pressure on the manufacturers to act to ensure their products are PFAS-free. Significantly, parallel legislation being implemented by DEP (LD 1503, Public Law 477), from which the Board’s Chapter 20 PFAS definition was taken, requires public disclosure of information about PFAS in consumer protects without any confidentiality provision.

  o **Inert ingredients.** We appreciate the clarification at the public hearing that proposed Chapter 20, Section 1.F.2 is intended to require those registering their products to disclose inert as well as active ingredients that contain PFAS, and that the reference to “confidential statement of formula” incorporates this requirement. Whether PFAS is being delivered via an

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² 5 MRSA §400 et al, §402, Definition of Public Record. https://www.mainelegislature.org/legis/statutes/1/title1sec402.html

³ FIFRA excludes the following information from public disclosure: information that discloses manufacturing or quality control processes; information that discloses methods for testing and measuring the quantity of deliberately added inert ingredients; and information that discloses the identity or percentage quantity of deliberately added inert ingredients. See also EPA webpage, Pesticide Registration Manual: Chapter 15 - Submitting Data and Confidential Business Information at: https://www.epa.gov/pesticide-registration/pesticide-registration-manual-chapter-15-submitting-data-and-confidential
inert or active ingredient is irrelevant; the chemical will end up in the environment either way.4

- **Clarification that adjuvants are included in “inert ingredients” for the purpose of required PFAS disclosure.** While the Board has separately written a report for the Legislature on additional regulation of PFAS in pesticides as required by LD 264, which discusses more broadly regulating adjuvants, it is not necessary to wait for further legislative direction or authority to include adjuvants as part of the manufacturers’ affidavit as to the presence or absence of PFAS. As discussed above, the Board has extensive authority to require information about the formulation and to require other information for registration of a product, and should make clear that adjuvants are covered with other inert ingredients. Otherwise, the affidavits will be misleading (and essentially meaningless) if they claim a product is “PFAS free” while containing adjuvants with PFAS.

- **Contamination during manufacture.** The presence of PFAS in pesticide products should be disclosed, regardless of the source – active ingredient, inert ingredient, adjuvant or contamination during manufacture. The potential for harm does not evaporate simply because the PFAS presence may not be intentional. If manufacturers know of PFAS in their products, they should be required to disclose that information regardless of the route the PFAS took to get into the product. Manufacturers are in the best position to ascertain this information.

- **Container affidavit.** The container affidavit in Section 1.F.A shouldn’t be limited to fluorinated high-density polyethylene containers. Although this provision tracks the language of LD 264, other types of containers can be fluorinated (and are marketed for pesticide storage) and thus have the potential to leach PFAS into the pesticide. The Board didn’t need LD 264 to give it the authority to regulate PFAS contamination from containers. Its rulemaking authority is quite extensive, and specifically includes authority to regulate pesticide storage, which includes containers as a form of storage [7 MRSA §610.2.B]. Adoption of container regulations to more specifically address PFAS contamination is authorized under the Board’s extensive general rulemaking authority cited above, and the Board has already exercised its authority to regulate containers more generally (regulating storage and disposal in Section 3 of Chapter 20, and storing pesticides for wholesale or retail purposes in Chapter 24).

In summary, the proposed rule, with the modifications we suggest, is a good start in addressing PFAS in pesticides. We look forward to the Board’s report to the Legislature on further regulating fluorinated adjuvants and taking additional action to protect farmers, the public and the environment from PFAS contamination caused by pesticide use.

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4 The pesticide registration requirements of 7 MRSA §607.3 state: “Submission of formula. The board, when it determines it necessary in the administration of this subchapter, may require the submission of the complete formula of any pesticide, including the active and inert ingredients.” The Board also has explicit authority under the registration provisions “to require the submission of other necessary information” by adopting rules under 7 MRSA §610.2, the Board’s overall rulemaking authority.
To:        Board of Pesticides Control
From: Patricia Rubert-Nason, Sierra Club Maine
Date: January 11, 2022
Re: Chapter 41, Prohibition of the Use of Certain Neonicotinoids for Outdoor Residential Use

As a part of our fight to protect both people and the environment, especially the most vulnerable among us, Sierra Club advocates for restrictions on harmful chemicals. On behalf of our over 22,000 members and supporters here in Maine and over 4 million across the country, we would like to thank the Board for their work on implementing LD 155, To Prohibit the Use of Certain Neonicotinoids for Outdoor Residential Use. However, we would also like to urge the Board to tighten the proposed definition of “invasive pest” to i) better reflect the intent of the legislature, ii) better align with the accepted definition and iii) better protect pollinator populations. We urge the Board to develop a defined list of exempted pests where the use of neonicotinoids is justified along with the appropriate neonicotinoid(s) for treatment, rather than leaning on a broad definition which leaves determining what qualifies as an invasive pest to the judgment of pesticide applicators.

While we may not all like insects, we rely upon them. “Insects create the biological foundation for all terrestrial ecosystems. They cycle nutrients, pollinate plants, disperse seeds, maintain soil structure and fertility, control populations of other organisms, and provide a major food source for other taxa.”1 Without insects we would be hungry. Eighty-five of the leading food crops worldwide rely on insects for pollination.2 We would be dirty, up to our necks in biological waste. Insects play a vital role in decomposition. And we would be poorer. Insects provide $57 billion of services to the US economy every year.3

But insects are in trouble. There have been numerous scientific papers in recent years on declines in both diversity and populations of insects.4 While there is debate about the exact speed and scale of the problem, it is clear that the problem is significant.

A recent article in the Proceedings of the National Academy of Sciences, nicely summed up the situation:

Declining insect population sizes are provoking grave concern around the world as insects play essential roles in food production and ecosystems. Environmental

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contamination by intense insecticide usage is consistently proposed as a significant contributor, among other threats. Many studies have demonstrated impacts of low doses of insecticides on insect behavior.⁵

Neonicotinoids are systemic pesticides, meaning they are taken up into the tissues of the plant. Some neonicotinoids, including at least two⁶ ⁷ of the compounds addressed by this regulation, are also persistent, meaning they are slow to break down in the environment and in the tissues of plants. As such, these compounds will tend to be present in the pollen and nectar of treated plants when they bloom. They are also highly toxic to pollinators and can reduce foraging ability and general fitness even at concentrations significantly lower than those required to kill the affected insect.⁸ Treated flowering plants effectively attract pollinators and then poison them (fatally or non-fatally) and thus present a significant risk to pollinator populations. This justifies the need to limit their use wherever possible and to seriously weigh their benefit against their impact.

We believe that the proposed exemption for “invasive pests” is too broad and does not accurately reflect the intent of the legislature. The established definition of “invasive pest” is limited to “non-native (or alien) to the ecosystem under consideration” and further limited to “the most aggressive species. These species grow and reproduce rapidly, causing major disturbance to the areas in which they are present.”⁹ In contrast, the proposed definition would permit virtually any invertebrate which presents any level of economic (or other) harm, even if it is modest, to be characterized as an invasive pest, even if it is a native species, or is not particularly aggressive.

In particular, part c of the definition “native or non-native vectors of plant diseases” could permit neonicotinoids to be applied for the control of a wide range of insects. Many plant-eating insects can transmit plant diseases, thus the proposed definition would allow a wide range of species, including many native species, to be characterized as “invasive pests” and is much broader than the conventional definition of invasive species.

We would also like to note that, while economic harm is a part of the conventional definition of “invasive species,” it is notably absent from the legislature’s rationale for exempting invasive pests from the ban on neonicotinoids for residential ornamental use. LD 264 says that the use of neonicotinoids should be permitted for the control of “invasive insect pests” “in order to safeguard the public health, safety and welfare of the State and to protect the natural resources of the State.” This would seem to indicate that the focus in determining the limits of the exemption should be on human health and environmental impact rather than economics.

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⁵ Proceedings of the National Academy of Sciences Oct 2020, 117 (41) 25840-25850; DOI: 10.1073/pnas.2011828117
⁶ https://www3.epa.gov/pesticides/chem_search/reg_actions/registration/fs_PC-044312_01-Sep-04.pdf
⁷ https://www3.epa.gov/pesticides/chem_search/reg_actions/registration/fs_PC-044309_30-May-03.pdf
⁸ Proceedings of the National Academy of Sciences Oct 2020, 117 (41) 25840-25850; DOI: 10.1073/pnas.2011828117
In writing LD 264, the legislature specified Asian long-horned beetle, emerald ash borer and hemlock wooly adelgid as “emerging invasive pests” for which the use of neonicotinoids should be permitted. These are three extremely destructive, non-native species that are devastating to our native trees. While the legislature did indicate that this exemption was not limited to these three species, we believe that they were intended to provide good examples of the kinds of species for which the legislature felt that the use of neonicotinoids was potentially justified while leaving room for the Board to address other similar threats that presently exist or which may emerge in the future. Rather than providing a broad definition of “invasive pests” we believe it would be more appropriate, and more in keeping with the legislature’s intent, to provide a specific list of invasive pests for which the use of neonicotinoids are permitted and which neonicotinoid(s) are indicated.

Given the ecological hazards associated with neonicotinoids, we believe it would be most appropriate to limit their use for the control of invasive pests to specific pests where their use is appropriate (they are an effective solution for targeting that pest) and the benefits to the environment and human health outweigh the harms and specific neonicotinoid(s) appropriate for that pest.

While we recognize the challenges of ongoing rulemaking related to a positive list, invasive species do not typically emerge as a problem abruptly and without warning. In most cases, problems with particular species are well-documented for months, if not years, in other states prior to arriving in Maine. We would like to suggest that one possible option to avoid the need for emergency rulemaking would be for the Department of Agriculture, Conservation and Forestry Staff to periodically report on emerging invasive species that might be appropriately addressed with neonicotinoids to the BPC, allowing rulemaking prior to their becoming an urgent problem in Maine.

I would like to thank the Board of Pesticides for their work on implementing LD 264 and urge them to tighten the definition of “invasive pests” to better align with accepted definitions and the intent of the legislature. We sincerely hope that you will be able to implement these regulations for this growing season, even if that means initially working with a list of the easy to identify products and finalizing a more complete list for next year.
Esteemed members of the Board of Pesticides Control – thank you for the opportunity to comment on the proposed rule amendments to Chapter 41, “Special Restrictions on Pesticide Use.” Specifically, I will address Section 6, which was drafted in response to LD 155, a resolve I sponsored which was signed by the Governor on June 10, 2021. The Legislature and Governor recognize that our pollinators are in crisis and that certain persistent chemicals contribute to declining survival rates for some species, and that using these chemicals for cosmetic purposes is unwarranted. I know that certain aspects of this rule have been challenging to draft, because we took a very targeted, evidenced-based approach to limiting risk rather than requiring a blanket ban.

I want to start by saying that most of the draft rule language is true to the intent of the resolve language and, I believe, the Legislature, and furthermore, it is exactly what I expected based on previous conversations with Board staff about how the resolve might be codified in rule.

I also regret that I was unable to attend the previous meetings in which you discussed this resolve. I have reviewed the minutes to better understand the few places where the proposed language deviates from what we discussed in the Legislature, and I will focus my comments there. I realize now that what seemed like very clear language and direction to us through the Legislature’s committee process was less clear than it could have been, and I apologize for that.

Specifically, the approach to handling the “invasive insect pest” application exemption is not what we envisioned or discussed with Board staff during the committee process. Director Patterson consulted with DACF staff to determine if any of the four targeted neonics were important for management of known invasive insect threats in the residential landscape. She listed three invasive insects in her testimony before the Agriculture, Conservation and Forestry

District 132: Ellsworth and Trenton
Committee which are thus listed in the resolve: Asian long-horned beetle, emerald ash borer, and hemlock wooly adelgid.

We tasked the Board with identifying additional invasive insect species requiring neonic application for management if and when those threats were detected. That is the purpose of the word “emerging” – meaning, unknown to us now and emerging at a later date. If we had intended to define “invasive invertebrate pests” as in these draft rules, we would have. Likewise, if we had intended to have the Board create a definition, we would have said to do that and defined parameters. We started a list for the Board to put in rules and add to, it’s as simple as that.

As drafted, these rules put the burden on the applicators to determine which species fit the definition. In my view, that is an abdication of regulatory responsibility to the regulated community. It’s unfair to the applicators to put that on their plate and will likely result in confusion.

I understand that DACF staff put a lot of research and thought into this definition and acknowledge that understanding invasive species threats is more than a full time job. I think they have made a strong effort, though I would be remiss if I didn’t point out that:

1. the resolve intentionally used the word “insect” which is not interchangeable with “invertebrate,” and
2. I am unaware of any agency or association in this country that includes native species in the definition of invasive.

If you visit the Maine Forest Service site “Invasive Threats to Maine’s Forest and Trees” you’ll see a definition of invasive species from federal Executive Order 13112 that reads: “a species is considered invasive if it is not native to the ecosystem in question and its introduction causes or is likely to cause economic or environmental harm or harm to human health.” A native species that becomes economically or environmentally damaging is typically called a nuisance species. This is probably why Maine’s Interagency Task Force on Invasive Aquatic Plants and Nuisance Species specifically includes both of those terms.

For the above reasons, I request that the Board reject the definition of “invasive invertebrate pests” and instead list the three pests that have thus far been identified. I understand the concern that a threat can appear overnight and would suggest that emergency rulemaking, albeit annoying, is always an available tool to the Board. Board Members, the Board Director, Maine Forest Service staff, the State Horticulturist, applicators or any other member of the public could come to the board with evidence of a legitimate threat and trigger emergency rulemaking. In most cases, these species are well known to scientists and even interested laypeople long before they arrive in Maine. As DACF staff can surely tell us, it is hard to draft a definition that works
for the known and predicts the unknown. It is much easier, and more precise, to list the known as it becomes known.

On the subject of the effective date, I know that there are three main considerations: 1) products have already been renewed for sale this year, 2) products may already be stocked in some retail stores, and 3) easy search options are not available for staff to determine which products with these four neonics are specifically used in outdoor residential landscapes.

However, I would remind the Board and all in attendance that our pollinators are in crisis and time is of the essence. Legislators and the Governor recognized this when they supported LD 155. Do we need to do more to protect bees and butterflies than restrict certain neonic use in residential landscapes? Absolutely, but that is not the task before the Board today. When we learn that food at the grocery store is toxic to people, do we wait for it to sell out before banning it? No, we immediately recall it.

On the subject of availability of products with these four neonics, staff told the Board in August that there are (as written in the minutes): “a total of 164 products registered including for lawn and ornamental treatment.” I know that each label needs to be scrutinized to determine its uses and that takes time, but let’s start with what we’re sure of, publish that list as soon as these rules are finalized, set an effective restriction date of April 1, 2022 for those products, and then work to complete the list on the timeline set forth in the draft rules. I would be happy to submit a list of known products on store shelves in Maine for staff to double-check.

I am certain that big box stores could have these products off the shelves in a week’s time if you told them they had to. And as Director Patterson stated in November, staff could for a period of time exercise enforcement discretion, which could be used in the case of smaller, independent retailers in Maine – if they didn’t get the October memo that these products were about to become restricted use. Applicators will still have a use for these products as these rules do not affect non-residential use, including in urban settings, forestry, and agriculture.

Finally, the following are a list of technical language revisions that I believe may be warranted, though admittedly, I am not the most qualified person to say for sure.

- There are two places the proposed rule says “turf and lawn” and four where it just says “turf.” Using the full phrase “turf and lawn” would provide clarity and consistency with the resolve language, unless there is a scientific and management reason why only “turf” is used in the cases where it is.
- A portion of Section 6, B reads, “the Board may exempt from this list pesticides that it determines are not for use in the control [emphasis added] of outdoor ornamental plants or turf.” These four chemicals are not used for controlling plants, but rather for controlling pests on plants. In Section 6, C, 5, the phrase “managing” is used, which
seems to fit better. This change would align with other uses of the word “control” in this chapter.

Thank you all for listening attentively to my comments. I assure you they are much shorter than my testimony on LD 155! I would be happy to answer any questions and will submit this in writing for the record.
Additional Comments of Representative Nicole Grohoski
To: Board of Pesticides Control
Subject: Proposed Rule Amendments to Chapter 41

23 January 2022

Esteemed members of the Board of Pesticides Control – I was glad to be able to join the public hearing regarding proposed rule amendments to Chapter 41 last week. You had many good questions and comments about the section on invasive species, to which I have given further thought.

In addition to listing specific invasive insect species in rule (rather than broadly defining invasive insect pests in rule as I discussed in my previous comment), one option mentioned was establishing an emergency permitting process in rule. This would allow the BPC to respond quickly in the event of an unforeseen threat that required one or more of the restricted neonics to be used. Then, the BPC could subsequently engage in routine technical rulemaking to add the problematic invasive insect species to the list in Chapter 41. I am not sure if there is precedent for this, but I support the idea.

Ideally, DACF staff or other stakeholders would identify emerging threats for and give BPC notice, such that the BPC could engage in rulemaking long before the threat arrived in Maine.

The important point that I would like to underscore is that the list (or definition) should not be all invasive insect pests that threaten public health, safety, and welfare, but a subset of that list that are just those species that also require dinotefuran, clothianidin, imidacloprid and/or thiamethoxam for effective management.

If the BPC would like to stick with a definition of “invasive insect pests,” I hope that it will tighten up that definition as I noted in my first comment, make it clear that these four neonics are only allowed for use on a certain subset of species, and publish a list of those species annually or as needed so that there is no confusion for licensed applicators about when to use these chemicals.

Thank you again for your attention to my comments during the rulemaking process.
To: Members of Maine’s Board of Pesticides Control  
From: Heather Spalding, Deputy Director, MOFGA  
Date: January 21, 2022  
Subject: Comments on BPC Rulemaking Efforts on Chapters 20 and 41 Regarding PFAS in pesticides, neonicotinoids, and chlorpyrifos

Thank you for the opportunity to submit comments on the proposed rule amendments to Chapter 20, which lays out special provisions regulating the use, storage and disposal of pesticides, and to Chapter 41, which establishes special restrictions on pesticide use.

In the last legislative session MOFGA supported LD 264 addressing the problem of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in pesticides, LD 155 restricting landscaping use of four neonicotinoid pesticides, and LD 316 banning the neurotoxic organophosphate chlorpyrifos. We would like to thank the BPC staff and board for the time and effort that you have put into understanding the legislation and how it could and should be implemented. We are encouraged by the progress on the rulemaking however we would like to see further improvements to ensure that the rules reflect the intent of the legislation. Here is a quick summary of how the rules should be strengthened:

- manufacturer reporting about PFAS in pesticides must include inerts, adjuvants and contaminants in addition to active ingredients listed in the product formulation;
- registrants’ affidavits should be made public;
- affidavits about pesticide storage should apply to all fluorinated containers;
- the invasive species definition in the neonics rule should be narrowed;
- the restricted-use neonics should not be available for residential landscaping in the upcoming growing season;

The chlorpyrifos rule looks great. Thank you!

Regarding proposed rules for Chapter 20

Often referred to as “forever chemicals” due to their persistence in the environment, PFAS are designated by the International Agency for Research on Cancer as a possible carcinogen based on epidemiological evidence linking exposure to prostate, kidney and testicular cancer. Other associated health risks include: decreases in fertility or increases in high blood pressure in pregnant women; reduced ability of the body’s immune system to fight infections including reduced vaccine response; child development effects including low birth weight, accelerated puberty, bone variations or behavioral changes; interference with the body’s natural hormones; and increased cholesterol levels and/or risk of obesity. Almost all of us, including infants, have PFAS in our blood.
Over the past few years PFAS have emerged as a growing contaminant of concern for the food supply in Maine and elsewhere as testing has revealed levels of contamination in milk, eggs, vegetable and grain crops, and wild game produced or harvested in areas where land was spread with amendments containing PFAS (in most cases, decades ago). As an organization working to create a safe, healthy and fair food system for all, this issue is of great concern to MOFGA and we’re closely following, and deeply involved in, the work to understand and address this issue across the state. Farmers are losing their businesses, their land, and their health. The PFAS problem affects all of us.

The Legislature passed many bills to address the PFAS problem in Maine last year. One of the bills that MOFGA supported was LD 264 - *Resolve, Directing the Board of Pesticides Control To Gather Information Relating to Perfluoroalkyl and Polyfluoroalkyl Substances in the State.* LD 264 started out as an effort to ban the aerial spraying of pesticides containing PFAS chemicals, but morphed into an outreach effort to obtain information about the extent of the PFAS problem in pesticides. MOFGA also supported LD 1503 - *An Act To Stop Perfluoroalkyl and Polyfluoroalkyl Substances Pollution*, which is now Public Law 477 and establishes that manufacturers must openly report the presence of PFAS in products, and lays out a plan to eliminate products with intentionally added PFAS over time, unless the use of PFAS is unavoidable. The state will prioritize action on products that are most likely to contaminate land and water resources, so it is logical to compile data on PFAS-containing pesticides that may be sprayed over vast farmland acreage and poison our water. With the story that broke last year about PFAS contamination of pesticides used for mosquito control in Massachusetts, and subsequent reports from EPA, we are particularly concerned about the PFAS problem being exacerbated by the spraying of PFAS-contaminated pesticides and we urge you take swift action to turn off this PFAS tap.

We believe PFAS should be regulated as a class, rather than one by one. It was wise to abandon the recommendation put forth at the October BPC meeting, which advised targeting only 75 PFAS that the Environmental Protection Agency had identified as potential candidates for expedited toxicological screening. That approach inevitably would have led to regular updates in the rule and, as we know, each amendment can take many months to years. We appreciate that you have aligned the definition of PFAS with the definition already in Maine statute. This consistency is critical for agencies to conduct collaborative efforts to address Maine PFAS crisis. We know that the Department of Agriculture, Conservation and Forestry is working tirelessly to coordinate with the Department of Environmental Protection, the Maine Center for Disease Control and Prevention, and the Department of Inland Fisheries and Wildlife.

The presence of PFAS in pesticides sold in Maine should be public information and we urge you to draft the rule to ensure that affidavits attesting to the presence of PFAS are easily accessible to the public. This is not a broader call for access to complete product formula data, it is a reasonable recommendation to ensure the public’s right to know about the presence of an extremely toxic and persistent chemical of great concern to the state of Maine.

We also believe that affidavits, while not disclosing the exact formulation of a pesticide, must acknowledge whether PFAS is present in any part of the product for sale – *i.e.*, they must report the presence of PFAS in the active ingredients, the inert ingredients, and the adjuvants, as well as
contaminants from processing or storage. The Board should exercise the broad authority it has to gather formula data in consideration of granting product registration. We hope that the system established for compiling the information would be streamlined so that it would not create an undue burden on the BPC staff. Manufacturers know whether PFAS is in their products and they must be responsible for reporting that in an online database that would minimize additional work for the staff.

LD 264 also directs the BPC to collect manufacturer about storage containers. While we recognize that the Resolve specified storage in high-density polyethylene (HDPE) plastics, it is important to note that new science indicates that the problem of PFAS leaching from containers goes beyond HDPE and is occurring in other plastic containers. As the BPC has established extensive rules regarding pesticide storage facilities, it should exercise similar authority to regulate storage containers without needing authorization from the Legislature. We suggest that the proposed rule’s Section 1.F.1. be simplified by changing “fluorinated high-density polyethylene container” to “fluorinated container”.

We look forward to hearing how the BPC would implement a prohibition on the distribution or application of pesticides or adjuvants containing PFAS, as directed in the Resolve.

**Regarding proposed rules for Chapter 41**

LD 155 - *Resolve, Directing the Board of Pesticides Control To Prohibit the Use of Certain Neonicotinoids for Outdoor Residential Use* focuses on four neonicotinoid pesticides (those containing the active ingredients dinotefuran, clothianidin, imidacloprid or thiamethoxam) commonly used in outdoor residential landscapes such as lawns, turf or ornamental vegetation, with some allowances to deal with emerging invasive insects. The law allows licensed pesticide applicators to apply these neonicotinoids to the landscape, but only “to manage emerging invasive insect pests, such as the Asian long-horned beetle, emerald ash borer and hemlock wooly adelgid in order to safeguard the public health, safety and welfare of the State and to protect the natural resources of the State.” The “invasive invertebrate pests” definition that you have proposed is very broad and goes far beyond the intent of the legislation, even including native species that could serve as vectors and that may be increasing because of our changing climate. If ever there were an occasion to take a precautionary approach to pesticides it would be with the approach to using neonicotinoids in the landscape. The definition of invasive species in the neonics rule should specify the emerging insect pests and the neonicotinoid products approved for use in their management. The decline of the insect population in the United States is becoming more commonly referred to as the “insect apocalypse” and, as reported in the journal PLOS One, is attributable to increasing toxicity of pesticides, particularly neonicotinoids. We do feel that broader action should be taken to remove neonicotinoids from the marketplace more generally – *i.e.* more restrictions in agriculture. But we see this law and rulemaking as a critical first step to addressing the problem. The BPC should direct retail outlets to start pulling products from the shelves right away. Pollinators are in crisis and we urge you to act swiftly to protect pollinators from unnecessary poisoning of the residenti landscape.

LD 316 - *An Act To Prohibit the Use of Chlorpyrifos* intends to stop the distribution of chlorpyrifos in Maine and calls for a one-year permitting process to sunset and track the use of existing chlorpyrifos inventory already in the possession of licensed pesticide applicators. Chlorpyrifos has been at the
forefront of pesticide concerns for decades due to the serious harms to human health, especially the impact that it has on the developing brains of children. The rule that you have drafted to prevent additional chlorpyrifos applications in Maine reflects the intent of the legislation. We recognize that the U.S. Environmental Protection Agency (EPA) has cancelled food tolerances of chlorpyrifos and will report findings of its registration review for non-agricultural uses by October 1st. We are fortunate in Maine to have the authority to go above and beyond the baseline relative risk standards of our national EPA. Thank you for your efforts with regulating this neurotoxin.

The Maine Organic Farmers and Gardeners Association (MOFGA) started in 1971 and is the oldest and largest state organic organization in the country. We’re a broad-based community that educates about and advocates for organic agriculture, illuminating its interdependence with a healthy environment, local food production, and thriving communities. We have 11,000 members, we certify more than 500 organic farms and processing facilities representing $90 million in sales, and we are working hard to provide training and create opportunities for Maine’s next generation of farmers. Each of these farmers is a Maine businessperson for whom economic health and environmental health are interdependent. While MOFGA envisions a future of healthy ecosystems, communities, people and economies sustained by the practices of organic agriculture, we attribute our success to collaboration and outreach to growers across the management spectrum.
Comments received regarding BPC rulemaking Jan. 14th, 2022.

Director Megan Patterson,

I am writing to urge Maine’s Board of Pesticides Control to implement the pesticide laws passed in the last session of the Legislature. The laws will restrict landscaping use of four neonicotinoids, ban the neurotoxin chlorpyrifos, and assess and address the problem of PFAS in pesticides.

Specifically, I urge the BPC to:

Narrow the scope of invasive species that could be treated with neonics by listing specific insect pests and the neonic(s) approved to use in their management. The definition currently proposed by the BPC is too broad and does not reflect the original spirit of the law. Please act swiftly to protect pollinators from unnecessary poisoning of the residential landscape. Pollinators are in crisis. There is no time to wait.

Please ensure that any PFAS chemical added to the product as an "inert" ingredient will be included in the reporting. The same goes for PFAS contaminants known to the manufacturer.

I appreciate that the BPC intends to implement the ban on chlorpyrifos as directed by state law. We are fortunate that Maine has the authority to go above and beyond the relative risk standards of the US Environmental Protection Agency.

Thank you for your consideration.

pzandrews@yahoo.com
17 Copper Ridge
Hermon, Maine 04401

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Thank you for your consideration.

joliyoka@gmail.com
11 Olsen Lane
Jefferson, Maine 04348
Hi Megan,

Yes I hoped I was responding to recent BPC work, which I understand is positive but ongoing. (Trying to spell the names of those chemicals is another challenge!)

Thank you,
Mariana

On Mon, Jan 10, 2022 at 8:15 AM Pesticides <Pesticides@maine.gov> wrote:

Hi Mariana,

Thank you for reaching out. Have your comments been provided in response to recent BPC rulemaking?

Thanks again,

Megan

Megan L. Patterson
Director
Board of Pesticides Control
Maine Department of Agriculture, Conservation and Forestry
To Megan Patterson & the rest of the Board of Pesticides Control:

I very much appreciate your work so far to limit the use of toxic chemicals. Now, while we are indoors during the cold season, is an excellent time to promote further progress.

I am particularly concerned about the use of Neonicotinoids, the neurotoxin Clorpyrifos, and PFAs. As both our Environmental Protection Agency and the Food & Drug Administration say, such substances are dangerous for human beings and other species on which we depend.

Please help the State of Maine stay a strong leader in sensible, smart, & safe agriculture. Progress made in 2021 should be underscored, embellished, and celebrated.

As Rachel Carson said, "Man is a part of nature, and his war against nature is inevitably a war against himself." I look forward to following the progress in the upcoming talks.

Thank you!

Mariana
Director Megan Patterson,

Thank you for considering this letter. I'm including what MOFGA has written, because they say it well. I'm aware that businesses that rely upon pesticides will be impacted by your decision, and that economic incentives often sway votes. Please be leaders in protecting pollinators, and support the full intent of the legislation that passed. We can find other ways for Maine businesses to thrive. Thank you, Lelania Avila.

I am writing to urge Maine's Board of Pesticides Control to implement the pesticide laws passed in the last session of the Legislature. The laws will restrict landscaping use of four neonicotinoids, ban the neurotoxin chlorpyrifos, and assess and address the problem of PFAS in pesticides.

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I appreciate that the BPC intends to implement the ban on chlorpyrifos as directed by state law. We are fortunate that Maine has the authority to go above and beyond the relative risk standards of the US Environmental Protection Agency.
Thank you for your consideration.

Lelania Avila
chickenhatlady2020@gmail.com
PO Box 1127, 5 Tracy Road
Northeast Harbor, Maine 04662
To: Board of Pesticides Control  
From: Patricia Rubert-Nason, Sierra Club Maine  
Date: January 11, 2022  
Re: Chapter 41, Prohibition of Chlorpyrifos  

As a part of our fight to protect both people and the environment, especially the most vulnerable among us, Sierra Club advocates for restrictions on harmful chemicals. On behalf of our over 22,000 members and supporters here in Maine and over 4 million across the country, we would like to thank the Board for their work on implementing LD 316 to prohibit the use of chlorpyrifos and urge them to adopt the rule as written.

Chlorpyrifos is widely used in both agricultural and non-agricultural settings. It is also a neurotoxin that negatively impacts the development of children. According to the National Pesticide Information Center:

Chlorpyrifos exposure was linked to changes in social behavior and brain development as well as developmental delays in young laboratory animals. Other studies showed that chlorpyrifos affected the nervous system of young mice, rats, and rabbits more severely than adult animals.

Researchers studied the blood of women who were exposed to chlorpyrifos and the blood of their children from birth for three years. Children who had chlorpyrifos in their blood had more developmental delays and disorders than children who did not have chlorpyrifos in their blood. Exposed children also had more attention deficit disorders and hyperactivity disorders.¹

Based, in significant part, on these risks, the EPA recently moved to revoke all tolerances for chlorpyrifos on food. However, this still leaves exposure risks from non-agricultural uses. Happily, the Maine legislature has chosen to go further in protecting young Mainers. LD 316 banned the use of pesticides containing chlorpyrifos for all uses, with a limited exception for pesticides that applicators had already purchased prior to the beginning of this year.

I would like to thank the Board of Pesticides for their work on implementing LD 316. We at the Sierra Club support the proposed rule as it is currently written and believe it accurately reflects the intent of the legislature.

¹ National Pesticide Information Center - Chlorpyrifos Fact Sheet  
http://npic.orst.edu/factsheets/chlorpgen.html