

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
DECEMBER 4, 2024**

ITEM 4

SUBJECT

STATE AGENCY UPDATES REGARDING THE EMERGING CONTAMINANTS 6PPD AND 6PPD-QUINONE.

DISCUSSION

The compound N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine (6PPD) is an organic chemical widely used as an antidegradant to improve performance of motor vehicle tires. 6PPD-quinone, an ozonation product of 6PPD, is highly toxic to coho salmon and other salmonids and has been identified as the primary causal toxicant responsible for extensive coho salmon mortality after exposure to stormwater in the Pacific Northwest. Tire wear particles are the primary source of these chemicals in aquatic environments, conveyed to surface waters via stormwater runoff. Due to the extensive use of 6PPD in tires and the rapid transformation of 6PPD to 6PPD-quinone in the environment, 6PPD-quinone has been detected in stormwater discharges in California above levels of concern and has been identified as a high-priority contaminant for monitoring in California's freshwater ecosystems.

This informational item will provide an overview of 6PPD and 6PPD-quinone, and updates on related efforts at the Water Boards, California's Department of Toxic Substances Control (DTSC) Safer Consumer Products Program, and California Department of Transportation (Caltrans). State Water Board's Constituents of Emerging Concern (CECs) Program will present background information on 6PPD and 6PPD-quinone, including sources, pathways, and risks to California's aquatic ecosystems, and collaborative efforts with government agencies to address the issues associated with 6PPD and 6PPD-quinone. DTSC will provide a regulatory update on requirements of tire manufacturers to assess the hazards and adverse environmental impacts of potential alternatives that could replace 6PPD in tires. Caltrans will provide an update on their strategy for 6PPD-quinone characterization and BMP effectiveness monitoring, literature review of scientific publications, white paper development, and partnering with regulatory and resource agencies (State Water Board and the National Marine Fisheries Services).

POLICY ISSUE

None.

FISCAL IMPACT

None.

REGIONAL BOARD IMPACT

None.

STAFF RECOMMENDATION

None.