



February 5, 2023

Marissa Smith  
Washington Department of Ecology  
300 Desmond Drive SE, Lacey, WA 98503

Re: Safer Products for Washington Regulatory Program

Ms. Smith,

Thank you for allowing the Whirlpool Corporation to provide further feedback on the Department of Ecology's (Department) implementation of the Safer Products for Washington Regulatory Program. We appreciate the Department listening to stakeholder input and working with manufacturers to ensure these regulations are targeted to addressing safety concerns. Our comments focus on the Organohalogen Flame Retardant (HFR) proposal.

### **Scope of Products**

The proposal requires clarification of the criteria to define the parts in scope. It would be useful to have a clear and robust rationale to identify which parts should be in scope. This could be accomplished through either compiling a comprehensive list of all parts subject to the regulation or by defining the scope based on items or components with shared characteristics (i.e. frequency of touch or consumer exposure).

It is also important to understand the distinction between flame retardants used in the different products the Department is seeking to restrict. The current proposal assumes that OFRs in all products pose the same level of risk, even though there is clear evidence of differentiated exposures. Consumers cannot normally access the flame retardants used in electronic enclosures unless there is a maintenance issue with that specific part, unlike other products the Department seeks to regulate. This suggests flame retardants in electronic enclosures should be regulated differently than other household products rather than using a one-size-fits-all approach.

The organohalogen flame retardant class of chemicals that the Department intends to ban is also too broad for regulation. A broad restriction, like the Department proposes, is unlike any other such restriction currently in place. For example, the RoHS Directive restricts only certain HFRs that manufacturers are able to test for and certify compliance with. By banning the entire class of HFRs, manufacturers will not be able to survey their suppliers and expect complete confidence in their

certification. The lack of alignment between the Department's proposal and international standards on HFRs will force the entire global supply chain to test products separately for the Washington market, which is not feasible. This can be resolved through both compiling a comprehensive list of all parts subject to the regulation and specifying individual flame retardants by CAS Registry Number that it plans to regulate for each material.

We urge the department to narrow the scope of the regulatory proposal by 1) specifying individual OFRs by CAS Registry Number (CAS RN) that it plans to regulate and 2) specifying individual finished electronic and electrical products that it plans to regulate. Further, the lack of clarity regarding the definitions that the Department has included in the Draft Rule could cause confusion for product manufacturers who may be uncertain as to whether their products fall within the regulatory scope or not. The Department not providing a complete list of chemicals and products that the Department intends to regulate limits our ability to provide valuable feedback regarding design, feasibility of alternatives, and other considerations as part of an overall approach to product safety.

### **Replacement Parts Exclusion**

Whirlpool appreciates the Department's decision to exclude repair or replacement parts manufactured before the compliance schedules. However, we believe the exclusion for these parts must encompass the full useful life of products manufactured prior to the enforcement date. For any SKU that falls under the restriction, it would be impractical to make new replacement parts that conform to the restriction after a product is already in use. For example, a refrigerator purchased in 2025 that is not yet subject to the restriction has a specific set of replacement parts for that SKU. Should the refrigerator require a repair on an area that contains FRs after the restriction goes into effect, it will be extremely burdensome for a manufacturer to construct a new replacement part that meets the new HFR criteria to fit into an old SKU. As a result, the availability of spare parts to address maintenance requests for older products is likely to be negatively impacted. All replacement parts for products sold prior to the restriction date must be grandfathered in for the useful life of the appliance, otherwise consumers would not be able to purchase any replacement parts that are impacted by the restriction.

### **Lack of Technical Alternatives**

Whirlpool is active in the sustainability space with several initiatives, including migration towards more environmentally-friendly materials and chemicals. The

company has been actively addressing the identification of alternative flame retardant plastic solutions for the enclosures of our products in North America which are designed to accept up to twice the amount of current/ampereage compared to European electrical devices. Below is a summary of the key learnings obtained so far from this program:

- Over the last five years of continuous development activity involving our entire supply base across multiple regions, the company has not been able to identify halogen free flame retardant alternatives that meet the specifications required in terms of flame rating, IEC standards, mechanical properties (impact resistance, durability, etc.) and aesthetics requirements.
- One key concern is the effect of humidity, which decreases FR properties of halogen free FRs especially if they are phosphorus-based.
- Another key finding is the poor mechanical properties and aesthetic appearances achieved with the majority of the halogen free FRs in commerce. Parts break very easily and show significant surface defects such as shadows, blushes, and areas of low gloss.
- Whirlpool has confirmed there are currently no viable alternatives through constant work with our suppliers all over the world.

### **Extended Timeline**

When a regulation would require manufacturers to change an integral part of a product, the timeline required to retool and reapprove appliances for mass production is extensive, especially considering that the Department's proposed alternatives are restricted in other states. Thus, manufacturers will first need a sufficient transition time to find an alternative followed by extensive product testing and potential re-tooling. In order to meet UL flammability standards compliance, manufacturers will need a least three to five years to prove out alternatives and to achieve re-certification to energy, performance and safety requirements. There is precedent for a 48-month compliance timeframe under both the RoHS 2 and REACH regulations. With this additional time comes extra costs for the manufacturers and potential increased costs on consumers. We also encourage the compliance date to be based on the date of manufacturing, similar to what we see in Department of Energy efficiency standards.

### **PVC**

PVC is a halogenated material because its molecule is based on chlorine which is in the halogen family. PVC is commonly considered a concern for health and the

environment if it's not properly disposed of at the end of life but rather incinerated. In this instance, there is a release of chlorinated substances which are harmful to humans and the environment. PVC has not shown health concerns tied to its intended use in consumer products.

The end of life collection of appliances and recycling/handling of materials are normally managed via robust recollection schemes in all US states. Since appliances are disposed of properly, and considering the safety advantages and low toxicity concerns of PVC for such applications, there should be a discussion on removing it from the scope of the regulation. Particularly as PVC is often used in other applications, like windows and flooring, that present a much higher consumer exposure to surfaces and an increased probability of creating dust that the regulation intends to limit.

### **Conclusion**

No other regulatory authority, either domestically or internationally, has proposed regulations for HFRs in casings and enclosures for electronic and electrical equipment as broad or with as condensed a timeline as Washington has. This regulation will cause serious disruptions for the appliance industry and will drastically reduce appliance product availability. We hope the State of Washington reconsiders moving forward on any regulations where appliance safety and availability is potentially threatened.

Whirlpool appreciates the opportunity to provide comments on the proposal and highlight the need for further clarification. Please do not hesitate to contact me at [luke\\_m\\_harms@whirlpool.com](mailto:luke_m_harms@whirlpool.com) or 202-286-9308 if you have any questions or need additional information.

Sincerely,  
Luke Harms  
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