August 31, 2022

Katrina Lassiter
Program Manager
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Dear Ms. Lassiter,

Thank you for the opportunity to provide input on the pre-draft regulation to implement the landmark 2019 Safer Products for Washington law, which is the strongest law in the nation to address harmful chemicals in products.

We are pleased that the Department of Ecology (Ecology) is issuing this draft rule on time as per statutory requirements and after three years of extensive input from stakeholders and the public. The agency is breaking new ground with this program and is proposing significant bans on four classes of chemicals in ten product categories. This is an excellent step forward, and we appreciate all the work that went into this important rule.

Strong regulatory actions are urgently needed to protect vulnerable populations and vulnerable species, from pregnant women and children to salmon and orcas. The Safer Products for Washington (SPW) law is our best opportunity to prevent pollution at the source from the unregulated chemicals in millions of products and their packaging that contaminate our homes, drinking water, communities, food, waterways, and wildlife. If the rules are strong and well-enforced, Washington will make progress in reversing disturbing scientific trends, for example:

- **Stopping the unnecessary contamination of breast milk and protecting the most vulnerable.** A recent peer-reviewed study found per- and polyfluorinated substances (PFAS) in 100% of breast milk samples tested from 50 women in Washington, and showed that detections of newer forms of PFAS, including ones found in textiles, are doubling every four years.

- **Keeping PFAS out of the environment and drinking water and saving money.** PFAS contaminate drinking water throughout Washington state, from Whidbey Island to Spokane. The costs of cleaning up PFAS are rising, and spending has reached more than $64 million in Washington State. In addition, banning PFAS in products will keep them out of surface water bodies, sewage treatment plants, and biosolids spread on forests, farms, and gardens.

- **Reducing the levels of persistent toxic chemicals in Southern Resident Orcas, salmon and other parts of the food web.** When PBDE chemicals were banned in Washington, scientists recorded levels of these chemicals decreasing in harbor seals, Pacific herring, and English sole. However, replacement flame retardants that have been used in electronics are

also brominated and build up in wildlife. Tackling all organohalogen flame retardants (based on chlorine, bromine or fluorine chemistries) will ensure the most dangerous forms decrease over time and help avoid regrettable substitution.

Leading companies have already taken steps to phase out these harmful chemicals and replace them with safer alternatives, future-proofing their businesses as an important part of environmental, social and governance (ESG) initiatives. Doing so is good for profitability; companies with high ESG ratings display lower cost of capital, lower volatility, and lower incidences such as spills.

Manufacturers that use highly hazardous, persistent, and often the cheapest chemicals externalize the staggering cost of the impacts of those chemicals to taxpayers, ratepayers, health-care patients and their families, and to future generations.

Environmental Justice and Protecting the Most Vulnerable is Core to SPW

While toxic chemicals impact everyone, vulnerable populations such as low-income communities and communities of color, particularly women of color, are disproportionately impacted. This leads to intergenerational harm as their children can carry the burden of negative health effects from toxics.

Ecology requested input on addressing environmental justice when administering, implementing, and enforcing Safer Products for Washington. Protecting the most vulnerable, including highly impacted communities, is core to the law: environmental justice cannot be an add-on. To accomplish this, it is critical that the restrictions are stringent, with no loopholes or broad exemptions, that phaseout timelines are short, and that enforcement happens. If the restrictions are not strong or well-enforced, the burden will be on already overburdened individuals and communities to protect themselves, which will only continue and exacerbate the injustice that exists. Examples of disproportionate exposures include:

- A 2021 report by Toxic-Free Future traced U.S. production of PFAS for food packaging back to a single manufacturing company, Daikin America, which is located in Decatur, Alabama. The facility also makes PFAS for textiles. TFF found that Daikin's Decatur operations have released PFAS into the environment, polluting a local waterway that serves as the water source for Decatur and other North Alabama communities. 51% of the population living within 3 miles of the Daikin facility is African-American, and the vast majority of people living within the 3-mile radius have incomes below $50,000. Chemical manufacturing facilities are often located near low-income communities of color, putting these populations at greater risk of toxic exposures and adverse health effects.

- Firefighters and workers at electronics recycling facilities are disproportionately exposed to organohalogen flame retardants (OFRs). Flame retardants can be emitted by combusted items, and firefighters have been found to have high levels of decaBDE in their blood.[1] Another study measured flame retardants in the breathing air around workers at an e-waste recycling facility compared to workers at a commercial waste recycling facility. The study found that on average, workers at the e-waste recycling facility were exposed to concentrations of flame retardants 12 times greater than the concentrations found in workers at the commercial waste recycling facility.[2]

- Different demographic groups are more exposed to bisphenols through can linings. A USDA study in 2004 found that African Americans purchase more canned vegetables than other racial groups in the US,[3] while another study found that consumption of canned foods, including canned vegetables, are correlated with higher levels of urinary BPA.[4]

- While all women are exposed to phthalates, women of color are disproportionately impacted by phthalate use in fragranced beauty and personal care products. Black women using fragranced feminine products have been found to have 150% higher exposure to diethyl phthalate (DEP), a chemical that is known to alter maternal sex steroid hormone concentrations during pregnancy and may increase risk of adverse health outcomes in offspring.[5] Another study detected higher levels of phthalates in Black and Latina hairdressers compared to office workers, due to the presence of phthalates in the hair services provided in their salons.[6]

Specific Comments on the draft SPW Rule

1. **We support the proposed restrictions. Ecology identified safer, feasible and available alternatives and is proposing to restrict the following chemicals in products:**

   - PFAS (per- and polyfluorinated substances) in carpet, rugs, indoor leather and textile furnishings, and aftermarket stain- and -water resistance treatments used for all leather and textile products.
   - Organohalogen flame retardants (OFRs) in foam mats and casings for indoor electronics such as televisions.
   - OFRs and certain organophosphate flame retardants (OPFRs) in recreational foam products such as covered floor mats, foam pits, covered flooring, and outdoor recreational products.
   - Bisphenols in thermal paper and drink can linings.
   - Alkylphenol ethoxylates (APEs) in laundry detergents.
   - Phthalates in polyvinyl chloride (PVC) flooring and fragrances used in beauty and personal care products.

2. **We support Ecology's original proposal that products "cannot contain" the priority chemicals. We do not support limiting the restrictions to "intentionally added" chemicals.**

   Ecology's original proposal is the clearest, most protective approach. It will be more complicated and burdensome on Ecology to enforce and there will be more opportunities for loopholes if companies can make arguments about why the chemicals are present and whether they were aware of their presence. If the chemicals are present, companies should figure out why and keep them out of the products. It is the responsibility of companies to know what is in their supply chain and be responsible for keeping the most dangerous chemicals out.

   A chemical may be present in a product for a number of reasons, but in any of these cases, it remains a toxic chemical that the state of Washington is restricting from products because of its effects on health and the environment. These reasons include use of the chemical in

production of the product, resulting in the presence of the chemical in the product even though it does not serve a purpose in the final product. In addition, there could be recycled content that contains the chemicals. Finally, contamination can occur when manufacturers use the chemical elsewhere in a facility or share equipment used for products that contain the chemical. No matter why the chemical is present, the harms are the same and the SPW regulation should not distinguish based on the reason for the chemical's presence.

3. **The rebuttable presumption in combination with "intentionally added" language is problematic.**

   The "rebuttable presumption" provision could result in confusion and onerous enforcement for Ecology. Ecology could be inundated with companies making claims the chemicals weren't intentionally added. This loophole could allow these chemicals to continue to be used or contaminate products in the supply chain.

4. **We oppose the broad exemption language in the draft rule and exemption for existing stocks.**

   The exemption provision in the draft rule (Section 020) is extremely broad without any specific requirements for companies to meet to obtain an exemption. This provision could be inconsistently applied, and it would be unclear to the public and regulated community how exemptions could be evaluated, granted, or denied. This is a dangerous precedent and is not consistent with the core values that underpin law and environmental justice principles.

   Furthermore, RCW 70A.350.040 (5) states: "A restriction or prohibition on a priority chemical in a consumer product **may** include exemptions or exceptions, including exemptions to address existing stock of a product in commerce at the time that a restriction takes effect." This provision is not a requirement and we have seen no evidence that broad, unclear exemptions are warranted. Any exemption should be extremely narrow and time limited and specific to the product category/chemical combination.

   Existing stock is often sold cheaply, creating a greater impact on low-income communities. This process has taken three years and provides an additional two years for compliance, with even more in certain cases. There are also laws in other states and countries that have resulted in changes in the supply chain to safer alternatives, so there is plenty of time for businesses to comply if restrictions go into effect in 2025.

5. **We recommend that all the bans go into force January 1, 2025.**

   It is urgent that our state put bans in place as quickly as possible, as allowed by law. As mentioned above, the trends we are seeing can only be reversed with rapid and strong regulatory action. For most of these chemicals, scientists and businesses have known about the environmental health hazards and exposures for decades. Our future depends on acting as quickly as possible. The agency has the ability to end the continued contamination of babies and orcas from the most dangerous chemicals. Safer alternatives are feasible and available, so there is no reason for delay.

6. **The organohalogen flame retardant restriction for indoor electronics should be more stringent given experience with previous laws.**

   - **We support changing the language to "the product cannot contain."** Ecology is proposing to restrict "intentionally added" organohalogen flame retardants intended for indoor use at 1,000 ppm for individual flame retardants and 1,500 for combined using a screening method for bromine, chlorine, and fluorine. We request that the restriction state "the product cannot contain" and the level be set much lower. In our testing, we have seen that companies will continue to produce casings for electronics that contain banned flame retardants at significant levels, many years after the ban went into place. These are chemicals that at least for some time will continue to be produced and used in other jurisdictions and allowing their presence at a relatively high level incentivizes companies to continue allowing their presence and maintain sloppy production practices. In addition, the enforcement level should apply to the total content at the homogenous material level, not the product level; that is, if a casing is made of multiple materials, each one must meet the limit. It is an approach consistent with Europe.

   - **Experience from the PBDE ban shows us that more stringent requirements are needed.** Washington's PBDE law banned TV electronic enclosures from containing deca-BDE in 2011 after identifying safer alternatives. The law excluded electronic recycled products. Testing of TVs in 2017 by Toxic-Free Future found deca in three televisions along with an array of other flame retardants at a variety of levels. Follow-up testing published in 2019 again found deca in televisions (see the accompanying table). There is no way to tell how the deca or the array of flame retardants ended up in the TV so the standard should apply to any flame retardants, not just intentionally added ones.

Table 1:

			Halogenated Flame Retardants				Phosphorus Flame Retardants	
Retailer	Brand	Model	TTBP-TAZ (%)	2,4,6-TBP (%)	DBDPE (%)	Deca-BDE (%)	BAPP (%)	TPhP (%)
Best Buy	Insignia	Roku LED TV 24" 720P	7.4	0.15	0.95	0.06	0.03	ND
Best Buy	Insignia	Roku LED TV 43" 4KUltra HD	9.6	0.45	0.69	0.01	0.17	ND
Best Buy	Insignia	Roku LED TV 50" 4KUltra HD	12	0.28	0.56	0.13	0.49	0.004
Amazon	Toshiba (Hisense)	Firetv Edition 43" 4KUltra HD	3.7	0.12	0.93	ND	ND	ND
Amazon	Toshiba (Hisense)	Firetv Edition 50" 4KUltra HD	3.9	0.14	1.1	ND	ND	ND
Amazon	Toshiba (Hisense)	Firetv Edition 55" 4KUltra HD	3.5	0.14	1.0	ND	ND	ND

ND = not detected
Concentrations given as percent by weight.

- **Recycling of electronics demands strict restrictions far below 1000 ppm.** To keep organohalogen flame retardants out of recycled products, restrictions need to be set as close to zero as is practical. In a 2022 study, the International POPS Elimination Network (IPEN) tested for brominated flame retardants in black plastic items from China, Russia, and Indonesia that were not required to meet fire safety standards. They found brominated flame retardants in children's toys, office supplies, hair accessories, and kitchen utensils. In some products the levels contained levels of brominated flame retardants in hundreds of parts per million. Their findings suggest that the presence of brominated flame retardants was due to unregulated e-waste recycling.

  When flame retardants from TVs are recycled into children's toys, it poses threats to the health of children. A May 2022 study found that flame retardants migrated from children's toys into children's saliva.[7]

7. **The restrictions for PFAS should not apply only to intentionally added PFAS.**

As mentioned previously, it is important that the agency use language that states the product "cannot contain PFAS." We support the agency's approach that detecting Total Organic Fluorine (TOF) indicates PFAS, but not just intentionally added PFAS, given our concerns outlined above. This is prudent given that state and federal drinking water levels are being set in the parts per trillion. To truly keep these chemicals out of the environment, the levels in products need to be as close to zero as possible. It is critical for businesses to identify and restrict all sources of PFAS in their supply chain.

8. **Phthalate restrictions should be stricter.**

We agree with removing the 100 ppm limit for phthalates used as fragrances in beauty and personal care products. For fragrances, there is no need to include the "intentionally added" language since it is a restriction based on function. This should be removed.

The language regarding "a solvent or fixative" for fragrance ingredients is unnecessarily specific and could lead to confusion and unforeseen loopholes. It is unquestionable that the ban is on ortho-phthalates used as fragrances and that phthalates have been historically used as solvents and fixatives for fragrance. But using these terms leaves it open for manufacturers to re-name the function the chemicals serve in the fragrance. Furthermore, to specifically exclude "orthophthalates used in beauty or personal care products for purposes other than as a solvent or fixative for fragrances" is unnecessary and provides yet another loophole.

A further problem exists if chemicals perform multiple functions. Ecology is presuming that detection of ortho-phthalates in products with "fragrance" listed on the label indicates addition of ortho-phthalates used in fragrances. We support this. However, for example, a company may use a phthalate as fragrance in a scented lip gloss, where the phthalate could also be used as a flavor (e.g., cherry). What prevents the company from arguing that the phthalate is added solely for flavor in a rebuttable presumption claim? This is another reason the rebuttable presumption provision creates problems.

We support the restriction on ortho-phthalates in vinyl flooring and the limit applying to any ortho-phthalate, individually or combined. However, the 1000 ppm limit is too high. We are very concerned that vinyl flooring can contain recycled content, and that phthalates should not be recycled. The limit should be set much lower to address this, particularly given that vinyl floors are low-cost and used widely in affordable housing.

9. **APE limits should be lower.**

We support the ban on APEs in laundry detergents; however, the 1000 ppm threshold is too high. Ecology identified safer, feasible, and available alternatives certified by the EPA in its Safer Choice program. There is no reason for APES to be used in detergents, so the levels should be much closer to zero.

10. **PFAS should be banned in outdoor furniture as well as in indoor furniture.**

In its June 2022 report, Ecology changed its draft determination from November 2021 to restrict PFAS in outdoor furniture to a reporting requirement. We agree with the draft regulatory determinations from November 2021 (p. 90) that there are safer, feasible and available alternatives for outdoor furniture and PFAS should be restricted. We believe the function of PFAS in outdoor furniture and furnishings is overstated in Ecology's June 2022 report, creating a false differentiation between indoor and outdoor furniture and furnishings with regard to PFAS, and that the safer, feasible and available alternatives that exist for cleanability for indoor furniture should apply to outdoor furniture. To the extent that manufacturers claim that PFAS serves a water-resistance function, Ecology has already identified an alternative in safer aftermarket treatments.

In its June 2022 report, Ecology states that, in addition to the functions PFAS provides for indoor furniture and furnishings, for outdoor furniture and furnishings PFAS protects the foam from weather. Similarly, the process function of PFAS for outdoor furniture differs from indoor furniture in that PFAS "provides water resistance." (p. 82) However, a review of websites of product manufacturers and retailers of outdoor furniture and furnishings indicates that:

- Protection from weathering is dependent on a high level of maintenance unrelated to PFAS and PFAS coatings on fabric last only until the fabric has been "thoroughly cleaned," at which point the fabric requires recoating with an aftermarket treatment. Thus, while consideration of weathering and protection from the elements are certainly differentiating features with regard to outdoor furniture as opposed to indoor furniture, the initial PFAS coating on fabric does not provide this function. As such, outdoor furniture and furnishings should not be considered separately from indoor furniture and furnishings for the purposes of this rule.

- Protection from rain depends on a high level of maintenance. PFAS is only one element of outdoor fabric that improves its water resistance, in addition to fiber content (polyester or acrylic) and density of weave. None of these attributes, alone or combined, truly protect outdoor furniture from rain or weathering, however. To maintain furniture appearance, retailers clearly state that cushions should be carefully maintained, with recommendations including:

- For daily care, wipe with a soft, dry cloth.
- Wipe spills immediately with a clean, dry cloth.
- Store indoors during long periods of inclement weather.
- Make sure furniture is completely dry before storage.
- Cover furniture with outdoor covers (sold separately) when left outside during inclement weather or when not in use.
- Use a proper outdoor cover that allows for adequate ventilation without trapping moisture.
- Remove or stand wet cushions to aid in drying time.
- For deep seating cushions we recommend opening the back zipper to dry and standing the cushions upright.

(https://www.potterybarn.com/products/torrey-all-weather-wicker-sq-occasional-chair-21/?pkey=ctorrey-outdoor-collection, https://www.crateandbarrel.com/moroccocharcoalovalloungechairwithcushion/s358365)

Given the above, we believe the function of PFAS in outdoor furniture and furnishings has been overstated by Ecology. While PFAS does impart some initial waterproofing qualities to outdoor fabric, maintaining those qualities is highly dependent on careful maintenance and regular application of aftermarket treatment. Outdoor furnishings should therefore be considered in the same category as indoor furnishings, and PFAS should be restricted in them.

Congratulations to Ecology's staff on an extraordinary body of work over the first three phases of implementing the Safer Products for Washington Law. This regulation, grounded in both sound science and market realities, has the potential to provide critically needed protections for Washington's residents, especially those most vulnerable, and its environment. Please feel free to contact me with any questions regarding our comments.

Sincerely,

Laurie Valeriano
Executive Director
Toxic-Free Future

Sources:

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