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August 31, 2022

Washington Department of Ecology
300 Desmond Drive SE
Lacey, Washington 98503

Re: Safer Products for Washington- Draft Preliminary Draft Rule Language

To whom it may concern:

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to raise the following points concerning the proposed recommendations for products with flame retardants under Safer Products for Washington.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than \$30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs. AHAM is also a standards development organization, accredited by the American National Standards Institute (ANSI). The Association authors numerous appliance performance testing standards used by manufacturers, consumer organizations and governmental bodies to rate and compare appliances. With respect to safety standards, we work closely with Underwriters Laboratory (UL), CSA, and other safety standards developers around the world. AHAM's consumer safety education program has educated millions of consumers on ways to properly and safely use appliances such as cooking products, portable heaters, and clothes dryers.

AHAM's members produce hundreds of millions of products each year. They design and build products at the highest levels of quality and safety. As such, AHAM members have demonstrated their commitment to strong internal design for safety procedures, monitoring, and evaluation/failure analysis systems. AHAM supports the petitioners' intent to protect consumers against all unreasonable risks, including those associated with the exposure to potentially harmful chemicals. AHAM also firmly supports the appropriate use of flame retardant chemicals in

electronic and electrical devices. Together with industry test requirements, safety mechanisms and internal design for safety procedures, flame retardant chemicals play an important role in the safety of household appliances. Publically available field incident data shows that fire retardant enclosures reduce the severity and number of electrical appliance/device caused fires from a failure of an electrical component. That is why the use of flame retardants in electronic devices is essential to meet consensus safety standards including safety standards for clothes dryers (UL 2158) and household electric ranges (UL 858). The proposed end product requirements may be considered above and beyond the current safety requirements and through possible unintended consequences these new requirements may actually reduce safety levels. The appropriate method for requesting changes like these is requesting updates to the end product safety standards through UL and CSA. The proposed change then would have a deliberate, rigorous and thorough review by a Standards Technical Panel (STP) of experts to assure there is no loss of safety levels.

Inaccessible Electronic Component Exclusion

Through the rulemaking process, AHAM has raised several concerns specific to how home appliances would be included in the broad categories of “electronic devices” or “electronic device casings.” **AHAM appreciates the exclusion of inaccessible components, such as printed circuit boards and internal fans as plastics devices used in appliances often are inaccessible to consumers and contain qualitatively low amount of flame retardant materials.** However, we would request additional clarifying language in the definition of an inaccessible electronic component.

Under the proposed rule, *an inaccessible electronic component means a part or component of an electronic product that is located inside and entirely enclosed within another material and is not capable of coming out of the product or being accessed during any reasonably foreseeable use or abuse of the product.* As appliances are often serviced and repaired, it is crucial that this exclusion also encompasses all components that are accessible for servicing/repair in order to allow these service providers to handle and fix these components that may contain flame retardants. This will ensure that service parts are not in scope.

Product Scope Consideration

If the State of Washington continues to investigate the use of OFRs in the outer casings of electronic devices, the Department of Ecology should first clarify the scope of the work. Then the proper parties can participate as required. However, due to the broad nature of the current proposal, it could potentially incorporate parts that consumers buy commercially including spare parts as well as service parts. Thus, the Department should clarify its intent and scoping process before moving forward with any rulemaking. This could be accomplished 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. Without this information,

manufacturers will have a difficult time surveying their supply chains to evaluate the enclosure for compliances.

In addition to a vague and potentially overly broad definition of electronic devices, it is important to acknowledge the difference between electronic devices and the other proposed categories of products. The use of flame retardant chemicals in children's products, stuffed furniture, and mattresses and mattresses covers are to prevent those items from becoming fuel for a fire cause by some external source. The purpose of flame retardant chemicals in electronics is to prevent those electronics from becoming the source of a fire and also to assure containment of a fire. All electrical devices inherently have some risk of starting a fire. AHAM's members work tirelessly to reduce these risks for home appliances. Nevertheless, the risk of fire inherent in all electrical components is a primary reason that electronics are contained in fire resistant enclosures. The protection from fire risks provided by electronic device enclosures is meaningfully different from preventing household goods from becoming additional fuel for a fire started by some other means. The Department must consider this type of fire protection and safety considerations.

External Enclosure Clarifying Definition

Under the proposed draft rule, an external enclosures means external plastic enclosures of casings of finished electronic products sold in their functional form. Enclosures are also called device casing. Other components of the product including printed circuit boards, internal fans, wires, cords, cables, switches, light bulbs, connectors, and screens are not part of the external enclosure.

AHAM asks for clarifying language around "functional form" as this could mean the entire appliance or could mean a service part such as a fan or pump. The Department of Ecology should default to what UL has defined as definitions of external enclosures as that is what the product will be certified to. If the State of Washington definitions are stricter than UL, that will require individual certification to the State of Washington before a product can enter the state for commerce.

Greater Consideration for Product Design & Viable Alternatives

AHAM members have been actively addressing the identification of alternative flame retardant plastics solutions for the enclosures. Going through their global supply chain, many manufacturers have not found it possible to replace these flame retardants that meet the necessary specifications required in terms of flame rating, IEC standards, mechanical properties (impact resistance, moisture resistance, humidity resistance, durability) and aesthetics requirements. This is especially important for products where moisture is a concern (dishwashers, washing machines, refrigerators), where the only option is using flame retardants to achieve the desired level of performance. Simple substitution is just not possible as product manufacturers need a broad array of material choices for differing product design needs.

Under the Preliminary Draft Rule, flame retardants used in plastic casings intended for outdoor use are subject to a reporting requirement, and not restrictions, due to weathering concerns. The Department should similarly consider product performance and design of household products, including the potential for fire risk or the containment of fires, as it evaluates possible regulatory actions for flame retardants used in plastic casings intended for indoor use.

Alignment with Product Safety Standards

In the Draft Rule, Ecology proposes a limit of 1,000 ppm for individual organohalogen flame retardants and 1,500 ppm for combined OFRs in casings and enclosures of electronic and electrical equipment. The Department cites UL 746H, which certifies plastics to either be non-halogenated or non-chlorine and non-bromine. Interestingly, UL 746H is an optional certification rating and is not always a viable option for electronic and electrical equipment. Electronic and electrical products with larger enclosures including major appliances can be required by UL 746C to undergo a specific test that assumes a flame threat occurs outside of the enclosure that the product must not propagate. In these instances, enclosures meeting specific size criteria must pass a larger scale fire test. Using an interior fire barrier (possibly metal) with a horizontal burn “shell” may not be enough to satisfy these additional requirements.

It is common for product standards to supersede UL 746C. These end product standards can contain additional or stricter requirements than UL 746C, such as an enclosure needing a minimum of UL 94 V-1 or V-0 for flammability. For example, UL 2158 Standard for Safety: Electric Clothes Dryer has criteria for large mass considerations. Section 28.13 requires a polymeric part that meets the large mass criteria to have a flame spread of 200 or less in either UL 723, UL 94 (which uses the ASTM E162 test), or CAN/ULC-S102.

Ecology’s proposal for OFR limits in casings and enclosures of electronic and electrical equipment intended for indoor use does not adequately consider that indoor products may have various design and performance criteria – such as moisture considerations – that make UL 746H an unsuitable option. Exemptions should be considered for the use of UL 746C instead of UL746H and for those end product standards that contain additional or stricter requirements than UL 746C.

The National Electrical Code requires all electrical products to be listed which requires certification to the appropriate safety standard. If the revised products meet the Washington requirements but do not meet the safety requirements required for certification and listing then these appliances won’t be approved for use in the State of Washington. Ceasing production of their already third-party safety certified product would be the only option if there are no viable and non-burdensome alternatives. AHAM urges the State of Washington to take a more robust and complete approach for assessing alternatives, which takes into account overall safety, performance, innovation, and sustainability factors.

Reporting Requirements Clarifying Language

Section 065 of the Preliminary Draft Rule sets out the reporting requirements. Under the preliminary rule, indoor electric products (Section 112(1)) does not include a reporting requirement. Comparing this to outdoor electric products, where a reporting requirement is included (Section 112(2)). That said, Section 065 could be read to create an independent reporting requirement regardless of the absence of a specific reporting requirements in Section 112(1). Given the reporting language in Section 065, the Department of Ecology should clarify in Section 065 that the reporting requirements do not apply unless reporting is required in a section regulating a priority product. This will clear up any ambiguity regarding reporting requirements for indoor electric products in Section 112(1). Alternately, the Department could include an affirmative statement in Section 112(1) that the reporting requirements of Section 065 do not apply to indoor electronic products.

AHAM also asks for clarifying language in Section 112(1)(c) regarding PPM limits. It could be read that the restriction applies to the product as a whole, not just to its external enclosure. PPM limits of 1000 – 1500 for just the external enclosure would not allow sufficient flame retardancy for equipment with external plastic enclosures to comply with UL Listing requirements nor the building codes that incorporate those UL standards. Alternate flame retardants may exist, but their ability to meet the wide variety of uses and performance requirements for durable products and their supply availability is undetermined.

Extended Timeline Requirement

When a regulation would require manufacturers to change an integral part of a product, the amount of time that is required to retool and reapprove appliances for mass production would take an extended period of time. This is because the appliance supply chain is global and complex. Appliances have thousands of product SKU's. 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. With this additional time comes extra costs for the manufacturers and potential increased costs on consumers.

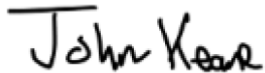
PVC

Polyvinyl Chloride (PVC) is commonly considered a concern for health and the environment if it's not properly disposed of at the end of life. The end of life collection of appliances are normally managed via robust recollection schemes in all U.S. 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 consideration on removing it from the scope of the regulation.

Conclusion

No other regulatory authority has proposed regulations for OFRs in casings and enclosures for electronic and electrical equipment as broad as what is in the Preliminary Draft Rule Language and would make Washington an outlier. An abrupt prohibition, unique to the State of Washington that is not appropriately targeted 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 if appliance safety and availability is potentially threatened. Thank you for considering our views and please contact me at jkeane@aham.org or 202-872-5955 if you would like to discuss in more detail.

Respectfully submitted,

A handwritten signature in black ink that reads "John Keane". The signature is written in a cursive, slightly slanted style.

John Keane
Manager of Government Relations