Date of Hearing: April 9, 2024

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE
Diane Papan, Chair
AB 2214 (Bauer-Kahan) – As Amended April 4, 2024

SUBJECT: Ocean Protection Council: microplastics

SUMMARY: Requires the Ocean Protection Council (OPC) to establish and lead an interagency coordination group to recommend statutory changes and adopt a workplan to implement recommendations from the 2022 Statewide Microplastics Strategy (Strategy). Specifically, **this bill**:

1) Requires the OPC to establish and lead an interagency coordination group that includes, but is not limited to, representatives from the California Coastal Commission, California Water Quality Monitoring Council, Department of Resources Recycling and Recovery, Department of Toxic Substances Control, Office of Environmental Health Hazard Assessment, State Energy Resources Conservation and Development Commission, and State Water Resources Control Board (Water Board).

2) Requires the interagency coordination group, on or before December 1, 2025, to identify and recommend to the Legislature statutory changes that are needed to implement the recommendations described in the Strategy, including, but not limited to:

    a) Expansion of the statewide microbead ban to include microplastics that are intentionally added to consumer products;

    b) Promote, or otherwise require, the sale and use of ENERGY STAR condenser dryers and washing machines with a microfiber filtration system with a mesh size of not greater than 100 micrometers, and develop a program to incentivize postmarket retrofits or purchase through rebates and other mechanisms;

    c) Allows OPC to augment a task force or work group that has already been formed to accomplish these requirements; and

    d) Requires implementation by agency personnel to be within the scope of their duties.

3) Requires OPC, in coordination with the interagency coordination group, to adopt a workplan outlining which participating agency within the interagency coordination group will implement the recommendations and requires the workplan be provided to the Legislature on or before December 1, 2025.

4) Allows OPC to augment a task force or work group that has already been formed to accomplish these requirements.

5) Requires implementation by agency personnel to be within the scope of their duties.

6) Repeals this section on January 1, 2029.

7) Makes findings and declarations regarding the health and environmental impacts of microplastics.

EXISTING LAW:

1) Establishes OPC in state government and requires OPC to, among other things, coordinate activities of state agencies that are related to the protection and conservation of coastal waters and ocean ecosystems to improve the effectiveness of state efforts to protect ocean resources, establish a science advisory team, and identify and recommend to the Legislature changes in law needed to achieve these goals [Public Resources Code (PRC) § 35600 *et seq.*].

2) Requires, under the Porter-Cologne Water Quality Control Act, the Water Board and Regional Water Quality Control Boards to implement a program to control discharges of preproduction plastic (including plastic resin pellets and powdered coloring for plastics) from point and nonpoint sources. Requires the Water Board to determine the appropriate regulatory methods to address the discharges from these point and nonpoint sources (Water Code § 13367).

3) Declares that littered plastic products have caused and continue to cause significant environmental harm and have burdened local governments with significant environmental cleanup costs (PRC § 42355).

4) Enacts the Plastic Microbeads Nuisance Prevention Law, prohibiting the sale of personal care products that contain plastic microbeads on and after January 1, 2020, and makes several related findings and declarations, including that (PRC § 42360 *et seq.*):

    a) Plastic does not biodegrade into elements or compounds commonly found in nature, but instead, upon exposure to the elements, photodegrades into smaller pieces of plastic, causing land and water pollution that is virtually impossible to remediate;

    b) Plastic pollution is the dominant type of anthropogenic debris found throughout the marine environment;

    c) Plastic pollution is an environmental and human health hazard and a public nuisance; and

    d) Microplastics are persistent organic compounds that attract other pollutants commonly present in the environment, many of which are recognized to have serious deleterious impacts on human health or the environment.

5) Requires, on or before December 31, 2024, OPC to adopt and implement a Strategy related to microplastic materials that pose an emerging concern for ocean health; specifies that the goal of the Strategy is to increase understanding of the scale and risks of microplastics on the marine environment and to identify proposed solutions to address the impacts of microplastics [PRC § 35635(b)].

6) Requires the State Water Board to adopt a definition of microplastics in drinking water by July 1, 2020; adopt a standard methodology to test drinking water for microplastics; and, adopt testing and reporting requirements (Health & Safety Code § 116376).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

1) **Purpose of this bill**. This bill requires OPC and an interagency coordination group to provide recommendations to the Legislature and adopt a workplan to implement recommendations from the Strategy. According to the author, "[This bill] addresses the urgent need to mitigate the pervasive presence of microplastics, which pose significant threats to both human health and the environment. Microplastics, including synthetic microfibers, are ubiquitous pollutants found across various ecosystems, and their prevalence has led to heightened human exposure. A global study conducted by WWF International revealed alarming statistics, suggesting that individuals may ingest an average of 5 grams of plastic per week, equivalent to the weight of a credit card. Synthetic microfibers, originating primarily from polyester, nylon, or rayon textiles, constitute a significant portion of microplastic pollution. It is estimated that in California alone, 4,900,000 pounds of microfibers are generated from apparel washing each year. Consequently, microfibers persistently infiltrate the environment, necessitating proactive measures to curb their detrimental effects. [This bill] leverages our state agency expertise and authority to engage in complementary efforts to reduce microplastics pollution and achieve a goal of zero plastic pollution entering state waters by 2030."

2) **Background**. Microplastics, defined by the Water Board as synthetic particles with at least three dimensions ranging from 1 nm to 5 mm in size, are considered pervasive and persistent global pollutants. Microplastics fall into two general categories: primary microplastics manufactured at a small size (*e.g.*, preproduction plastic pellets used in manufacturing or microbeads in personal care products) or secondary microplastics that result from the breakdown of larger plastics. Microplastics have a range of polymer types, sizes, shapes, and associated chemicals.

   Environmental impact. Plastics are a global threat to ocean health. Worldwide, an estimated 11 million metric tons of plastic enter the ocean each year, with this amount expected to triple by 2040 if no intervention takes place. Plastics are recognized globally as the most harmful and persistent fraction of marine litter, accounting for at least 85% of total marine waste.[1] Over time, plastics break down in aquatic environments into pieces of ever-decreasing size, creating microplastics, which are increasingly found in marine organisms, including mammals, fish, mollusks, and crustaceans. In toxicity studies, microplastic exposures have been shown to cause adverse effects, including tissue inflammation, impaired growth, developmental anomalies, and reproductive difficulties. Laboratory experiments have shown that organisms, such as zooplankton and fish, ingest microplastics indicating microplastics may accumulate in higher trophic organisms. In California, microplastics have been observed in Monterey Bay, San Francisco Bay, the Greater Farallones National Marine Sanctuary, Lake Tahoe, and in Southern California waterways.

   Microplastics are not only a marine pollution problem. Microplastics have been found nearly everywhere scientists have looked, from freshwater environments to agricultural soil, and within human placenta, stool samples, and lung tissue.

   Statewide Microplastics Strategy. This Statewide Microplastic Strategy (February 2022), required by SB 1263 (Portantino, Chapter 609, Statutes of 2018), provides a multi-year roadmap for California to take a national and global leadership role in managing

[1] From Pollution to Solution: A global assessment of marine litter and plastic pollution. UN environment programme, (2021).

microplastics pollution by utilizing a two-track approach to manage microplastic pollution. The recommended actions are consistent with OPC's California Ocean Litter Prevention Strategy and build upon the Top 10 Recommendations to Address Plastic Pollution in California's Coastal and Marine Ecosystems.

The first track lists 22 immediate, "no regrets" actions and multi-benefit solutions to reduce and manage microplastic pollution:

- Pollution Prevention: Eliminate plastic waste at the source (*e.g.*, products or materials from which microplastics originate such as vehicle tires, textiles, single use foodware and packaging, agriculture, and fisheries and aquaculture).

- Pathway Interventions: Intervene within specific pathways (*e.g.*, stormwater runoff, wastewater, aerial deposition) that mobilize microplastics into California waters.

- Outreach & Education: Engage and inform the public and industries of microplastic sources, impacts, and solutions.

Two solutions from this section are specifically mentioned in this bill: (1) expand the microbead ban to include microplastics that are intentionally added to specific consumer products; and (2) promote, or otherwise require, the sale and use of ENERGY STAR condenser dryers and washing machines.

The second track outlines a 13-point comprehensive research strategy to enhance the scientific understanding of microplastics in California and inform future action:

- Monitoring: standardize a statewide monitoring approach and understand and identify trends of microplastic pollution statewide.

- Risk Thresholds & Assessment: improve understanding of impacts to aquatic life and human health, including developing a water quality objective.

- Sources & Pathways Prioritization: identify and prioritize future management solutions based on local data.

- Evaluating New Solutions: develop and implement future pollution prevention and pathway intervention solutions.

The Strategy includes an implementation timeline as well as which agencies will be tasked with partnering on the objectives. The Strategy was prepared in collaboration with all the agencies listed as 'interagency coordination group' required by this bill, except the CEC. CEC would be responsible for the washing machine and dryer objective—the only objective that did not have a designated partner in the Strategy. The Strategy also calls for OPC and partnering agencies to provide recommendations to the Legislature by December 2025. This bill codifies the deadline for these recommendations to be provided to the Legislature.

3) **Double referral**. This bill is also referred to the Assembly Environmental Safety and Toxic Materials Committee.

4) **Arguments in support**. The Nature Conservancy, Ocean Conservancy, and 5 Gyres write in support of this bill stressing the macro-problem of micro-fibers as they are the most abundant and ubiquitous type of microplastic. "Asia and Europe are already farther ahead of the U.S. in implementing filtration solutions to tackle post-consumer microfiber pollution. Microfiber filtration technology is currently built into washing machines from major brands like Panasonic, Hitachi, Sharp, and Toshiba. […] California has the opportunity with [this bill] to lead the nation to address plastic microfiber pollution and incentivize innovation among washing machine manufacturers. With filtration solutions in hand, we can no longer afford to wait to address the threats of microfiber pollution."

5) **Related legislation**. AB 1628 (McKinnor) of 2023 would have required all new washing machines sold or offered for sale in the state for residential or state use contain a microfiber filtration system by January 1, 2029. AB 1628 was vetoed by the Governor.

   SB 1263 (Portantino) Chapter 609, Statutes of 2018, required OPC to adopt a statewide research strategy and identify early actions to reduce microplastic pollution in California's marine environment.

   SB 1422 (Portantino) Chapter 902, Statutes of 2018, required the Water Board to adopt a definition of microplastics in drinking water, to adopt a standard methodology to be used for the testing drinking water for microplastics, and established requirements for four years of testing and reporting.

   AB 888 (Bloom), Chapter 594, Statutes of 2015, prohibits the sale of personal care products with plastic microbeads.

   SB 270 (Padilla), Chapter 850, Statutes of 2014 and Proposition 67 (2016) established a statewide single-use carryout bag ban, requiring a fee for paper and reusable bag in grocery stores, food marts, liquor stores, and retail stores with a pharmacy.

REGISTERED SUPPORT / OPPOSITION:

Support

Ocean Conservancy
The 5 Gyres Institute
The Nature Conservancy

Opposition

None on file

Analysis Prepared by: Stephanie Mitchell / W., P., & W. / (916) 319-2096