

ASSEMBLY THIRD READING

AB 888 (Bloom)

As Amended April 22, 2015

Majority vote

Committee	Votes	Ayes	Noes
Natural Resources	7-0	Williams, Cristina Garcia, Hadley, McCarty, Rendon, Mark Stone, Wood	
Environmental Safety	6-0	Alejo, Dahle, Gonzalez, Gray, McCarty, Ting	
Appropriations	12-4	Gomez, Bloom, Bonta, Calderon, Daly, Eggman, Eduardo Garcia, Holden, Quirk, Rendon, Weber, Wood	Bigelow, Gallagher, Jones, Wagner

SUMMARY: Prohibits the sale of personal care products that contain plastic microbeads on and after January 1, 2020. Specifically, **this bill:**

- 1) Defines terms used in this bill, including:
 - a) "Personal care product" as an article to be applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance, and an article intended for use as a component of such an article, but excludes prescription drugs.
 - b) "Plastic microbead" as an intentionally added plastic particle that that is five millimeters or less in all dimensions.
 - c) "Person" as an individual, business, or other entity.
- 2) Beginning January 1, 2020, prohibits a person from selling or offering for promotional purposes a personal care product containing plastic microbeads that is used to exfoliate or cleanse in a rinse-off product. Specifies that this provision does not apply to products that contain plastic microbeads in an amount less than one part per million or products containing natural exfoliants.
- 3) Establishes enforcement provisions, including civil penalties not to exceed \$2,500 per day for each violation, as specified. Authorizes the Attorney General, a district attorney, a city attorney, or a city prosecutor to enforce the requirements of this bill.
- 4) Specifies that penalties collected be retained by the office that brought the action.
- 5) States legislative findings and declarations relating to the impacts of microplastics.

FISCAL EFFECT: According to the Assembly Appropriations Committee, this bill has negligible state costs and provides for enforcement through civil penalties collected and retained by the enforcing agency.

COMMENTS: According to the author:

Microplastic beads are sold in consumer products as abrasives and exfoliants (such as in soaps, facial scrubs, etc.) In some products there are over 350,000 microbeads in one tube alone. They are directly washed down the drain and too small to be captured by water treatment facilities. Recent studies have shown microbeads to be a pervasive marine pollutant, and have been found in alarming quantities everywhere from the garbage gyres in the Pacific Ocean to the Great Lakes to the LA [Los Angeles] River. Research has also shown that these beads absorb toxins and are being ingested by marine life, posing a threat to our marine ecosystems. Currently there is no law banning their use in consumer products. While some larger companies such as Unilever, Proctor & Gamble, and Johnson & Johnson have pledged to phase microbeads out of their products and replace them with natural alternatives, the proposed phase out dates [are inconsistent] and in some cases are only 50% by a certain date. [AB 888] would provide a hard phase out date to ensure that plastic microbeads from personal care products are no longer entering our waters.

Plastic microbeads are small plastic pellets that are added to personal care products as exfoliants and abrasives. Unlike other forms of plastic pollution, microbeads in personal care products are designed to be washed down the drain. Wastewater treatment systems are not capable of capturing these small particles, and they pass directly into the state's waterways and eventually to the ocean. Biodegradable alternatives that do not contribute to marine debris exist and are widely used by some product manufacturers, including ground apricot shells and cocoa beans. According to The 5 Gyres Institute, microplastic particles and microbeads, which are typically made of polyethylene, polypropylene, polyethylene terephthalate, polymethyl methacrylate or nylon, can be found in facial and body scrubs, shampoos, soaps, toothpaste, eyeliners, lip gloss, deodorant, and sunblock sticks. Some of these products contain more than 350,000 beads per bottle.

Plastic is the predominate form of marine debris. Plastics are estimated to comprise 60% to 80% of all marine debris and 90% of all floating debris. According to the California Coastal Commission, the primary source of marine debris is urban runoff. Due to the interplay of ocean currents, marine debris preferentially accumulates in certain areas throughout the ocean. According to Eriksen et al. (2014), 24 expeditions from 2007 to 2013 estimated that there is approximately 96,400 metric tons of floating plastic in the Northern Pacific Ocean. The North Pacific Central Gyre is the ultimate destination for much of the marine debris originating from the California coast. A study by the Algalita Marine Research Foundation found an average of more than 300,000 plastic pieces per square mile of the Gyre and that the mass of plastic was six times greater than zooplankton floating on the water's surface.

Most plastic marine debris exists as small plastic particles. Even large pieces of plastic break down into small particles due to excessive ultraviolet radiation exposure and subsequent photo-degradation. These plastic pieces are confused with small fish, plankton, or krill and ingested by aquatic organisms. Over 600 marine animal species have been negatively affected by ingesting plastic worldwide. Last month, scientists at the Australian Research Council Centre of Excellence for Coral Reef Studies at James Cook University found that corals are also ingesting small plastic particles, which remain in their small stomach cavities and impede their ability to consume and digest normal food.

In addition to the physical impacts of plastic pollution, microplastics have toxicological effects. Research suggests that microplastics attract and absorb persistent organic pollutants, such as Polychlorinated Biphenyls, dichloro-diphenyl-trichloroethane, and Polybrominated diphenyl ethers. Studies conducted by University of California Santa Barbara's National Center for Ecological Analysis and Synthesis (NCEAS) show that about 78% of the chemicals recognized by the United States Environmental Protection Agency are associated with microplastic pollution. Additional studies at NCEAS show that toxic concentrations of pollutants and additives enter the tissue of animals that have eaten microplastic. These pollutants bioaccumulate and bioamplify, having the potential to impact ecosystems and human health.

Analysis Prepared by: Elizabeth MacMillan / NAT. RES. / (916) 319-2092

FN: 0000434