
SENATE COMMITTEE ON ENVIRONMENTAL QUALITY

Senator Allen, Chair

2021 - 2022 Regular

Bill No: SB 1232
Author: Allen
Version: 2/17/2022
Urgency: No
Consultant: Genevieve M. Wong

Hearing Date: 3/28/2022
Fiscal: Yes

SUBJECT: Solid waste: products: labeling: biodegradability

DIGEST: Allows a manufacturer to claim that a product is “biodegradable,” “degradable,” or “decomposable” if the product does not contain certain ingredients and if it meets specific biodegradability standards or if CalRecycle determines, with respect to a specific product, material, or ingredient, that there is competent and reliable evidence that it is “biodegradable,” “degradable,” or “decomposable.”

ANALYSIS:

Existing law:

- 1) Finds and declares that it is the public policy of the state that environmental marketing should be substantiated by competent and reliable evidence to prevent deceiving or misleading consumers about the environmental impacts of plastic products. (Public Resources Code (PRC) §42355.5)
- 2) Prohibits the sale of a product that is labeled “compostable” or “home compostable” unless it meets certain American Society for Testing and Materials (ASTM) standard specification or has OK Compost HOME certification, except as specified. (PRC §42357(a))
- 3) Prohibits the sale of a product that is labeled “biodegradable,” “degradable,” “decomposable,” “soil degradable” or any form of those terms, or in any way imply that the product will break down, fragment, biodegrade, or decompose in a landfill or other environment except as specified. (PRC §42357(b))
- 4) Requires a manufacturer or supplier, upon request by a member of the public, to submit, within 90 days, information and documentation demonstrating compliance with these labeling requirements. (PRC §42357(d))
- 5) Authorizes a city, county, or the state to impose \$500 civil liability for the first violation of these provisions, \$1,000 for the second violation, and \$2,000 for

the third and any subsequent violations. (PRC §42358)

This bill authorizes a manufacturer to claim that a product is “biodegradable,” “degradable,” or “decomposable” if either (1) or (2) is met:

- 1) The product meets all of the following:
 - a) The product, and its contents if the product is a package or container, does not contain an intentionally added ingredient that is either of the following:
 - i) Identified on a specific list containing chemicals and toxicants because it presents a risk to human health from dermal or oral exposure.
 - ii) Identified on the National List of Allowed and Prohibited Substances as a prohibited nonsynthetic substance for use in organic agriculture or livestock due to its potential environmental harm.
 - iii) Determined by CalRecycle to present a risk to human health from dermal or oral exposure when present in a product labeled as “biodegradable,” “degradable,” or “decomposable.”
 - b) The product, including its label and closure system if applicable, and its contents if the product is a package or container, is exclusively composed of nonsynthetic organic materials, notwithstanding the presence of any mineral fillers or mineral additives, or up to 10% synthetic substances by product weight, as specified.
 - c) The mineral content of the product does not exceed 25% of the product by weight.
 - d) Testing of the product under conditions that comply with ASTM standard D6691-17 demonstrates that the product will be consumed by marine bacteria in no longer than 5 years.
 - e) No more than 6 months following the replacement of withdrawn ASTM standard D7081-05, the product has demonstrated to biodegrade in laboratory conditions in accordance with an ASTM standard that replaces the withdrawn ASTM standard.
- 2) CalRecycle determines, with respect to a specific product, material, or ingredient, that there is competent and reliable evidence supporting a claim that it is “biodegradable,” “degradable,” or “decomposable.”

Background

- 1) *Biodegradability of plastics.* “Biodegradable” plastics may degrade; however, there is no established standard for degradability (size of the particles remaining, length of time for degradation). Generally, these materials simply break down into smaller pieces of plastic, which continue to pose a threat to the

environment. According to the U.S. Environmental Protection Agency, marine debris has become a serious problem along shorelines, coastal waters, estuaries, and oceans throughout the world. It is estimated that 60-80 percent of all marine debris and 90 percent of floating debris is plastic. Small bits of plastic are a threat to marine life, including sea birds and filter feeders. Recent studies by the Algalita Marine Research Foundation and the Southern California Coastal Water Research Project have found that the average mass of plastics in the seawater off the coast of Long Beach is two and a half times greater than the average mass of plankton. After storms with excessive runoff, the mass of plastics is even greater. A similar study over seawater 1,000 miles west of San Francisco found the mass of plastics was six times the mass of plankton in drifts where marine animals congregate for feeding on plankton.

- 2) *Biodegradable standards.* ASTM, headquartered in Pennsylvania, is an international standards organization that develops and publishes consensus, technical standards. ASTM has adopted over 12,000 voluntary standards for a wide range of materials, products, systems, and services.

ASTM has developed standards for plastics designed to aerobic biodegrade “in a marine environment by a defined microbial consortium or natural sea water inoculum” (ASTM D6691-17). In other words, the rate a plastic product will be consumed by marine bacteria or microorganisms.

ASTM also began development of a marine degradable standard (D7081-05), but it was withdrawn in 2014, which means the standard has been “discontinued by the ASTM Sponsoring Committee responsible for the standard. A standard may be withdrawn with or without replacement.” There is no current standard for marine degradable plastic.

Comments

- 1) *Purpose of Bill.* According to the author, “According to a study led by the University of Georgia, humans have created 8.3 billion tons of plastic in the world to date, which is the equivalent of 55 million jumbo jets. Roughly 8 million metric tons of non-biodegradable plastic waste ends up in the world’s oceans each year – the equivalent of five grocery bags filled with plastic for every one foot of coastline on earth. This pollution is costing governments hundreds of billions of dollar each year.

Recycling is one part of the solution, but less than nine percent of plastics are actually recycled. Even the most recyclable material types such as water bottles end up in landfills, in incinerators or as litter more than 60 percent of the time. Regardless of recyclability, fossil fuel-based plastics break down into

microplastics that leach into the environment and take hundreds of years to degrade.

While California has done more to promote the recyclability of single-use plastics in recent years, the state has done little to invest in or incentivize alternatives to fossil fuel-based materials that can help end reliance on oil and gas extraction and help advance materials that can break down in the natural environment without polluting the planet. SB 1232 takes a longer view of the plastics crisis and begins to contemplate how to move more towards renewable, sustainable alternatives. By setting a standard for material that can truly break down in the environment fully and quickly, innovative companies and responsible consumers will have clear guideposts.”

- 2) *Two options for compliance.* Under SB 1232, a manufacturer may claim that their product is biodegradable, degradable, or decomposable if the product meets one of two standards.

Option A. Option A requires the product to meet various requirements, including that it does not contain certain intentionally added ingredients that CalRecycle determines present a risk to human health from dermal or oral exposure. However, CalRecycle may not be well-situated to evaluate the potential health risks posed by these products. A more suitable agency to make these determinations may be the Office of Environmental Health Hazard Assessment (OEHHA), the lead state agency for the assessment of health risks posed by environmental contaminants.

Option A also requires, within 6 months of a replacement standard for withdrawn standard ASTM D7081-05, that the product biodegrades in accordance with that replacement standard. Thus, until a replacement standard to withdrawn D7081-05 is developed, Option A is not a viable pathway to comply.

Option B. The second way a manufacturer may claim their product is biodegradable, degradable, or decomposable is if CalRecycle determines that a specific product, material, or ingredient is such. However, SB 1232 does not provide CalRecycle with guidance or parameters to make this determination other than it rely on “competent and reliable evidence.” Without further parameters, determinations under this option could be inferior to the standards required under Option A. Additionally, and similar to the considerations under Option A, OEHHA may be a better fit to make these determinations.

- 3) *Committee amendments.* The committee may wish to amend the bill as follows:

- a) **Shift responsibility from CalRecycle to OEHHA to determine if the product contains one of the specified intentionally added ingredients that present a risk to human health from dermal or oral exposure and to determine, in consultation with CalRecycle, whether a specific product, material, or ingredient is biodegradable, degradable, or decomposable.**
- b) **Require OEHHA, in making that determination under Option B, to ensure that the specific product, material, or ingredient meets the same standards that apply to Option A, excluding compliance with ASTM D6691-17 and D7081-05.**

Related/Prior Legislation

AB 1469 (Santiago, 2021) would have prohibited a person from selling a plastic product that is labeled “industrially compostable” unless it meets certain ASTM standards for plastics designed to be aerobically composted in municipal or industrial facilities. AB 1469 was held in the Assembly Natural Resources Committee

AB 2287 (Eggman, Chapter 281, Statutes of 2019) authorizes the use of plastic agricultural mulch film labeled “soil degradable” if it meets certain standards.

SB 1383 (Hueso, 2014) would have authorized the Director of CalRecycle to adopt a standard for plastic products that degrade in soil, as specified, and permits the sale of agricultural mulch film plastic that meets that standard. This bill was vetoed by Governor Brown, who stated that the standard for biodegradable agricultural film plastic was not yet finalized.

SB 567 (DeSaulnier, Chapter 594, Statutes of 2011) created the Plastic Products Law to prohibit a plastic product from being sold that is labeled “compostable,” “home compostable,” or “marine biodegradable” unless the plastic meets certain ASTM standards or another standard that is subject to CalRecycle requirements.

AB 2147 (Harman, Chapter 349, Statutes 2006) prohibited persons from selling plastic food and beverage containers labeled as “compostable,” “biodegradable,” “degradable,” or any form of those terms, unless the containers meet certain requirements.

SB 1749 (Karnette, Chapter 619, Statutes 2004) prohibited persons from selling a plastic bag labeled as “compostable,” “biodegradable,” “degradable,” or any form of those terms, unless the plastic bag meets certain requirements.

SOURCE: Author

SUPPORT:

Cove PBC
Republic Services INC.

OPPOSITION:

California Compost Coalition

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