Date of Hearing: July 14, 2025

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Isaac G. Bryan, Chair
SB 633 (Blakespear) – As Amended May 23, 2025

SENATE VOTE: 27-10

SUBJECT: Beverage containers: recycling

SUMMARY: Requires beverage manufacturers to include, as part of their reporting requirements to the Department of Resources Recycling and Recovery (CalRecycle) for the Beverage Container Recycling and Litter Reduction Act (Bottle Bill), proof of third-party validation of postconsumer recycled content (PCR), and information on the country of origin of that material.

EXISTING LAW:

1) Pursuant to the Bottle Bill:

    a) From January 1, 2022 to December 31, 2024, requires plastic beverage containers, as defined, to contain a minimum of 15% PCR plastic, on average;

    b) From January 1, 2025 to December 31, 2029, requires plastic beverage containers, as defined, to contain a minimum of 25% PCR plastic, on average; and,

    c) On and after January 1, 2030, requires plastic beverage containers, as defined, to contain a minimum of 50% PCR plastic, on average. (Public Resources Code (PRC) 14547)

2) Requires beverage manufacturers to annually report the amount in pounds of virgin plastic and PCR plastic used by the manufacturer for plastic beverage containers subject to the CRV for sale in the state in the previous calendar year. (PRC 14549.3)

3) Pursuant to the Rigid Plastic Packaging Container (RPPC) Law (PRC) 42300 *et seq*.):

    a) Requires RPPCs sold or offered for sale in the state to meet, on average, the following:

        i) Be made from at least 25% postconsumer material;

        ii) Have a recycling rate of 45%, as specified;

        iii) Be a reusable or refillable package;

        iv) Be a source-reduced container; or,

        v) Is a container for floral preservative that is subsequently reused by the floral industry.

4) Pursuant to SB 54 (Allen), Chapter 75, Statutes of 2022, establishes the Plastic Pollution Prevention and Packaging Producer Responsibility Act (Act) (PRC 42040 *et seq*.), which:

a) Requires, by January 1, 2024, producers of covered material to form and join a producer responsibility organization (PRO), subject to specified requirements and CalRecycle approval, to carry out the requirements of the Act. Prohibits a producer of covered material from selling, offering for sale, importing, or distributing covered materials in the state unless the producer is approved to participate in the PRO.

b) Requires that all covered material offered for sale, distributed, or imported into the state on and after January 1, 2032, is recyclable in the state or eligible to be labeled "compostable," as specified.

c) Requires that all plastic covered material offered for sale, distributed, or imported into the state to meet the following recycling rates:
   i) Not less than 30% of covered material on and after January 1, 2028;
   ii) Not less than 40% of covered material on and after January 1, 2030; and,
   iii) Not less than 65% of covered material on and after January 1, 2032.

d) Prohibits producers of expanded polystyrene (EPS) food service ware from selling, offering for sale, distributing, or importing into the state EPS food service ware unless the producer demonstrates to CalRecycle that all EPS meets the following recycling rates:
   i) Not less than 25% on and after January 1, 2025;
   ii) Not less than 30% on and after January 1, 2028;
   iii) Not less than 50% on and after January 1, 2030; and,
   iv) Not less than 65% on and after January 1, 2032 and annually thereafter.

e) By January 1, 2032, requires the PRO to develop and implement a plan to achieve 25% reduction by weight and 25% reduction by plastic component for covered material sold, offered for sale, or distributed in the state, as prescribed, including interim targets of 10% by January 1, 2027, and 20% by January 1, 2030.

THIS BILL:

1) Requires beverage manufacturers to report the following to CalRecycle:

   a) The amount in pounds and by resin type of virgin plastic and PCR plastic used by the manufacturer for plastic beverage containers for sale in the state in the previous calendar year.

   b) By country of origin, the amount in pounds of imported PCR plastic used by the manufacturer for plastic beverage containers for sale in the state in the previous calendar year.

   c) Proof that the PCR used by the manufacturer for plastic beverage containers has been validated by a third party that adheres to at least one applicable International Organization for Standardization (ISO) standard and that meets CalRecycle's criteria for validating PCR, as specified. Defines "applicable ISO standard" as ISO 22095:2020(E) 5.3.2 segregated model, 22095:2020(E) 5.4.1 controlled blending model, or 22095:2020(E) 5.4.2.2.1 rolling average percentage method.

2) Requires manufacturers to submit the information to CalRecycle under penalty of perjury pursuant to standardized forms in a form and manner prescribed by CalRecycle.

FISCAL EFFECT: According to the Senate Appropriations Committee, this bill has unknown, but likely significant, ongoing costs (Beverage Container Recycling Fund) for CalRecycle to collect and verify information related to new reporting requirements, provide legal advice and enforcement, and conduct/review audits.

COMMENTS:

1) **Plastic**. Plastics pose a threat to the environment from origin to end-of-life. Plastic production is responsible for three and a half percent of all greenhouse gas emissions—more than the entire aviation sector. In 2021, global plastics production was estimated at 390.7 million metric tons, a 4% increase from the previous year. The United Nations Environment Programme reports that only 9% of all plastic ever made has been recycled, 12% has been incinerated, and the remaining 79% has accumulated in landfills or the environment.

   Once plastics enter the environment, they remain there for hundreds to thousands of years. Plastics do not break down into their constituent parts, but instead break down into smaller and smaller particles, or microplastics. Because they are so small, microplastics are carried in the air and in water, and are easily ingested or inhaled by living things and accumulate up the food chain. Microplastics have been found in the most pristine natural environments on earth, including in the deep ocean, Antarctic sea ice, and in the sand of remote deserts. Micoplastics are found in household dust and drinking water (bottled and tap), and humans are inhaling and consuming them. A March 2024, study published in *Science of the Total Environment* identified microplastics in all human tissues sampled, with the polyvinyl chloride (PVC) being the dominant polymer. In February of this year, a study published in *Nature Medicine* found microplastics in human brains in higher concentrations than other body systems. This plastic accumulation increased 50% over the past eight years. Shockingly little information exists about the potential health impacts of microplastics exposure. Laboratory studies have found that microplastics increase the risk of cancer and disrupt hormone pathways in lab rats.

   Plastic pollution and the impacts of microplastics on human health fall disproportionately on marginalized communities. Nearly all plastic is produced from fossil fuels and generates greenhouse gas emissions and toxic chemicals that impact air and water quality. About 14% of oil is used in petrochemical manufacturing, a precursor to producing plastic. By 2050, plastic production is predicted to account for 50% of oil and fracked gas demand growth. According to *Feeding the Plastics Industrial Complex: Taking Public Subsidies, Breaking Pollution Limits*, a report released on March 14, 2024, by the Environmental Integrity Project, "more than 66% of people within three miles of factories that manufacture the main ingredients in plastic products are people of color living in communities that are over-exposed to air pollution while schools and other public services are chronically underfunded." The report notes that these facilities receive billions in subsidies while repeatedly violating environmental laws and regulations. For example, Indorama, the world's largest producer of polyethylene terephthalate (PET) resins used in beverage containers and other single-use packaging, operates a facility in Louisiana that cracks natural gas or oil into ethylene. The facility received both a $1.5 million grant from the state and an exemption from local taxes – a subsidy estimated to be worth at least $73 million over 10

years. In return, Indorama violated its permitted air pollution control limits. In one example, over five months in 2019, the facility released more than 90 times the permitted level of volatile organic compounds. Instead of coming into compliance after multiple violations, the state revised the facility's pollution control permit to allow higher levels of emissions.

Recycling plastic into new products is one way to reduce plastic pollution, as it keeps the recycled plastic out of the environment and reduces our dependence on virgin resin. However, recycling is currently only feasible for some of the more common, and least toxic, forms of plastic. The most effective way to tackle the plastic pollution crisis is to use less of it, particularly the types that are not readily recyclable.

2) **Recycled content**. The United States has not developed significant markets for recycled content materials, including plastic. Historically, China has been the largest importer of recyclable materials. In an effort to improve the quality of the materials it accepts and to combat the country's significant environmental challenges, China established Operation National Sword in 2017, which included inspections of imported recyclable materials and a filing with the World Trade Organization indicating its intent to ban the import of 24 types of scrap, including PET, high density polyethylene (HDPE), PVC, and polystyrene (PS) beginning January 1, 2018. In November 2017, China announced that imports of recyclable materials that are not banned will be required to include no more than 0.5 percent contamination.

   Following China's actions, other Southeast Asian countries have enacted policies limiting or banning the importation of recyclable plastic materials. Last year, Malaysia and Vietnam implemented import restrictions. India and Thailand have also banned scrap plastic imports.

   These limitations are important to reducing plastic pollution worldwide, as these countries have received low-quality mixed plastic waste that is challenging to recycle and has little to no scrap value. The plastic is sorted to remove the materials that can be easily recycled, and the rest is left to be burned or otherwise disposed. In countries with inadequate waste management systems, this can include being left on beaches or otherwise dumped into the environment, contributing to the ocean plastic pollution crisis.

   In order to foster markets for recycled materials and reduce the need for virgin materials, the state has established recycled content requirements for various products.

3) **Bottle Bill**. The Bottle Bill was established in 1986 to be a self-funded program to prevent littering and encourages consumers to recycle beverage containers. The program accomplishes this goal by requiring consumers to pay a deposit for each eligible container at the time of purchase and guarantees consumers repayment of that deposit, the California Redemption Value (CRV), for each eligible container returned to a certified recycler. The statute includes two main goals for the program: (1) reducing litter; and, (2) achieving a recycling rate of 80% for eligible containers. Containers recycled through the Bottle Bill's certified recycling centers also provide a consistent, clean, uncontaminated stream of recycled materials.

   The bottles that are collected through the Bottle Bill program are mostly made of PET plastic. PET is highly recyclable plastic, and many markets that include postconsumer recycle content material in their products use recycled PET (rPET) that is sourced from the

Bottle Bill program. In 2017, 47% of all available rPET in the United States was used for fiber products (e.g., carpet, clothes, and shoes), according to the Association of Plastic Recyclers and NAPCOR's "Report on Postconsumer PET Container Recycling Activity in 2017." Food and beverage products were the second-largest users of rPET, at 21%.

To promote more closed-loop recycling (where bottles are recycled into bottles that can be returned to the recycling system multiple times) and to avoid downcycling (where bottles are recycled once into a non-recyclable product), the Legislature passed AB 793 (Ting), Chapter 115, Statutes of 2020. AB 793 requires plastic beverage containers subject to the Bottle Bill to contain increasing amounts of PCR plastic. Specifically, bottles must contain 15% PCR plastic by 2022, 25% by 2025, and 50% by 2030. AB 793 grants the director of CalRecycle the ability to review and adjust the minimum PCR content percentage, which may be informed by information submitted by producers.

AB 793 also includes annual reporting requirements for plastic reclaimers, manufacturers of PCR plastic, and beverage manufacturers. These reporting requirements are critical to ensure that CalRecycle is able to verify and enforce the recycled content requirements. Plastic material reclaimers must report on the amount and resin type of empty plastic beverage containers in the Bottle Bill that they collect and sell. Manufacturers of PCR plastic report to CalRecycle the amount of food-grade flake, pellet or other PCR material they sell, and their capacity to produce food-grade material. Manufacturers of beverages sold in plastic beverage containers are required to report the amount of new and PCR plastic they use in a year. CalRecycle has authority to audit and investigate a beverage manufacturer to make sure they are in compliance with the PCR requirements established by AB 793.

4) **RPPC**. The state's RPPC Law was established in 1991 to reduce the amount of plastic waste disposed in California's landfills and to develop markets for recycled content materials. RPPCs include containers that are made from rigid plastic, such as tubs, buckets, bottles, trays, and other rigid plastic containers. The law has seven compliance options: 1) The container must contain at least 25% postconsumer recycled content; 2) The container must be routinely reused at least five times; 3) The container must be recycled at a 45% recycling rate; 4) The product manufacturer or another company under the same corporate ownership uses postconsumer material generated in California equivalent to or exceeding 25% postconsumer material; 5) The RPPC is source reduced by container weight, product concentration, or a combination of the two; 6) The container is routinely returned and refilled by the product manufacturer at least five times; or, 7) The container contains floral preservatives and is reused by the floral industry for at least two years.

5) **SB 54**. SB 54 (Allen), Chapter 75, Statutes of 2022, established the Plastic Pollution Prevention and Packaging Producer Responsibility Act, which created sweeping new minimum recycling requirements for single-use plastic packaging and food service ware (covered material), source reduction requirements for plastic covered material, and prohibits the sale or distribution of EPS food service ware unless it meets accelerated recycling rates. SB 54 requires producers to comply with the bill's requirements through an expanded producer responsibility program. Under SB 54, covered material must meet specified recycling and source reduction requirements by 2027, which ramp up until all covered material must achieve and maintain a 65% recycling rate and a 25% source reduction requirement by 2032. This bill additionally requires producers, through the PRO, to pay $500 million per year for ten years (from 2027 to 2037) to be deposited into the California

Plastic Pollution Mitigation Fund, which is established to fund various environmental and public health programs.

6) **Tracking recycled content**. The United States imports and exports significant volumes of PCR plastic, including rPET. In 2024, imports increased by 20% from the previous year. Overall, the United States imports far more rPET than it exports, primarily from Southeast Asia. The rPET entering the country is typically in flake form, recovered and processed outside the country, and it is in high demand by US end-users - particularly for the low prices offered by overseas sellers.

   Recycled plastic can be indistinguishable from newly synthesized plastic. At the same time, the cost of making rPET is higher than the cost of making virgin plastic; in 2017, the estimated average cost to produce virgin PET was $0.52-0.56 per pound, while the cost to process and produce rPET was estimated at $0.60-0.65 per pound. Because of the economic incentive to use new plastic over rPET, the legal mandates for rPET production, the amount of rPET that is imported from abroad, and the fact the two products can be indistinguishable, there are legitimate concerns that virgin plastic could be sold as PCR plastic. Additionally, different ways of calculating recycled content can be used that impact how the amount of PCR in a container is reported. It is important to ensure that PCR claims accurately reflect the amount of PCR plastic in the finished product.

7) **Author's statement**:

   > The state of California set a high bar for recycled content in plastic bottles with AB 793 (Ting, 2020), requiring 15% by 2022, 25% by 2025, and 50% by 2030. Although many popular drinks now proudly advertise the percent of recycled plastic in their bottles, there is currently no robust verification process for these claims. Recycled plastic is indistinguishable from newly synthesized plastic after it is processed by reclaimers and made into pellets or flakes. This fact threatens to undermine the ability for bottle manufacturers to make these bold statements and meet the state's targets, especially in light of reporting that identified new plastic hidden in "100% recycled" material sold to them.
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   > A third-party certification of plastics recyclers (reclaimers) would ensure that they maintain records and a well-documented method for tracking material through their system, from the purchase of reclaimed material (e.g., bales of polyethylene terephthalate (PET) bottles from waste haulers) to the sale of processed material to bottle manufacturers (e.g., recycled PET pellets). This would provide clarity about the recycled plastic sold in California, including the amount and quality of plastic from out of state, which is currently difficult to determine. Requiring these third-party reports would provide hard data on whether bottle manufacturers are meeting the state's recycled content targets and help build public confidence in plastic recycling programs.

8) **This bill**: SB 633 is intended to ensure that PCR requirements are implemented in a manner that reduces the need for virgin plastic for bottles, bolster markets for rPET, and advance closed loop recycling systems. This bill requires the collection of data on rPET imports to better understand how the state, and its plastic recyclers, are impacted by rPET import trends.

Additionally, this bill requires manufacturers to report on the country of origin for rPET and to certify that the rPET they use is made from actual recycled content.

9) **Amendments**. The author of this bill is continuing to work with stakeholders to address how information about country-of-origin is managed and how PRC material is certified and to what standards. The *committee may wish to amend the bill* to adopt the negotiated amendments.

10) **Previous and related legislation**:

AB 973 (Hoover) replaces the RPPC program with a new program that requires set PCR rates. The bill would, starting January 1, 2029, require a manufacturer to include, as part of its annual registration, proof of third-party certification of the PCR content under penalty of perjury of each of its covered products. This bill was held in Assembly Appropriations Committee.

SB 551 (Portantino), Chapter 983, Statutes of 2024, allows beverage manufacturers to demonstrate compliance with the state's recycled content requirements for beverage containers by submitting a consolidated report to CalRecycle, as specified.

AB 793 (Ting), Chapter 115, Statutes of 2020, establishes a tiered program requiring the total number of plastic beverage containers sold by a beverage manufacturer to contain certain average amounts of postconsumer recycled plastic content starting January 1, 2022, and reaching at least 50% recycled content by January 1, 2030.

REGISTERED SUPPORT / OPPOSITION:

Support

National Stewardship Action Council
Natural Resources Defense Council
Republic Services

Opposition

American Beverage Association
American Chemistry Council
California Chamber of Commerce
California Grocers Association
Consumer Brands Association
International Bottled Water Association

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