

## Comments on “Priority Consumer Products Draft Report Prepared by Department of Ecology, Washington State”

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**Disclaimer:** The views expressed herein are those of the author and do not necessarily represent the views or the policies of the U.S. Environmental Protection Agency

The draft report was well organized, clearly written and easy to follow. The rationales for the priority consumer products identified as significant sources or uses for five classes of priority chemicals were based on scientific data from the literature and economic and market information, which are sound and reasonable. The following are my comments to be considered by the authors in the future revision.

1. It is suggested to define “aftermarket carpet treatments” and “pretreated carpet” in the text or in RCW 70.240.010. And in Table 1 (Page 3 Row 3), use “pretreated carpet” instead of “carpet” for clarification. Will the treated carpet be separated from “their untreated backings (page 29)”? Will the “aftermarket treatments” only include liquid sprays (Page 4 and Page 36)?
2. Page 3, the statement “Studies suggest that pigment and dye manufacturing is the product group that contributes the most to PCB levels in the environment” is not accurate, given that legacy PCBs/Aroclors still exist in old buildings with much higher concentrations than the inadvertent PCBs in consumer products.
3. In Page 10, it states that “The non-halogenated flame retardants identified by the department under Chapter 70.240 RCW are: Triphenyl phosphate (TPP), Tri-n-butyl phosphate (TNBP), Ethylhexyl diphenyl phosphate (EHDPP), Tricresyl phosphate (TCP), and Isopropylated triphenyl phosphate (IPTPP).” However, under RCW 70.240.035, the list of flame retardants of high concern for children is different, where (a) IPTPP; (b) TBB; (c) TBPH; (d) TCPP; (e) TPP; and (f) V6 are included.
4. The last paragraph in Page 11 and Table 3 mainly discussed brominated flame retardants such as DecaBDE, DBDPE, TTBP-TAZ, TBBPA and BTBPE. It is suggested to add some information about organophosphorous flame retardants if available. Recommend reference is: TSCA Work Plan Chemical Problem Formulation and Initial Assessment Chlorinated Phosphate Ester Cluster Flame Retardants, EPA Document# 740-R1-5001, EPA OPPT, August 2015.
5. Page 32, on existing regulations of PFAS, many of the states take different approaches to regulating consumer products containing PFAS. See more information at: <https://www.jdsupra.com/legalnews/pfas-consumer-products-regulations-69043/>

6. A reference citation is needed for the statement “According to safety data sheets, carpet treatments contain fluorochemicals at concentrations between 1 and 5%.” in page 34.
7. Page 35, it is more accurate to state that “As carpet treatment wears off, PFAS can be released into indoor air and accumulate in dust **and other indoor surfaces**”.
8. Page 74, in the sentence of “Sources included in this analysis were personal care products, PVC materials, air emissions, and other materials.” Air emission is a chemical transport pathway from products. Suggest deleting “air emissions”.

Editorial Comments:

1. In Acronyms (Table 3), please add EC, EPA, PVC, MEOP
2. The literature citations were mixed up. Examples are:
  - a. There are two “Safer States, 2019” in the Reference;
  - b. There are three “European Commission, 2019” in the Reference;
  - c. Could not find Reference “Boronow et al. (2019)”;
  - d. Reference “EPA 2009b” is the same as “Guo et al. 2009”. And “Guo et al. 2009” was not cited in the text;
  - e. There are three “DTSC, 2018” in the Reference. And the NPE links do not work;
  - f. Page 51, “Health Canada, 2001”, shall it be “Environment Canada & Health Canada, 2001”? There is no “EC 2008” in the Reference;
  - g. There are two “EPA 2014”, two “EPA 2010”, two “EPA 2019”, and two “EPA 2015” in the Reference;
  - h. Page 65, “Floor Covering Weekly, 2016” in the text should be “Floor Covering Weekly, 2017”;
  - i. There are no “EPA 2009a”, “Resilient Floor Covering Institute, 2019”, “Health 2019”, and “Health Canada 2013” in the Reference;
  - j. The following reference was not cited in the text: Bureau of Chemical Safety, Food Directorate, & Health Products and Food Branch. (2010). Survey of Bisphenol A in Soft Drink and Beer Products from Canadian Markets. Health Canada.;
  - k. References ECHA 2016, 2018, 2018 were not cited in the text. There are two ECHA 2018 citations in the Reference.