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March 27<sup>th</sup>, 2024

Vermont House Committee on Human Services

Good morning. I'm Dr. Holly Davies and I am a toxicologist with the Washington State Department of Health. We work with our state environmental agency, which is called the Department of Ecology, on reducing toxic chemicals in consumer products. Thank you for the opportunity to talk to you this morning about toxic chemicals in products and S.25.

Before I tell you about our report to our legislature and implementing our new state law on chemicals in cosmetics, I want to mention that we are also concerned about exposures from the other products in this bill. We started looking at phthalates in menstrual products as part of our Phthalate Action Plan and then found there are other toxic chemicals that are known to be in menstrual products. I'm also concerned about products that are similar to menstrual pads such as incontinence products and diapers. All of these products are in contact with parts of people's skin that is more permeable than other areas of our body, so chemicals are taken up by the body more. We are also looking at artificial turf fields because of PFAS, as well as lead, 6PPD and other chemicals.

Under our Safer Products for Washington program, we identify priority chemicals and priority products that are a significant use of the priority chemicals. After we identify alternatives that are less hazardous and that are feasible and available, we are able to restrict priority chemicals in priority products or require reporting by rule. We completed the rulemaking process for our first cycle of this program that includes a restriction on PFAS in indoor textiles and on phthalates that are used as fragrances in cosmetics. For the partial cycle of Safer Products for Washington that is specifically focused on PFAS products, we are finalizing our regulatory determinations. This includes proposed bans for PFAS in cleaners and most apparel. We will send our final report to the legislature on these regulatory determinations in June 2024 and we have begun rulemaking. For our second full cycle of Safer Products for Washington we have proposed Priority Chemicals that include formaldehyde and formaldehyde releasers, some cyclic methylsiloxanes, toluene, halogenated chemicals, and 6PPD.

It's important to consider chemicals that have been intentionally added in the manufacturing process, even if they don't serve a purpose in the final product. In our Safer Products rule we define an "intentionally added chemical" as "a chemical that serves an intended function in the final product or in the manufacturing of the product or part of the product." Bisphenol A (BPA) in can linings is one example from that rule. BPA is used in making the epoxy for the can lining, but in the final product BPA has reacted. The remaining BPA is present as an unreacted monomer and it serves no function. But, people are still exposed to it. That's different from other types of contaminants that are not intentionally added at any point in the manufacturing process. For some contaminants, such as lead, we are particularly concerned about effects at low amounts and strive to keep contaminants as low as possible.

When it comes to potentially harmful ingredients, cosmetics require extra scrutiny because we apply these chemicals directly to our bodies. Some people are also exposed to chemicals in cosmetics at work. Cosmetics is not just about make up. The definition of cosmetics includes what we often call personal care products such as shampoo, lotion, shaving cream, toothpaste, and deodorant. These everyday products can contain harmful chemicals. As cosmetics are applied, users are exposed to these harmful chemicals through our skin, by ingestion and by breathing in vapors. When we wash them off, they go into our wastewater and are eventually released into the environment. The chemicals and chemical classes in this bill can disrupt our hormone systems, increase cancer risks and harm brain development. We know the best way to protect human health from these toxic exposures is to remove harmful chemicals from cosmetics.

I am particularly concerned about harmful ingredients in cosmetics that disproportionately affect people of color. Certain products are used more frequently by some groups than others. Many of the studies on usage have specifically looked at women's use, and studies have rarely included people who do not identify as men or women. One example is that Black women use more hair straighteners and relaxers compared to White women, and while I am saying "women," the use of these products often starts in young girls. The use of hair straightening products by Black women has been associated with a higher breast and uterine cancer risk. Black women have higher incidences of breast cancer at a younger age and are more likely to die of breast cancer compared to White women.

In 2022 we received funding from our legislature to work with communities of color to identify and test cosmetics for toxic chemicals. We talked to people about what they use and where they buy

products, reviewed the scientific literature, and tested products for heavy metals, formaldehyde, asbestos, and phthalates. We found lead, arsenic, and formaldehyde in some cosmetic products we tested.

The presence of lead in foundations and lipstick is particularly concerning because lead harms brain development and there is no known safe level. Our law includes a limit of 1 ppm for lead. In our product testing lead levels were below 1 ppm in 17 out of 20 products we tested. That shows us that it is possible to make safer products and that the majority of manufacturers are doing so. While there is some lead contamination that is harder to avoid, such as in municipal water, I'd like to note that the national action levels for lead in drinking water is 15 ppb, which is much lower than our limit of 1 ppm in cosmetics. While there were only a few products with more than 1 ppm lead, because we don't buy our cosmetics products at random, the presence of lead in just a few products can be significant sources of exposure for people who use those products every day.

Formaldehyde can be present in cosmetics either because it is used or because a different chemical is added that releases formaldehyde over time. In products that included a formaldehyde releaser in the ingredients, we found formaldehyde in 26 out of 30 of the products we tested. What this means is that when formaldehyde releasers are used, people are often exposed to formaldehyde in the product. In most of the products we tested that listed a formaldehyde releaser, we found concentrations of formaldehyde above 200 ppm, which can cause allergic reactions. Of course allergic reactions are problematic, but a more consequential impact of formaldehyde in cosmetics is increased cancer risk.

We are implementing our Toxics Free Cosmetics Act that passed in 2023. The restrictions on nine chemicals and chemical classes takes effect in 2025. We are assessing hazards of chemicals with a focus on safer alternatives used as preservatives and setting up support for both manufacturers and cosmetologists to move to safer alternatives, especially since our law includes professional products. We are also preparing for rulemaking to ban formaldehyde releasing chemicals. Our law restricts the use of formaldehyde, but instead of directly restricting chemicals that release formaldehyde, the law includes this determination by rulemaking. We are concerned about all formaldehyde releasing chemicals, because they all release formaldehyde, and I've already mentioned some of formaldehyde's health effects. We are working to identify ten commonly used formaldehyde releasing chemicals for an initial restriction and additional formaldehyde releasing chemicals for a later restriction. Our vision is to reduce

exposure of all workers, communities, and wildlife to toxic chemicals in cosmetic products by transforming the cosmetics industry to make and use safer chemicals, ingredients, and products.

Thank you again for this opportunity to speak and I'm happy to take any questions.