

## Environmental Health Services Division

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Kimberly Grievés  
Phthalates Action Plan Project Manager  
Washington State Department of Ecology  
c/o [ChemActionPlans@ecy.wa.gov](mailto:ChemActionPlans@ecy.wa.gov)  
RE: Phthalates Action Plan Comments

Dear Ms. Grievés:

Public Health – Seattle & King County (PHSKC) would like to thank the Washington State Department of Ecology (Ecology) and the Washington State Department of Health (Health) for the opportunity to comment on the State’s Phthalate Action Plan (AP). We applaud Ecology and Health for their work to address human and environmental exposures to this large and ubiquitous class of chemicals. PHSKC is pleased to see the evolution of more specific draft actions since the previous version described to the advisory committee. Below are overarching comments on the Draft AP followed by a table with specific comments relevant to the relevant chapters and recommendations.

**It is unclear how Ecology will prioritize the large number of recommendations.** Because there are so many recommendations across multiple areas of concern, it would be helpful for Ecology to provide an indication of how feasibly and impactful each recommendation is, and a schedule for implementation in the overall table that indicates prioritization based on feasibility and impact.

**Safer Products for Washington (SPWA) capacity limitations are a concern.** Ecology is recommending that SPWA “consider” identifying additional consumer products as sources or uses of phthalates including non-fragrance personal care products, cleaning products, textiles and apparel, packaging (food and non-food), automotive products, building materials, medical devices and products, other food contact articles, and vinyl products. Many of these categories could be quickly incorporated into the actions for SPWA round 2 but will require staff time to conduct the background research and identify safer alternatives for each product category. SPWA is already overburdened. Actions not included in round 2 will not be regulated for over 10 years. PHSKC is concerned that the large number of categories being pushed to SPWA will lead to a bottleneck and delays in addressing many categories that need swift action. We recommend that Ecology prioritize product categories and identify staff that can continue to conduct work to identify safer alternatives for phthalates in priority categories so that SPWA can maintain a rapid pace and actions on phthalates are not delayed to future rounds of SPWA. It would be helpful for stakeholders to understand the timeline for the phthalates product categories that have been referred to SPWA and for Ecology to outline how SPWA will manage these requests with respect to everything else proposed for round 2, include if additional staffing/funding be provided for the phthalates work within SPWA. We recommend that Ecology identify a way to ensure staffing and resources are provided to SPWA for all phthalate products recommended for action through this legislation, especially those that are most feasible and impactful.

**Ecology should include more discussion of cumulative impacts and actions to address them.** National discussion is occurring on cumulative risk assessment and how best to act on potential impacts of

multiple phthalates while also considering additional chemicals and stressors that make individuals more sensitive or vulnerable to phthalate exposures. PHSKC recommends that Ecology further explore how the AP can account for cumulative impacts, including:

- The discussion on cumulative impacts of multiple phthalates and co-exposure with other chemicals in appendix B is useful and should be highlighted as a standalone section upfront in the document, and relevant information pulled into the proposed recommendations, particularly in the environmental justice sections.
- Ecology should document and track possible cumulative exposures/impacts described to date and work to identify where similar trends or issues exist within WA (both across the class of phthalates, for other chemicals, e.g., other endocrine disruptors, that Ecology is regulating (within our outside SPWA) and for other stressors).
- Ecology should propose actions to reduce cumulative risks in the AP.
- Ecology Should consider information that could be applicable to the AP that was raised, discussed, or submitted by comment letters submitted during EPA's Science Advisory Committee on Chemicals meeting on *EPA's Draft Proposed Principles of Cumulative Risk Assessment under the Toxic Substances Control Act* and *EPA's Draft Proposed Approach for Cumulative Risk Assessment of High-Priority Phthalates and a Manufacturer-Requested Phthalate under the Toxic Substances Control Act*.
- Ecology should explore where overlapping uses of phthalates from different product categories may lead to large exposures to sensitive and vulnerable populations (e.g., children and pregnant people in neighborhoods, occupations, cultural groups), who incur greater exposures or impacts from phthalates. For example, as described in our previous comment letter, there are currently eight phthalates that are approved for food contact use by FDA, however a number of these are banned or restricted by the Consumer Products Safety Commission or the WA State Children's Safe Products Act. PHSKC recommends that as part of the AP, Ecology examine overlapping uses and differences in restrictions across routes of exposure that suggest the need for actions that reduce cumulative exposure risks for sensitive populations like children. For example, Ecology may consider a proposal in the AP that would ban or restrict the use of phthalates that are already banned or restricted in children's products. This would limit exposures to phthalates that are known to be harmful to children.

**Ecology should create consistency among equity actions across recommendations.** PHSKC appreciates that each recommendation includes a discussion about environmental justice and equity considerations, and in many cases, actions to prioritize them. We recommend that Ecology review each recommendation to ensure that all include priority actions to address environmental justice and equity concerns. Ecology should include a section on secondhand products in the consumer products section and a recommendation on how to address reducing exposures from secondhand products.

**Ecology should better coordinate information provided about phthalates in Washington State.** It would be helpful for Ecology to include contextual information about phthalates in Washington State either before or within the sections that outline the recommended actions. The recommended action sections are at times difficult to understand without the context about what is known or happening in Washington State. Much of this information is included in the appendices but requires the reader to flip between the general background, the recommendations, and the appendices to get the full picture. We recommend that each recommended action include: 1) the currently known status in WA, 2) what gaps exist, 3) what action is proposed, 4) why the action is needed, and 5) how it will be conducted.

Thank you again for the opportunity to comment on these important recommendations. Included below is a table with specific comments for the relevant sections and recommendations. Do not hesitate to reach out with questions.

Respectfully,

*Shirlee Tan*

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## PHSKC comments and recommendations

Section	Comment
<b>Introduction and background sections</b>	
Executive Summary and Introduction	<ul style="list-style-type: none"> <li>• General readers will not know what this action plan is and how it differs from the Chemical Action Plan.</li> <li>• In the first use of the term “Action Plan”, please define what it is and how it differs from a Chemical Action Plan. Describe what an action plan is generally and why this was the approach here.</li> </ul>
Executive Summary (Development)	<ul style="list-style-type: none"> <li>• This document states that the final Phthalates AP was published in December 2023.</li> <li>• Change to “anticipates publication in Dec 2023”</li> </ul>
Phthalates Background information	<ul style="list-style-type: none"> <li>• More information on the state of WA would be helpful for local jurisdictions to help us understand where we should focus and how we can help with actions in the AP</li> <li>• Background information vs. information in the appendices should be more clearly organized and any information on what is known for Washington should be included sooner (either in background or in the information for each recommendation).</li> </ul>
Background: Human exposures and health impacts	<ul style="list-style-type: none"> <li>• The health section only briefly touches on the known impacts of phthalates, but then goes into more detail in the appendices. This is confusing and requires the reader to move around in the document to look for background information.</li> <li>• It would be helpful to have related information on health, environment, etc., organized in one place.</li> </ul>
Background: Populations and health impacts of concern	Please mention other racial groups that are disproportionately exposed to phthalates in personal care products.
	Update draft with information about the cosmetics law and how this can now address phthalates
	Provide citations for the statement on boys of color being potentially more exposed and impacted.
Health and Environment sections	<ul style="list-style-type: none"> <li>• It would be helpful for Ecology to provide a more organized overview of the known and suspected health impacts, populations of concern, and then any specifics known or suspected in WA. This could be organized in a table that would help highlight what is known relative to exposures of concern, impacts of concern, and populations of concern</li> </ul>

	<ul style="list-style-type: none"> <li>Bring information from appendices to tie in with recommendations on what's known in the state of WA.</li> </ul>
Regulations	A table of regulations would be helpful highlighting WA, national, other states, EU. Please Add table of relevant regulations
Products and materials sections	
	Include a discussion/recommendation on fragrance products that are not personal care products (e.g., air fresheners). Add to products section or justify why not included at this time.
Consumer products	
Background	In the discussion section, REACH, the State of Washington, and other testing of products is mentioned: Ecology should include here any information on regulatory or health action levels that indicate that exposures are problematic or not. It is hard for the reader to understand what 100ppm vs 100,000 ppm means, for example. It is only at the end that CPSA and its reporting limits are mentioned. Please define REACH and CPSA.
	For CSPA are there any conclusions for WA based on what manufacturers have been reporting? Is the reporting in children's products now less common or have manufacturers shifted to other phthalates that are not required to be reported?
Recommendation #1	<ul style="list-style-type: none"> <li>Page 34 – the statement about SPWA actions is not clear. It reads that they identified fragrances as a priority in the following products: personal care, beauty, and vinyl flooring. Please reword this for clarity.</li> <li>Add to the bulleted list – fragrance products such as air fresheners (exposures include from new clothing, in hotel rooms, in taxis and other car services, classrooms, etc.), considerations should be discussed especially for children, asthmatics, and workers that may be exposed all day (e.g., taxi drivers, hotel cleaning staff that spray them all day while cleaning hotels rooms).</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>This is a good recommendation. The implementation should be more clearly laid out 1) how should the program be set up, 2) what is required, 3) how will products be prioritized?</li> </ul>
Food Contact Articles	
Recommendation #1	<ul style="list-style-type: none"> <li>It is unfortunate that this is a recommendation to promote voluntary change to safer alternatives. Instead, it would be better if Ecology moved to require the move to safer alternatives by banning the most problematic food packaging items with phthalates.</li> <li>It would be helpful on this recommendation to understand what kind of manufacturers we have in WA and where the biggest impact would be – in this recommendation are you targeting food processing manufacturers, food packaging groups, or food packing production manufacturers? Describe where most of our processed food is coming from in WA?</li> </ul>

	<ul style="list-style-type: none"> <li>The equity focus here is great, but please also include a discussion about children as a sensitive exposure group that should be prioritized, particularly when they are part of a vulnerable population.</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>While this could fit under the activities of SPWA, the program is already very busy. Prioritize this exposure and identify ways expedite this work. SPWA is already on round 2 so adding this to their focus push action out for 5-10+ years. Additional resources should be requested - using PFAS as an example, the food packaging work conducted was not straightforward and takes time and resources on its own.</li> </ul>
Daycares	
Background	<ul style="list-style-type: none"> <li>Check terminology that is preferred by state (day care vs child care), both are used here but it's not clear what the difference is.</li> <li>Page 43-44, add to the list of why kids are a sensitive population of concern that: because of their small size relative to body proportions, they have a large surface area and a much higher metabolism than adults, which also impacts exposure levels and metabolism of chemical exposures.</li> <li>In the daycare/childcare section discuss the various kinds of daycares that range from neighborhood family care to licensed facilities, and who is attending each of these facilities in WA. Neighborcare facilities are run by families in their own homes, likely leading to very different exposures to phthalates based on the kind/type of facility.</li> <li>Page 44 – define ECE. Check full document for acronyms that have not been spelled out or defined.</li> <li>Define CSPA. CPSC used earlier but defined here. Define CPSIA.</li> </ul>
Recommendation #1	<p>This is a good recommendation, additional ideas for inclusion:</p> <ul style="list-style-type: none"> <li>Projects focused on facility maintenance and environmental health are also occurring in local programs and could serve as partners to the state to incorporate this work.</li> <li>Justification makes it sound like Ecology's requirement for restriction of phthalates in vinyl flooring is already happening. More information should be provided about when this starts, how long it will take, etc.</li> <li>To prioritize facilities with the greatest needs, I would include small family friendly, neighborhood care facilities that are either unlicensed or licensed, especially in low income neighborhoods. These are likely the ones with the fewest resources and in the poorest facilities, often resident's homes.</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>Consider addition the development of a co-op purchasing program for childcares that makes selecting phthalate free cleaning and other materials easy and less expensive.</li> <li>Providing education and information is more effective with assistance in providing safer products. Ecology should commit to finding funding that can help. It would be helpful here to</li> </ul>

	<p>understand what safer products exist and if swapping will be an prohibitive cost for facilities.</p> <ul style="list-style-type: none"> <li>• Ecology should make all efforts to reach the facilities and communities most impacted and this would include the unlicensed, family neighborhood care.</li> <li>• Clarify how the regulatory authority would be used here.</li> <li>• Under Environmental Justice – translations “will” be required, not “may” be required.</li> </ul>
Health Care	
Background	Discuss what is known about alternatives in DEHP free products.
Recommendation #1	<ul style="list-style-type: none"> <li>• Again, this is an action that is ready to go. Pushing this action to SPWA will delay what can be done until the 3<sup>rd</sup> round of SPWA at best, meaning another 5-10 years before it’s addressed. This category should be addressed as soon as possible.</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>• Include patients in outreach when appropriate so they can advocate when they prefer phthalate free items.</li> </ul>
Recommendation #3 and #4	<ul style="list-style-type: none"> <li>• Ecology/DOH should target specific outreach to women, particularly of reproductive age, to raise awareness of this issue and allow them to understand approaches to reduce exposures.</li> </ul>
Building Materials	
Background	<ul style="list-style-type: none"> <li>• Include discussion and consideration of PVC decking in recommendations.</li> </ul>
Recommendation #1	<ul style="list-style-type: none"> <li>• No comment. Good recommendation.</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>• Add county owned buildings to state owned buildings to ensure that public housing is included by the housing authorities that are managed by cities/counties.</li> </ul>
Preferred purchasing	
Background	<ul style="list-style-type: none"> <li>• No comments – PHSKC supports these recommendations. Please include in recommendations a statement that requires providing purchasing criteria to local governments for possible adoption.</li> </ul>
Biosolids	<ul style="list-style-type: none"> <li>• See King County Department of Natural Resources Division comments</li> </ul>
Recommendation #1	<ul style="list-style-type: none"> <li>• PHSKC supports recommendation.</li> <li>• Please include compost related products (e.g., hydroseed matrix) to understand phthalates content.</li> </ul>
Recommendation #1	<ul style="list-style-type: none"> <li>• Discuss and include a recommendation focused on occupational and residential exposures from the recycling process itself and phthalates that are released into the environment: <a href="#">The potential for a plastic recycling facility to release microplastic pollution and possible filtration remediation effectiveness - ScienceDirect</a> (this likely ties into the equity section as well).</li> </ul>
Recommendation #2	<ul style="list-style-type: none"> <li>• Rather than use state resources on a voluntary reporting and labeling protocol, Ecology/DOH staff time would be better spent working on establishing the information needed to ban packaging that has phthalates.</li> </ul>

Recommendation #1 & #2	In this section it would be helpful to know which jurisdictions have done voluntary testing and what those results look like, or what to expect from other testing that has been done elsewhere. Could jurisdictions that are doing voluntary testing be approached for a study with Ecology given the lack of funding? Same for gases? Include a recommendation to seek funding from/with air agencies in the state to do this work?
Drinking Water	
Background	<ul style="list-style-type: none"> <li>PHSKC supports these recommendations</li> </ul>
Aquatics: surface water, sediment, biota	
Background	<ul style="list-style-type: none"> <li>Note which 6 phthalates have been monitored in Puget Sound sediments by Ecology since 1989 and whether trends in levels mirrors shifts seen in human biomonitoring from DEHP to DINP for example.</li> <li>TSCA systematic review – TSCA tends to focus only on the data/exposures within their regulatory purview. Ecology should note whether this information referred to here includes non-TSCA literature/exposures/impacts (e.g., from FIFRA or other regulations like cleaning products and personal care product contributions to environmental concentrations).</li> <li>Include/discuss data on phthalates in sediment/surface water/fish tissue from RI/FS studies from cleanup sites in WA.</li> </ul>
Recommendation #1	Bullet #2: regarding, “Testing species and tissues that are most likely to be eaten by overburdened communities and sensitive populations.” Please Add “or contribute to traditional practices or livelihood.”
Outdoor air	No comments
3-year review	PHSKC supports evaluation and review at the three-year mark to ensure that proposed recommendations are on track and to determine what needs to change to make sure the actions move forward.
Appendix B: Health Chapter	<p>Thank you for adding this information. It is very useful for context and understanding how to prioritize the proposed recommendations.</p> <p>Recommendations for this chapter include:</p> <ul style="list-style-type: none"> <li>In the intro add a few sentences about newer data on female reproduction, neurodevelopment, obesity and diabetes.</li> <li>Add information from EPA proposed cumulative risk evaluation by their Science Advisory Committee on Chemicals (SACC).</li> <li>Dev Tox - change “pregnant women” to “pregnant people”</li> <li>Female reproductive toxicity – this section needs more information. Add Maffini paper and include Jodi Flaws papers.</li> <li>Male reproductive toxicity – add any new relevant info from EPA proposed cumulative assessment of phthalates</li> <li>Cumulative effects section – create as a standalone section as a chapter and update with the recent review by SACC.</li> </ul>
Human exposure	<p>Biomonitoring –</p> <ul style="list-style-type: none"> <li>The WEBS data seem like a significant piece to follow up on. Where are these elevated exposures coming from? Include a recommendation around this.</li> </ul>



	<ul style="list-style-type: none"> <li>• Mention the ECHO study and data from that on pregnant people’s exposures and other phthalates of concern not included in NHANES.</li> </ul> <p>Occupational exposures –</p> <ul style="list-style-type: none"> <li>• add workers in recycling facilities and transfer stations.</li> </ul> <p>Health equity considerations –</p> <ul style="list-style-type: none"> <li>• Include discussion of exposures from second hand products.</li> <li>• Include a recommendation in earlier section on consumer products about secondhand exposures and actions to protect/remove toxic products from that market.</li> </ul>
Appendix C Phthalates in the environment	This appendix should be improved so that it contains more information and matches the scope and depth of the human health appendix.
Appendix F	<ul style="list-style-type: none"> <li>• Include in the introduction a description of what costs were considered. Are these costs to the state to manage each recommendation?</li> <li>• It would be helpful for stakeholders if Ecology could include health cost calculations for each recommendation to demonstrate the estimated benefit of each action.</li> </ul>
Logistical	<ul style="list-style-type: none"> <li>• Check document for typos, grammar and acronyms that have not been written out with first use (e.g., CSPA)</li> <li>• Format document with section listed on each page so that it is easier for the reader to scroll through the document and find sections of interest.</li> </ul>