

6PPD ACTION PLAN ADVISORY COMMITTEE MEETING

Virtual (Zoom)
Tuesday, April 17, 2024
10:00 a.m. to 12:00 p.m.
Facilitator: Tanya Williams
Meeting 5 of 6

Attendees

Advisory Committee members in attendance and the organizations they represent:

Aimee Navickis-Brasch (Evergreen StormH2O); **Angela Bolton** (City of Bellevue); **Augie Krupp** (Molecular Rebar); **Catherine Gockel** (Environmental Protection Agency); **Chelsea Mitchell** (King County); **David Troutt** (Nisqually Indian Tribe); **Don McQuilliams** (City of Bellevue); **Dylan Ahearn** (Herrera); **Ed Kolodziej** (University of Washington – Tacoma); **Eli Mackiewicz** (City of Bellingham); **Emily Gonzalez** (Puget Soundkeeper); **Fran Solomon** (Western Washington University); **Gabrielle Rigutto** (ChemFORWARD); **Greg Haller** (Northwest Indian Fisheries Commission); **Haley Lewis** (Environmental Protection Agency); **Heather Trim** (Zero Waste Washington); **Heidi Siegelbaum** (WSU Stormwater Center); **Jamie McNutt** (Flexsys); **Jeff Durant** (Flexsys); **Justin Greer** (United States Geological Survey); **Kathie Dionisio** (Environmental Protection Agency); **Katie Byrnes** (Washington Conservation Action); **Keith Estes** (Long Live the Kings); **Kenia Whitehead** (GSI -U.S. Tire Manufacturers Association); **Laurie Valeriano** (Toxic Free Future); **LeeAnn Racz** (ToxStrategies, LLC); **Marissa Paulling** (Northwest Indian Fisheries Commission); **Mary Rabourn** (King County); **Melissa Heintz** (ToxStrategies, LLC); **Rebecca Cook** (STOI); **River Wan** (Pierce County); **Robert Campbell** (LANXESS Corporation); **Sara Hutton** (GSI – U.S. Tire Manufacturers Association); **Sean Dixon** (Puget Soundkeeper Alliance); **Seth Book** (Skokomish Indian Tribe); **Shirlee Tan** (Public Health Seattle King County); **Steve Laing** (Trout Unlimited); **Vice Chairman Joshua Bagley** (Suquamish Tribe).

Washington State agency support staff in attendance:

Madison Bristol (Ecology); **Frances Bothfeld** (Ecology); **Holly Davies** (Health); **Elinor Fanning** (Health); **Amina Al-Tarouti** (Health); **Stephanie Gill** (Ecology); **Cassie Horton** (Ecology); **Mallory Little** (Health); **Richelle Perez** (Ecology); **Nathan Lubliner** (Ecology); **Craig Manahan** (Ecology); **Katie Pruitt** (Governor’s Salmon Recovery Office); **Andrea Carey** (Fish and Wildlife); **Rhea Smith** (Ecology); **Tony Bush** (WSDOT); **Tanya Williams** (Ecology); **Lindsey Bineau** (Ecology); **Monica Cornell** (Ecology); **Lizzy Baskerville** (Ecology); **Derek Rockett** (Ecology).

Advisory Committee members not present:

Katherine Saluskin (Yakama Nation Tribal Health); **Amber Lewis** (Suquamish Tribe); **Stephanie Blair** (Washington State University - Puyallup); **Marc Gauthier** (Upper Columbia United Tribes); **Caitlin Lawrence** (Washington State University – Puyallup); **HollyAnna Littlebull** (Yakama Nation); **John Herrmann** (Snohomish County); **Jen McIntyre** (Washington State University); **Neil Smith** (Flexsys); **Alison Osullivan** (Suquamish Tribe); **Tanya Eison-Pelach** (Affiliated Tribes of

Northwest Indians); **Taylor Aalvik** (Affiliated Tribes of Northwest Indians); **Tracey Norberg** (U.S. Tire Manufacturers Association); **Kiersten Maxwell** (University of Washington).

Guest attendees:

Sarah Ogden (Exceltech Consulting); **Stephanie Kennedy** (ToxStrategies, LLC).

Meeting Notes

The 6PPD Action Plan advisory committee's wrap-up meeting began at 10 a.m. with 59 participants. We provided an overview of the agenda. We reminded committee members they would have until the end of day on April 17 to review and comment on all recommendations. We would then close the document and begin responding to comments.

Next, we reviewed the phase 1 timeline and shared where we are in the process. We provided an overview of priority timeframes, including the internal technical review period and the Tribal government review. Phase 1 of the Action Plan will be published as part of a Legislative progress report that is due December 2024. We will share a link to this report with the advisory committee once it is published. At this time, we will also provide a summary of any significant changes that occurred between May 2024 and December 2024.

As we move forward in the process, participating state agencies will identify recommendations to integrate into their budget requests. We will share which recommendations have been included in budget request proposals at the meeting on May 21.

We shared next steps with the group and asked committee members to reflect on phase 1. We will discuss any significant changes made to the phase 1 recommendations. We will also solicit input from committee members in our May 21 meeting on how we should approach phase 2. Your feedback will help us to determine whether we should move forward with a second phase or shift to writing a comprehensive plan.

We finalized the meeting minutes captured from the working meeting held on March 26, 2024. We asked members if we needed to make any corrections to the document. Advisory committee members did not raise any objections or concerns.

Group Discussion

We shared that we'll respond to any final comments within the collated document and begin incorporating feedback after our meeting. Committee members were reminded to submit all final comments prior to end of day on April 17.

We informed the advisory committee that we wouldn't review all 39 recommendations. Instead, we focused on recommendations that had generated the most discussion to date in case more conversation was needed. We encouraged participants to share their input on each recommendation.

- **Recommendation 1: Fund research to assess hazard and performance of potential safer alternatives to 6PPD in tires.**

A committee member asked us to clarify our agency partners. They recommended we add non-governmental organizations (NGOs) as partners since NGOs have the expertise to evaluate hazards. We agreed that including NGOs was a great idea and would move forward with adding interested NGOs as partners.

A committee member asked us to clarify whether it's an appropriate use of state funding to research tire performance requirements of alternatives. They stated manufacturers should be doing this themselves and would be required to do so to meet safety requirements. Individuals could interpret this action as subsidizing the manufacturer.

We explained the Legislature gave us funding to conduct toxicity testing to assess alternatives. We're discussing this recommendation internally to determine whether it's an appropriate use of funding. Although we've received a comment about funding from the tire industry for performance testing, we have no way of requiring tire manufacturers to run performance tests on the chemicals that we are interested in researching as alternatives. The committee member said we should recommend the Legislature implement a tire fee under MTCA and that we can't have in-class alternatives that substitute with the same high hazards. We shared that we are working with rubber manufacturers to see what toxicity testing is needed because we want to find a replacement to 6PPD.

A committee member expressed that Ecology shouldn't play a role in balancing hazard and performance. The participant questioned the role of the advisory committee if Ecology is making the final decision. Another member encouraged the group to look holistically at what needs to be done since we don't have all of the answers or the tools.

- **Recommendation 2: Develop a Washington State Tribal Leaders Advisory Board to support continuous engagement and participation in projects related to 6PPD and salmon recovery.**

This recommendation would bring in Tribal leaders and Tribes as co-managers as we determine how to use funds and plan projects for salmon recovery. We explained there used to be a Tribal Advisory Board, but the group no longer meets. This would be an opportunity to reestablish the group. A committee member expressed the group didn't sunset; they just stopped meeting. The member supported this idea, and they believe that Tribes need to have a strong voice on how to spend 6PPD funds relative to salmon recovery. This recommendation is with the Governor's Office of Indian Affairs.

- **Recommendation 5: Develop and fund research on species native to the Pacific Northwest, such as shellfish, lamprey, other fishes, and plant life.**

A committee member raised concerns that although there may not yet be an analytical method, we're limiting funding and research on 6PPD and 6PPD-q and not focusing on other paraphenylenediamines (PPDs). It may be problematic to spend money on one chemical when there's an entire class.

- **Recommendation 6: Expand research to determine the extent and magnitude of 6PPD bioaccumulation and biomagnification in juvenile salmonids and other aquatic biota in Puget Sound.**

A committee member asked if we could include persistence when we research questions like "how long does 6PPD hang out in various species of organisms?" and "what is its half-life?" We agreed to consider this characteristic as we continue to develop research projects on sublethal effects on marine and freshwater aquatic species.

- **Recommendation 8: Establish a Toxics and Salmonids Ecosystem Monitoring Program (TSEMP) that integrates and expands existing priority toxics and salmon monitoring efforts.**

We're looking at the existing sampling and monitoring programs in the state to support a network of standardized, community-based monitoring efforts in the future. A member reminded the group the Puget Sound Ecosystem Monitoring Program (PSEMP) framework can be applied statewide. The inclusion of Puget Sound in its name doesn't need to limit its ability to serve as a statewide function. It'll be a multi-step process to determine how best to implement this program. We're considering what platforms we could leverage to support it. This recommendation is connected to recommendation #12.

We've built out the title of this recommendation since our last advisory committee meeting to: Establish a Salmonid Ecosystem Toxics Observatory at the Department of Ecology to integrate and expand existing priority toxics and salmon monitoring efforts and maximize the state's efficiency in addressing these threats.

- **Recommendation 10: Expand lab capacity to support additional 6PPD-quinone monitoring and research to inform mitigation actions and measure effectiveness.**

This recommendation was developed in response to the need to expand lab capacity. Currently, not all labs have continual long-term funding to support science staff and equipment maintenance. They rely on small contracts across the board, whether it's Center for Urban Waters, Ecology, or King County. Longer-term support is needed. We're also trying to streamline the lab accreditation process to have more labs accredited under EPA method 1634.

A member stated the justification didn't specify how capacity will be expanded. We agreed and stated that we'll continue to build out this recommendation. Additional recommendations we received included the need for community scientists, and the use of community science initiatives to expand capacity beyond normal pathways for sampling. We explained this input aligned with recommendation #12, which focuses state technical guidance on monitoring and sampling.

- **Recommendation 11: Continue to streamline lab accreditation resources to expedite 6PPD-quinone accreditation for laboratories in Washington state.**

A committee member believed the recommendation is problematic and felt that we would struggle to understand 6PPD if we're only looking at accredited methods. We plan to raise this issue with management and we'll follow-up with this committee member when we have more information.

- **Recommendation 12: Develop a feasibility assessment for a Toxics Salmonid Ecosystem Health Monitoring Initiative through local source identification pilot studies.**

A committee member raised concerns that the recommendation reads like an implementation plan and encouraged us to consider whether it's appropriate to include specifics at this point. The participant felt this recommendation was out of balance with some of the others and recommended reducing details. Doing so can encourage flexibility and promote the ability to adjust as needed so that agencies are not tied to specifics we don't have enough information on.

Additional suggestions included the need for community scientists and the use of community science initiatives to expand capacity beyond normal pathways for sampling. We shared that the process isn't as simple as collecting a grab sample, so we're looking at other methods to help standardize our monitoring efforts.

- **Recommendation 15: Assess the potential for 6PPD and transformation products to reach Washington drinking water sources.**

This recommendation is an initial preparedness action to assess vulnerable drinking water sources in the state. The Office of Drinking Water would be the lead agency in close collaboration with sister agencies. The Office of Drinking Water is not currently proposing to sample for 6PPD since there is no drinking water method. Health shared this initiative will start with Group A Public Water Systems but can move to voluntary sampling of private wells in the future.

- **Recommendation 16: Sample and analyze edible tissues of aquatic species and other biota, including but not limited to salmonids.**

This recommendation is intended to provide flexibility while partnering with existing agencies and programs. Health will partner with other Tribes to help identify culturally significant species, but it will depend on what the communities are comfortable with sharing. A committee member suggested considering researching bioaccumulation of 6PPD in Orca whales. Health concurs and shared that NOAA has run some orca tissue samples for 6PPD-q analysis, but 6PPD-q was not detected. Health also added this idea is related to recommendation number 3.

- **Recommendation 18: Define a broader class or classes of PPD chemicals for consideration as a priority chemical class under Safer Products for Washington and recommendations in the Action Plan.**

A committee member asked about the plan for updating and keeping Legislators informed. We responded that we will have conversations with Ecology's Governmental Relations office, who will take recommendations to the Legislature. We will follow up with our Governmental Relations office to learn more about this process.

- **Recommendation 19: Identify and prioritize product categories that contain PPDs of concern, with an initial focus on non-tire products and products made from tires.**

There were no follow-up comments or input received.

- **Recommendation 20: Take action to replace crumb rubber-based outdoor recreational surfaces in Washington with safer options and prioritize overburdened communities for funding and technical assistance.**

A committee member appreciated how this recommendation was written to provide options for implementation. The committee member pointed out there are a lot of reasons beyond 6PPD to look at artificial turf and crumb-rubber based recreational surfaces. We also received a suggestion to change the title of the recommendation to "tire rubber" or "recycled rubber."

- **Recommendation 21: Create incentives and invest in initiatives to identify sustainable chemistry and materials for use in tires and other products that use PPDs.**

There were no follow-up comments or input received.

- **Recommendation 22: Complete a fish bioassay study to determine designation under WAC 173-303-100(5)(c).**

There were no follow-up comments or input received.

- **Recommendation 24: Assess reuse products (e.g., playground surfaces, traffic control devices, pavements, synthetic turf infill, flooring, rubber mulch) as a source of 6PPD and 6PPD-quinone.**

There were no follow-up comments or input received.

- **Recommendation 26: Ecology should prioritize waste tire cleanups, administered through funds provided from Substitute House Bill 2085, according to potential harm to the environment and human health.**

We reminded the group that right now, our cleanups are based on first come, first serve. They are not prioritized. The purpose of this recommendation is to prioritize the cleanups based on environmental degradation and potential human health impacts. We explained that this recommendation will benefit the environment and human health.

A committee member recommended that we flip the discussion to allow us to push for better programs, staffing, and funding by considering whether or not to include a challenge statement versus saying what we will do through the scope of this bill. The committee member agreed that having a better plan for prioritization is great and can show a need for additional funding.

- **Recommendation 27: Provide long-term funding for best management practice (BMP) effectiveness research, including implementing and monitoring BMPs installed in the field and conducting laboratory studies.**

There were no follow-up questions or input received.

- **Recommendation 28: Implement the low-risk, high-reward stormwater mitigation pilot projects that the Puget Sound Stormwater and Transportation Charter Group identified.**

We shared that we will be doing more than the list identified through Puget Sound Stormwater Transportation Charter Group. There will be additional monitoring on how well certain best management practices (BMPs) are working in the field. Washington State Department of Transportation (WSDOT) will be doing a lot more than this list, including using funds and incorporating the HEAL Act. A committee member commented that it's important to highlight that this charter group has the support of the Puget Sound Federal Leadership task force. It has the support of state, Tribal, and federal leadership.

A committee member expressed that it would be good to include treatment for decant facilities, especially to answer questions such as, "what is happening with that water?" We shared that we are addressing that in the fish bioassay study recommendation to determine whether it designates as a waste. Another committee member suggested

that we change the language from “here’s a set of recommendations to what we’re going to do” to saying, “we’re going to start with this.”

- **Recommendation 29: Develop a toolbox of retrofits that stormwater managers and permittees can use.**

A participant recommended that we clarify the “plug and play” model and suggested that we better define it within the recommendation. We agreed with this input and will clarify this language.

- **Recommendation 33: Create a dedicated funding pool for creating community co-benefits and addressing environmental injustices through the installation of stormwater BMPs.**

A committee member recommended that we offer guidance on determining how to provide co-benefits or how those co-benefits would be incorporated into a project for municipalities. They voiced that it’s a struggle to try and balance what is listed here and what they believe municipalities need to do. We shared there could be a link between this recommendation and the toolbox of retrofits recommendation. Additional input that we received identified opportunities to provide more education about BMPs along highways.

- **Recommendation 34: Dedicate funding toward evaluating and implementing 6PPD operations and maintenance (O&M) best practices to ensure the long-term effectiveness of BMPs.**

There were no follow-up questions or input received.

Next Steps

We asked members to submit final feedback by end of day on April 17, 2024. This allows us time to review and incorporate input prior to the start of the internal review cycle. We asked participants to reflect on Phase 1 of the Action Plan. We’ll share any significant changes made to the recommendations with the advisory committee in our upcoming meeting.

Feedback/Comments Received for Additional Discussion

The table below provides pertinent comments from the meeting. These comments were pulled from the main meeting chat. You can access the main group meeting chat in the files tab of the “General” channel in our action plan Teams channel.

Input	Focus Area
I think this recommendation is potentially a dangerous precedent to put state dollars toward research that the tire industry should be performing on their own products to make them safe for use... would the state need to do this for any compound that is found to be toxic in any product?	Alternatives
Does industry really need metrics for "acceptable hazard" in this space?	Alternatives
A tire manufacturers fee could be linked to recommendation #33 - funding community co-benefits and/or #37 - reduce funding burden on permittees/taxpayers.	Alternatives, Stormwater
Random: Will/is there a tissue and sample bank to store future marine and other samples as techniques change or for a historical comparison?	Ecotoxicology
I worry here about "where 6PPD and other CECs are the primary limiting factor for salmon recovery" - ecosystems rarely behave this way...	Ecotoxicology, Environmental Monitoring and Research
Yes, but if the analysis is flawed, which it is, then the industry will say there are none. Or they will define what is less hazardous and use 7PPD. Both are problematic.	Environmental Monitoring and Research
For analytical measurements - ensure an expedited process for lab accreditation for other commercial labs who are using the draft EPA method.	Environmental Monitoring and Research
Recommendation #13: My question is, how does this recommendation impact potentially proposed update to Ecology's Aquatic Life Toxic Criteria of a numeric water quality standard for 6PPD-q and proactive actions of Washington state to deal with this fast-moving issue of 6PPD and salmon recovery?	Environmental Monitoring and Research
CUW currently has what I would consider a pretty solid, accurate, and precise LC/MS/MS analytical method that includes 76 PPDs, PPQs, PPD transformation products and other roadway chemicals. Its near impossible for me to think we could ever get that method accredited for use on an ECY project, even though I think it's quite useful and needed to understand the roadway runoff and PPD space. How can we make progress in this space to really use these capabilities?	Environmental Monitoring and Research
Public education on this crumb rubber issue is key! Thanks for considering adding that.	Products

Input	Focus Area
Recommend adding outreach to tire wholesalers and auto shops on proper storage and waste (with Ecology as a co-lead).	Solid waste
There have already been discussions about funding stormwater BMPs partially through the tire industry, especially since it will be exceedingly expensive.	Stormwater Best Management Practices
Why just the "Puget Sound Stormwater Transportation Charter Group" recommended pilot projects? Was that process run through HEAL Act review? Did it take EJ communities and GSI co-benefits into account? Suggest this recommendation be simplified to "implement low-risk, high reward stormwater mitigation projects" With a goal of 10,000 infrastructure BMPs in the first year across the State.	Stormwater Best Management Practices
Are cross team members embedded in groups like the transportation charter group - e.g., health, communications, other? Or how will all these efforts stay informed, coordinate with other topical groups?	Stormwater Best Management Practices
I think an evaluation is needed to look at what type of funding is available, and which are most flexible to use for ongoing, longer-term support for both monitoring and maintenance.	Stormwater Best Management Practices

Links/Resources Shared in Zoom Chat, including Breakout Session Chats

- [Safer Products for Washington: Phase 3 Working Draft Criteria for Feasible and Available](#)
- [Adopted Priority Product: Motor Vehicle Tires Containing 6PPD | Department of Toxic Substances Control \(ca.gov\)](#)

Action Items

- Advisory Committee:
 - Submit all final input by end of day on April 17 for consideration.
 - Reflect on Phase 1 of the Action Plan.
 - Prepare to discuss future steps during our final meeting on May 21.
 - We'll share any significant changes to phase 1 recommendations at our final meeting.
 - We'll also share the recommendations that will be supported by a budget package.