

DTSC Workshop on Motor Vehicle Tires Containing 6PPD Priority Product Proposal, July 2021

WRITTEN QUESTIONS SUBMITTED

This workshop was held virtually via Zoom. Some of the questions submitted via the Q&A function on Zoom were not read aloud due to time constraints and were therefore not visible to all attendees. All questions submitted via the Q&A function or to SCP's email inbox during the workshop are included below. The slides and full recording from the workshop can be found on [DTSC's Chemicals in Motor Vehicle Tires webpage](#).

Question	Asker Name	Answer(s)
Will the recorded presentation be delivered to the audience members?	Chelsea Klett	Answered live
What are the other uses of 6PPD in commerce besides tires? Are these also potential sources?	Dianne Barton	Answered live
Is it correct that your basis for concern regarding other salmonids is just based on phylogeny analysis, not any actual data collected in non-Coho species? Are such data being collected to your knowledge?	tom lewandowski	Answered live
California is a major user. is synthetic turf sports fields with granulated tires. has anyone looked at 6ppd in run off	Kathleen Michels	Answered live
Besides fish, are there other detrimental environmental effects of 6PPD or 6PPD-quinone?	John Pyrdol	Answered live
Have mitigation measures like stormwater control measures (e.g. swales, bioinfiltration) been studied for treatment effectiveness of 6PPD? Does that effect the listing process?	Chris Desiderati	Answered live
Given the fact significant data gaps exist, do you think initiating rulemaking may be premature?	Shaun Flanigan	Answered live
Pour in place playground mats used throughout cities, including on beaches, are made from used tires. Has anyone looked at these as sources of 6PPD and other toxicants?	Dianne Woelke	Answered live
Is there any data on concentrations of 6-PPD or 6-PPDQ in soils and sediments, specifically in stormwater conveyance systems	Douglas Navetski	Answered live
What are the Big Valley Pomo Tribal traditonal uses for the CoHo Salmon?	Shaun Flanigan	Answered live

Can emerging contaminants such as 6PPD easily be added to tribal monitoring programs?	Dianne Barton	Answered live
Do you know how many tribes in CA have "Treatment as State" status for setting water quality standards? Have any set standards for emerging contaminants?	Dianne Barton	Answered live
How did you purify the 6PPD quinone from the mixture and did that have an effect on enhancing the formation of 6PPD-Q.	David Benko	Answered live
would you expect quinones formed from other PPDs to also be toxic to salmon?	David Benko	Answered live
Thank you for the excellent presentation.	Karen DiBiasio	n/a
There are very limited types of tires without 6PPD, correct? (non-marking tires, white tires). What anti-degradants are used in these tires?	Craig Manahan	Answered live
Do you believe that data gaps related to 6PPD-Quinone affect the course of the Alternatives Analysis for 6PPD?	Craig Manahan	Directed to panelist/not read aloud due to time
How can we be confident that mortality in the Great Lakes is not occurring? My work has detected 6PPD-quinone at concentrations above the (it seems now likely underestimated) LC50 in rivers that discharge into Lake Ontario, for example. Perhaps it is an issue of not looking hard enough.	Cassandra Johannessen	Answered live
What chemical(s) were used as anti-degradants before 6PPD was adopted?	Craig Manahan	Answered live
What are some chemicals currently being investigated as potential alternatives to 6PPD? What are chemicals that should be investigated?	Craig Manahan	Answered live
Are you working with Washington State Dept of Ecology	Kirk O'Reilly	Answered live
IS there an equivalent for USTMA in Europe? Do you coordinate with other organizations?	Shalene Thomas	Typed from Sarah Amick, USTMA: Yes, we closely coordinate with the European Tire and Rubber Association located in Europe.
If an alternative anti-ozonation chemical is identified, will it be proprietary to USTMA members or be made widely known to others?	Dianne Barton	Answered live

I would be interested in seeing a summary of the toxicity data for the previously identified transformation products. Please direct me to where the information can be found. Also, why was 6PPD-quinone not previously identified as a transformation product? If a standard test species was/is used for transformation product testing, it may be hard to detect coho-specific risks.	Mark Jankowski	Answered live
Who manufactures 6PPD that is used by tire manufacturers?	Shalene Thomas	Directed to panelist/not read aloud due to time
to Ed - what additional research on 6 PPDq are he and his team working on and when might it be published?	James Ritchie	Answered live
Who funded this research	Catherine Gockel	Answered live
can you comment on the likely stability of 6 PPD quinone in the enviroment based on your methodology work?	tom lewandowski	Answered live
Has there been any analysis of 6PPD-q in air?	Cassandra Johannessen	Answered live
Can you comment on your SPE procedure and its extraction efficiency?	Cassandra Johannessen	Directed to panelist/not read aloud due to time
in your search for sources have you looked at runoff from granulated tires in synthetic turf fields ?	Kathleen Michels	Answered live
What are the possible implications for human health given the effects of 6PPD-quinone on the blood brain barrier of coho?	Michelle Chow	Answered live
Will today's presentation be available to share?	Kirk O'Reilly	Typed from DTSC: Final slides and a recording of the workshop will be available on our website as soon as possible after the workshop.

Were there no other regions in the body in which the endothelial cell tight junctions were disrupted (ie, dye was only seen in the brain but not other anatomic locations)? Is it the increased pressure on the cerebellum that may be a reason for loss of equilibrium? Can you comment on the P glycoprotein comment made in Blair et al 2021; ie, how is it possibly involved? Might this protein partly explain coho's sensitivity?	Mark Jankowski	Answered live
Have you been able to determine which tight junctional proteins are being targeted in coho salmon?	Lynn Nakayama Wong	Answered live
for Andrew Patterson with Eurofins - you said at the beginning of your presentation that you were contacted to do work on 6ppdq and asked to get this method ASAP. Can you say who called to ask for that?	James Ritchie	Answered live
Has anyone screened 6PPD or the quinone for receptor binding (e.g., AhR)?	Claudio Sorrentino	Answered live
what are the possible implications for human and other mammalian health (sublethal as well as lethal effects	Kathleen Michels	Directed to panelist/not read aloud due to time
for Blair: Have you evaluated the coho to ensure they don't have a virus that could make them more sensitive to 6 ppdq?	James Ritchie	Answered live
Also for Ed and/or Blair: What are other publications that have evaluated other aquatic species and impacts from 6 ppdq?	James Ritchie	Directed to panelist/not read aloud due to time
What info can you share about the USTMA process for understanding toxicity of transformation products from antiozonants like 6PPD or other chemicals used in tires? If the focus previously has only been on TPs for which standards are available, will that be expanded during upcoming work?	Kathy Peter	Answered live
What is the persistence of 6PPD-Q in the environment? Terrestrial and in water.	Grant Johnson	Directed to panelist/not read aloud due to time
Has anyone tested the run off from synthetic turf laden with hundreds tons of granulated tires per field which is a "trojan. horse " for introducing large amounts of tire particles along with tire toxins such as 6PPD including where the worn out fields are is dumped in out of the way places.	Kathleen Michels	Directed to panelist/not read aloud due to time

For DTSC: What engagement have you had with chemical manufacturers of 6ppd on this issue and are you aware of any research by the 6ppd manufacturers on this issue?	James Ritchie	Answered live
There is one very significant alternative. My company Fuel & Tire Saver systems has show the ability to reduce tire wear by 30-80 percent. This specific methodology is a near-term stopgap measure that could be effective.	Mike Lo Presti	Answered live
How will states and the federal government have to work together to require a change of addatives	Kirk O'Reilly	Answered live