

February 18, 2014

Human Resources Committee
State Capitol
Des Moines, IA 50319

RE: SF 2161

Dear Chairman Ragan and Committee Members:

The undersigned organizations are writing in reference to our concerns regarding the SF 2161, which would purport to ban the use of formaldehyde in certain children's products. The undersigned organizations represent a broad spectrum of the American economy. Each organization is committed to maintaining the safety and integrity of the products our industries produce in order to ensure a safe and healthy product for use by the consumer. Based on the reasons set forth below, we strongly believe that SF 2161 is unnecessary and should not be further considered by the Senate Human Resources Committee.

A. The potentially affected industries are already federally regulated and/or have implemented comprehensive voluntary measures that address any potential concerns regarding formaldehyde exposures.

Formaldehyde has been thoroughly reviewed at the federal level and is sufficiently regulated in the products potentially covered under SF 2161. Taking for example textiles and apparel, the formaldehyde chemistry used in dyeing and finishing have been extensively studied by CPSC under the Federal Hazardous Substances Act (15 U.S. Code 1261-1278). These studies, conducted at Oak Ridge National Laboratory and other locations, determined that formaldehyde content in textiles do not pose acute or chronic health problems for consumers. Based on this research and other work, CPSC has decided that no regulatory standard was necessary for formaldehyde in textiles and apparel.¹

The cosmetic industry has worked with the federal government to develop a national scientific organization, known as the Cosmetic Ingredient Review (CIR), which is sanctioned by the U.S. Food and Drug Administration (FDA) to review and assess the safety of ingredients used in cosmetics. Based on its reviews, the CIR classifies formaldehyde in beauty products as 'safe' as long as the substance is no greater than 0.2 percent measured as free formaldehyde, kept to a minimum, and not aerosolized. Formaldehyde was just recently reviewed by the CIR and their

¹ See, e.g., U.S. Government Accountability Office (GAO). (2010). Formaldehyde in Textiles (GAO-10-875), at 11. Available at <http://www.gao.gov/new.items/d10875.pdf>.

current assessment is up to date.² We believe that CIR's standards should inform any effort to assess the safety of personal care products that might fall under this SF 2161. Furthermore, recent data show that inhalation of formaldehyde from the use of personal care products poses no risk to human health.³

Taken together, industry voluntary efforts and existing regulations have led to a wide margin of safety for most uses of formaldehyde chemistry, thereby eliminating the need for Iowa to ban its use in any consumer products. While we have included examples above of products that would appear to fall under SR 2161, it is important to note that the federal government comprehensively regulates formaldehyde use in consumer products. For example, the federal government, following Congressional legislation, is currently finalizing a regulation that would nationalize emission limits set under California's airborne toxics control measure to control formaldehyde emissions from composite wood products.⁴ Through many years of voluntary stewardship efforts and as a result of the California regulation, formaldehyde resin producers and panel manufacturers are already now capable of making products that emit at, or near, naturally occurring background levels from wood itself. End-use product manufacturers, such as those that make cribs or wood toys, would be required to purchase certified compliant composite wood and, consequently, abide by those emission limits.

B. The products covered under SF 2161 simply do not pose a significant exposure to formaldehyde that would be of concern for an increased health risk.

SF 2161 defines children's product to cover "a product primarily designed or intended by a manufacturer to be physically applied to or introduced into a child's body...." Oral and dermal exposures, which are the primary routes of exposures addressed under SF 2161, in fact do not pose toxicological risks at the levels contained in the children's products covered by the proposed bill. Formaldehyde is a normal metabolite of many natural foods, including fruits (e.g., apples, bananas, grapes, pears, plums). It is produced in healthy adults and children continuously as a result of consuming a balanced diet. Such continuous exposures (0.3-0.6g/day)⁵ are likely to dwarf those intermittent exposures from consumer products. In fact,

² See <http://www.cir-safety.org/ingredient/formaldehyde>

³ Lefebvre, et al. (2012). "Consumer inhalation exposure to formaldehyde from the use of personal care products." *Regulatory Toxicology and Pharmacology*, 63: 171-76.

⁴ See <http://www.epa.gov/opptintr/chemtest/formaldehyde/>

⁵ Lindinger, W., Taucher, J., Jordan, A., Hansel, A. and Vogel, W. (1997), Endogenous Production of Methanol after the Consumption of Fruit. *Alcoholism: Clinical and Experimental Research*, 21: 939-943.

reported concentrations for a majority of the products covered under Washington State's Children's Safe Products Act fall at or below even 100 ppm, or 0.1 g/l.⁶

These naturally occurring exposure levels underscore the scientific fact that the body is able to safely metabolize such low level formaldehyde exposures. Formaldehyde can be found in every living system. It is normally present in all tissues, cells, and bodily fluids, and its natural occurrence must be taken into account in any formaldehyde risk assessment. Formaldehyde metabolizes quickly in the body; it breaks down rapidly, is not persistent and does not accumulate in the environment. The World Health Organization, among others, has concluded that there is no scientific evidence that children are more or less susceptible to formaldehyde exposures than adults.⁷

Although to a lesser extent, SF 2161 also appears to consider possible inhalation exposures to formaldehyde from covered products through chemical degradation. It is well-established in the scientific literature that any potential association between inhaled formaldehyde and health risks such as cancer is linked to significant and prolonged exposures to inhaled formaldehyde.⁸ The products covered under SF 2161 could not plausibly emit formaldehyde at continued and sustained levels to pose any risk of cancer to even the most sensitive populations, especially when considering the small, reported concentrations under the Washington State's Children's Safe Products Act public reporting system.

C. Formaldehyde is one of the most studied chemicals on the planet, providing greater certainty than lesser-studied replacements.

Formaldehyde is one of the most extensively studied chemicals in use today. The conditions for safe use are well-established. Should formaldehyde be banned in children's products based on non-scientifically based fears, there is risk of unintended health consequences with the replacement chemicals. It is almost certain that replacement chemicals will not have the same level of scientific understanding and scrutiny, raising questions about their safety. Moreover, there may be further issues related to performance and cost, which could unnecessarily harm Iowa businesses and consumers.

Summary

⁶ Data are available at <http://www.ecy.wa.gov/programs/swfa/cspa/>.

⁷ See, e.g., World Health Organization (WHO). (2010). WHO Guidelines for Indoor Air Quality: Selected Pollutants, at 116. Available at http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf.

⁸ See, e.g., Kerns, et al. (1983). "Carcinogenicity of Formaldehyde in Rats and Mice after Long-Term Inhalation Exposure." *Cancer Research*, 43: 4382-92.

We **urge** that this Committee not move forward with SF 2161. Any law that would ban the use of a particular chemical in any consumer product should be based on sound science and an assessment of exposure and risk, not just potential hazard. When considering the full weight of the evidence, we do not believe that the science supports a ban on the products that would fall under SF 2161.

As we have illustrated in our letter, formaldehyde has been thoroughly reviewed at the federal level and is sufficiently regulated in the products potentially covered under SF 2161. Potential formaldehyde exposures are scant and far below the well documented concentrations that are necessary to result in toxicological effects. Moreover, formaldehyde is well-studied and understood, whereas potential alternatives will likely not have the same level of scientific scrutiny, raising the potential for unforeseen future health concerns.

We thank you in advance for considering our concerns. Should you have any questions, please feel free to contact us.

Sincerely,

American Apparel & Footwear Association
American Chemistry Council
American Home Furnishings Alliance
American Wood Council
Composite Panel Association
Fashion Accessories Shippers Association
Iowa Association of Business and Industry
Iowa Retail Federation
Juvenile Products Manufacturers Association
Travel Goods Association