Date of Hearing: March 27, 2023

ASSEMBLY COMMITTEE ON TRANSPORTATION
Laura Friedman, Chair
AB 756 (Papan) – As Amended March 2, 2023

SUBJECT: Department of Transportation: contaminated stormwater runoff: salmon and steelhead trout bearing surface waters

SUMMARY: Requires the California Department of Transportation (Caltrans), in consultation with the State Water Resources Control Board (SWRCB) and the Department of Toxic Substances Control (DTSC), to develop a programmatic environmental review process to prevent 6PPD and 6PPD-quinone (Q) from entering salmon and steelhead trout bearing surface waters of the state. Specifically, **this bill**:

1) Defines "6PPD" as the chemical compound N-(1,3-Dimethylbutyl)-N′-phenyl-p-phenylenediamine commonly contained in motor vehicle tires.

2) "6PPD-quinone" means the reaction product of 6PPD that is acutely toxic to aquatic life.

3) "Biofiltration" means the effect of vegetated treatment facilities that reduce stormwater pollutant discharges by intercepting rainfall on vegetative canopy, and through incidental infiltration or evapotranspiration, and filtration.

4) "Bioretention" means the effect of engineered facilities that store and treat stormwater by passing it through a specified soil profile, and either retain or detain the treated stormwater for flow attenuation.

5) "Consultation" means the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes potential needs for confidentiality with respect to places that have traditional tribal cultural significance.

6) "Tribal community" means a community within a federally recognized California Native American tribe or nonfederally recognized Native American tribe on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.

7) Requires Caltrans' 6PPD and 6PPD-quinone programmatic environmental review process to include:

    a) A pilot project no later than December 31, 2025 in the city of San Mateo where Highway 101 crosses the San Mateo Creek to study the effectiveness and cost effectiveness of installing and maintaining bioretention and biofiltration comparatively along department rights-of-way to eliminate the discharge of 6PPD and 6PPD-Q into surface waters of the state.

   b) A map of all locations where Caltrans is likely to discharge stormwater into salmon or steelhead trout bearing surface waters of the state. A report to the Legislature no later than December 31, 2026 describing the strategy to eliminate, by December 31, 2037, the discharge of 6PPD and 6PPD-Q by the department into salmon and steelhead trout bearing surface waters of the state. States this report requirement is inoperative on January 1, 2028.

8) Requires Caltrans to provide consultation on a government-to-government basis with tribal communities, as appropriate, in order to allow tribal officials the opportunity to provide meaningful and timely input in the development of the department's strategy to eliminate 6PPD and 6PPD-Q from all salmon and steelhead treat bearing surface waters of the state.

9) Requires Caltrans, beginning January 1, 2027, to annually install bioretention or biofiltration controls at 10% of the locations identified in the map for 10 years, until the department has installed bioretention or biofiltration controls at all locations where it is likely to discharge stormwater into salmon or steelhead trout bearing surface waters of the state.

10) Requires the Director of Caltrans to prepare an annual status report describing the status of the department's progress in preventing the discharge of 6PPD and 6PPD-Q and give this report to the Legislature on or before October 31 of each year, through October 31, 2038.

EXISTING LAW:

1) Establishes Caltrans and provides that it has full possession and control of all state highways and property and rights in property acquired for state highway purposes. (Streets and Highways Code (SHC) 90)

2) Requires Caltrans to prepare an annual report to the Legislature describing the status of progress in locating, assessing, funding, and remediating barriers to fish passage, and requires an assessment of potential barriers to fish passage prior to commencing project design (SHC 156 *et seq*.).

3) Implements and maintains a state highway system which supports the goals and priorities determined through the transportation planning process, which is in conformity with comprehensive statewide and regional transportation plans, and which is compatible with statewide and regional socioeconomic and environmental goals, priorities and available resources. (Government Code 14000.5)

4) Establishes the federal Clean Water Act (CWA) to regulate discharges of pollutants into the waters of the United States and to regulate quality standards for surface waters. (United States Code (USC) 1251 *et seq.*)

5) Establishes the National Pollutant Discharge Elimination System (NPDES) permit program requiring the State Water Board and the nine California Regional Water Boards to prescribe waste discharge requirements which, among other things, regulate the discharge of pollutants in stormwater, including municipal stormwater systems. (USC Code 1342)

FISCAL EFFECT: Unknown

COMMENTS:

In lowland Puget Sound, many urban streams in the vicinity of the city of Seattle were the focus of extensive physical and biological restoration activities in the 1990s. These efforts restored wild salmon access to urban streams. However, in follow-up studies of these restored urban habitats, salmon populations experienced high mortalities. Researchers found that this die-off coincided with high storm water run-off from roads, and they identified 6PPD-Q as the causal toxin.

6PPD is an antioxidant added to vehicle tires that improve their longevity by making them resistant to degradation when exposed to the oxygen in our atmosphere. The reaction between 6PPD and ozone that confers its protective effects also creates a toxic by-product known as 6PPD-Q. 6PPD-Q is acutely toxic to Coho Salmon, Pacific Steelhead Trout and Chinook salmon populations.

Storm water is defined by US Environmental Protection Agency (EPA) as the runoff generated when precipitation from rain and snowmelt events flows over land or impervious surfaces without percolating into the ground. Storm water mobilizes pollutants such as motor oil and trash. In most cases, storm water flows directly to water bodies through sewer systems, contributing a major source of pollution to rivers, lakes, and the ocean.

Storm water discharges in California are regulated through National Pollutant Discharge Elimination System (NPDES) permits. The permit regulates storm water discharges from: (1) all Caltrans-owned municipal separate storm sewer systems;(2) Caltrans-owned right of way, parking, storage and maintenance facilities, including equipment cleaning operations and any other non-industrial facilities with activities that have the potential of generating significant quantities of pollutants; and (3) certain non-stormwater discharge, and requires that Caltrans' construction program complies with specific requirements issued by the SWRCB. Caltrans' Stormwater Management Program provides water quality monitoring, best management practices development along with implementing guidance and tools.

The SWRCB regulates stormwater and non-stormwater discharges in several ways. It requires Caltrans to comply with existing total maximum daily loads (TMDLs) established by the United States Environmental Protection Agency (U.S. EPA) or adopted by the Regional Water Quality Control Boards (Regional Water Boards. The SWRCB also identifies stormwater discharges from the Department's transportation system as a source of pollutants that impair receiving water and requires Caltrans to comply with a total of 88 TMDLs per TMDL-specific waste load allocations and associated compliance deadlines. Caltrans is required to implement stormwater pollutant control measures (e.g., best management practices, cooperative agreements, etc.) to address its contribution to the water quality impairment of the receiving water. At this time, Caltrans has not taken specific actions to reduce the discharge of 6PPD-Q into salmon or steelhead trout-bearing surface waters of the state.

In the 2016 Statewide Stormwater Management Plan, biofiltration is listed as one of the 11 best management practices approved for use by Caltrans. Caltrans has tested biofiltrantion strategies that involve polluted stormwater passing through vegetation, sedimentation, or soil and determined them to be a "fiscally reasonable and technically feasible" approach to reducing stormwater pollution. Preliminary results published in a report by the Washington State Department of Ecology, observed that 6PPD and 6PPD-Q clung to the soil, suggesting this might be a viable strategy.

According to the author, "To build a strong, safe, and sustainable future for California we must take action to preserve the health and safety of rivers and streams. For that reason, we are required to address the many dangers facing our waterways including micro-particle pollutants and toxic storm water runoff that threaten native species and ecosystems. One such pollutant is known as 6PPD-Q and it is extremely dangerous for salmon and trout populations native to California surface waters. This comes from our vehicle tires every time we drive. Biofiltration and bioretention systems, readily available storm water filtration management practices, effectively treat the runoff of 6PPD in terms of both toxic chemical exposure and salmon spawner survival. Therefore, I am proposing Assembly Bill (AB) 756 which will require the Department of Transportation to develop and implement a strategy to eliminate 6PPD-Q from storm water discharges into our California aquatic systems. This is just one step towards preserving the health and wellness of our water system in California."

Committee comments: This bill establishes a pilot project to study to the cost effectiveness of various approaches to capturing 6PPD and 6PPD-Q to in order to reduce toxic stormwater runoff, followed by a requirement that the Caltrans install bioretention or biofiltration controls at 10% of the priority sites identified for each of the next 10 years beginning in 2027.

Caltrans has a responsibility to ensure that its roads do not contribute to negative environmental impacts; however, it has not taken specific actions to address this toxin. It will be important for SWRCB to assess this relatively new toxin and work with Caltrans to help to determine the best way to minimize its negative impacts.

Installing the proposed control systems will likely be of significant cost to Caltrans and it is reasonable to consider the source of the pollutant, which is tires, and if tire manufacturers have a responsibility to contribute to the cost of managing the toxins released by their tires.

U.S. Tire Manufacturers Association (USTMA) writing in support states, "USTMA and its members care deeply about this issue and are committed to collaborating with researchers, regulators, and stakeholders to better understand these distinct compounds (6PPD and 6PPD-Quinone); fill relevant knowledge gaps to support the development of potential alternatives and mitigation strategies; advance an alternatives analysis of 6PPD in tires under California's Safer Consumer Products Regulations; and increase the use of effective mitigation strategies."

Previous legislation: SB 1263 (Portantino), Chapter 609, Statutes of 2018 requires the Ocean Protection Council to adopt and Implement a Statewide Microplastics Strategy to address microplastic materials that pose an emerging concern for ocean health.

SB 541 (Allen), Chapter 811, Statutes of 2017 requires specified state and regional entities to consult on and recommend best design and use practices for storm water and dry weather runoff capture that can generally be applied to all new, reconstructed, or altered public schools.

AB 2379 (Bloom of 2018) would have required that clothing made from fabric that is composed of more than 50% synthetic material bear a conspicuous label that is visible to the consumer at the point of sale, as specified, including a statement that the garment sheds plastic microfibers when washed. AB 2379 is currently on the Assembly inactive file. Died on inactive file.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coastkeeper Alliance
Clean Water Action
Coachella Valley Waterkeeper
Heal the Bay
Humboldt Baykeeper
Inland Empire Waterkeeper
Laane
Monterey Bay Aquarium
Monterey Waterkeeper
Orange County Coastkeeper
Orange County Waterkeeper
Planning and Conservation League
Restore the Delta
Russian Riverkeeper
San Diego Coastkeeper
Santa Barbara Channelkeeper
South Yuba River Citizens League
The Otter Project
U.s. Tire Manufacturers Association
Water Climate Trust
Wishtoyo Chumash Foundation
Yuba River Waterkeeper

Opposition

None on file

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