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**SENATE COMMITTEE ON ENVIRONMENTAL QUALITY**

**Senator Allen, Chair**

**2019 - 2020 Regular**

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**Bill No:** AB 793  
**Author:** Ting and Irwin  
**Version:** 6/19/2020  
**Urgency:** No  
**Consultant:** Genevieve M. Wong

**Hearing Date:** 8/14/2020  
**Fiscal:** Yes

**SUBJECT:** Recycling: plastic beverage containers: minimum recycled content

**DIGEST:** Imposes specified minimum postconsumer content standards for plastic beverage containers subject to the California Redemption Value (CRV) that requires the beverage container to contain, on average, no less than 50 percent postconsumer recycled plastic content by January 1, 2030.

**ANALYSIS:**

Existing law, the California Beverage Container Recycling and Litter Reduction Act (Bottle Bill):

- 1) Requires beverage containers sold in this state to have a CRV of five cents for containers that hold fewer than 24 ounces and 10 cents for containers that hold 24 ounces or more and requires a distributor to pay a redemption payment to the Department of Resources Recycling and Recovery (CalRecycle). Continuously appropriates these funds to CalRecycle for the payment of refund values and processing fees.
- 2) Requires that each new glass container manufactured in the state contain a minimum of 35 percent postfilled (recycled food container cullet) glass. Requires every glass food, drink, or beverage container manufacturer in the state to report the amount of tons of new glass and the tons of postfilled glass used in the manufacturing of those containers to CalRecycle.
- 3) Provides that any person convicted of a violation is guilty of an infraction punishable by a fine of up to \$100 and not more than \$1,000 per violation.

This bill:

- 1) Requires, between January 1, 2022, and December 31, 2024, the total number of plastic beverage containers filled with a beverage sold by a beverage manufacturer subject to the CRV for sale in the state to, on average, contain no less than 10 percent postconsumer recycled plastic per year. Increases that

amount to 25 percent between January 1, 2025, and December 31, 2029; and 50 percent on and after January 1, 2030.

- a) Does not apply these requirements to refillable plastic beverage containers and certain beverage manufacturers whose projected processing fees are less than a specified amount.
- 2) Requires the director of CalRecycle to consider, at least annually or at the petition of the beverage industry not more than annually, whether the minimum recycled content requirements should be waived or reduced. Requires the director to consider certain factors, such as changes in market conditions, availability or recycled plastic suitable to meet the minimum recycled content requirements of the bill, and capacity of recycling or processing infrastructure.
- 3) Subjects, commencing January 1, 2023, a beverage manufacturer that does not meet the minimum recycled plastic content requirements described by the bill to a civil penalty, and which, after March 1, 2024, increases as compliance rates decrease.
  - a) Authorizes CalRecycle to require a beverage manufacturer to submit a corrective action plan detailing how the beverage manufacturer will come into compliance in lieu of, or in addition to, a civil penalty.
  - b) Requires CalRecycle to consider certain factors in determining whether to assess a penalty and the amount of the penalty. Requires CalRecycle to consider granting a waiver, reduction, or extension of the penalties assessed to a beverage manufacturer that has demonstrated progress towards meeting those requirements, based on certain factors.
- 4) Authorizes CalRecycle to conduct audits and investigations and take enforcement action against a beverage manufacturer for the purpose of ensuring compliance with these requirements.
- 5) Deposits penalties collected into the Recycling Enhancement Penalty Account, which is created by this bill. Moneys in the account are available for expenditure upon appropriation by the Legislature for the purpose of supporting the recycling infrastructure, collection, and processing of plastic beverage containers.
- 6) Requires CalRecycle to contract with a research university to study the polyethylene terephthalate and high-density polyethylene markets and for the

study to be completed by May 1, 2025.

- 7) Commencing on or before March 1, 2022, requires plastic material reclaimers to annually report to CalRecycle the number of empty plastic beverage containers that the reclaimer has collected and sold in the previous calendar year. Also requires manufacturers of postconsumer recycled plastic to annually report to CalRecycle the amount of “food-grade” flake, pellet, sheet, fines, or other forms sold in the previous calendar year and their capacity to produce “food-grade” material. Requires the report to specify the amount of material that meets beverage manufacturer specifications for “bottle grade” material, as defined by the bill.

**Background**

- 1) *Plastic in the Bottle Bill.* The vast majority (97 percent) of beverage containers subject to the Bottle Bill are made out of Polyethylene Terephthalate (PET, #1). PET is used to manufacture most soft drink and water bottles. Other types of plastics used to make containers subject to the Bottle Bill include High Density Polyethylene (HDPE, #2), Polyvinyl Chloride (PVC, #3), Low Density Polyethylene (LDPE, #4), Polypropylene (PP, #5), Polystyrene (PS, #6), and other (#7). The table below shows a breakdown of containers sold in 2018 by plastic type, as well as containers recycled and their recycling rate.

*Plastic Containers Sold and Recycling Rate in 2018*

Plastic Type	Containers Sold	Containers Recycled	Recycling Rate (%)
<b>PET, #1</b>	12,480,696,915	9,276,239,810	74
<b>HDPE, #2</b>	196,169,790	127,773,380	65
<b>PVC, #3</b>	116,110	16,651	14
<b>LDPE, #4</b>	8,849,177	289,590	3
<b>PP, #5</b>	3,512,434	372,222	11
<b>PS, #6</b>	117,416,820	32,047,313	27
<b>Other, #7</b>	44,754,072	2,930,194	7

Source: CalRecycle May 2019 Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates

- 2) *Recycled plastic markets.* The US 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, HDPE, PVC, and 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. Last year, India announced that it will ban scrap plastic imports. Thailand has announced a ban that will go into effect in 2021.

- 3) *Recycled plastic beverage containers.* PET is one of the easiest plastics to recycle, and recycled PET (rPET) can be used to manufacture numerous items including beverage containers, clothing, health care product containers, and carpet, among many others. Other types of plastics, particularly #3, 4, 6, and 7 plastics, are much more challenging to recycle, and many of these types of products simply get sent to a landfill. This problem has likely been exasperated by the recent export restrictions implemented by China and other countries.

The Food and Drug Administration (FDA) oversees the use of recycled materials to make new food containers. FDA's safety concerns include ensuring that contaminants from the postconsumer material are not in the final food-contact product, that recycled postconsumer material not regulated for food-contact use is not incorporated into food-contact packaging, and that adjuvants in the recycled plastic comply with the regulations for food-contact use. To address these concerns, FDA considers each proposed use of recycled plastic on a case-by-case basis and issues informal advice as to whether the recycling process is expected to produce plastic suitable for food-contact applications. FDA has prepared the Guidance for Industry - Use of Recycled Plastics in Food Packaging: Chemistry Considerations to assist manufacturers of recycled-content food packaging.

Manufacturers are slowly responding to the need to increase recycled content in their products. Coca Cola has announced a goal to include 50% recycled content by 2030. PepsiCo's sustainability goals include increasing recycled materials in plastic packaging, reducing packaging's carbon impact, and working to increase recycling rates. While these goals indicate that incorporating additional recycled content is possible, currently the vast majority of plastic beverage containers contain little to no recycled content. AB 2530 (Gordon), Chapter 861, Statutes of 2016 required beverage container manufacturers to report the amount of recycled content in their products. According to the 2017 reports, the vast majority of manufacturers continue to use no recycled content.

## Comments

- 1) *Purpose of Bill.* According to the author, “In California alone, nearly 12 billion plastic bottles are sold every year. While many plastic bottles are made of recyclable content, more than 3 billion bottles are not recycled at all, and are dumped in landfills. In order to encourage efficient use of recyclable plastics, AB 793 sets a minimum recycled content standard for plastic bottles in California.”
- 2) *Minimum content standards support recycling markets.* Market challenges in plastic recycling are due to numerous reasons, including, but not limited to:
  - a) *Low demand for recycled plastic.* As mentioned previously, beverage container manufacturers currently use very little recycled plastic on their own. The major reason for low demand for recycled plastics by beverage manufacturers is due to the low price for producing virgin plastic, making it a much cheaper option than using recycled plastic. While cheap and more economical for manufacturers, the low market price for virgin plastic does not account for its high environmental costs from production, disposal, and litter.
  - b) *Low scrap value for plastic.* Demand directly impacts price, and low demand for recycled plastic means a lower price will be paid for that material. Scrap value for #3-7 plastics is particularly problematic, but even PET, which has a positive scrap value, is still much lower than aluminum. As of February 2019, the scrap value for a ton of PET was \$188, compared to aluminum which was \$1,150 per ton. Recent shifts by beverage manufacturers from using aluminum to plastic, as well as the market impacts from the China policy, has only exasperated this challenge.
  - c) *Low recycling rate for plastic.* In turn, low scrap value for plastic reduces the recycling incentive, leading to lower recycling rates.

This bill is intended to help correct these market failures. By requiring manufacturers of plastic beverage containers to achieve specified recycled-content requirements, this bill has the potential to support plastic recycling markets in the following ways:

- i) Increase demand for recycled plastic;
- ii) Increase scrap value for recycled plastic;
- iii) Increase the recycling rates for plastic beverage containers;

- iv) Incentivize a shift away from using non-economically feasible types of recycled plastics (#3-7); and
- v) Reverse the trend back to using more aluminum beverage containers.

All of these intended market impacts from this bill have the potential to correct market failures and lead to a reduction in the production of virgin plastic and plastic waste.

- 3) *Waiving or reducing minimum recycled content requirements based on certain factors, but can't increase based on those same factors?* AB 793 requires CalRecycle to consider whether the minimum recycled content requirements should be waived or reduced based on a number of factors, including market conditions and the availability of recycled plastic. CalRecycle, however, would be prohibited from adjusting the minimum content higher than what is statutorily prescribed *based on those same conditions*. If CalRecycle can lower, or *all together waive*, the minimum content requirements due to market conditions or a lack of available recycled plastic, shouldn't the department be able to increase minimum content requirements due to market conditions or an abundance of recycled plastic?
- 4) *Off ramps for beverage manufacturers.* Under the bill, beverage manufacturers have three potential opportunities to be "excused" from having to comply with, or otherwise be penalized for not complying with, the minimum content requirements.
  - The director can waive or reduce the minimum postconsumer recycled plastic content percentages if the director makes a finding that the minimum recycled content requirement should be adjusted based on factors such as changes in market conditions, recycling rates, availability of recycled plastics, capacity of recycling or processing infrastructure, and progress made by beverage manufacturers.
  - If a beverage is not in compliance with the minimum content requirements, the department, *in lieu of* or in addition to assessing a penalty, may require the beverage manufacturer to submit a corrective action plan. Whether a penalty is assessed is based on factors such as whether the violation is intentional, whether there is a chronic pattern of noncompliance, the economic size and condition of the beverage manufacturer, and whether the violation is due to circumstances beyond the reasonable control of the beverage manufacturer or otherwise unavoidable under the circumstances including, but not limited to, unforeseen changes in market conditions.
  - If it is determined that a penalty should be assessed, the department is required to consider granting a waiver, reduction, or extension of the

penalties after considering anomalous market conditions, disruption in, or lack of supply of, recycled plastics, and other factors that have prevented a beverage manufacturer from meeting the minimum content requirements. According to the author, this is consistent with CalRecycle's current practices for assessing penalties.

A beverage manufacturer could seek relief from any of these requirements or enforcement provisions based on an assertion that there is no market available. Could this argument have the potential to undercut the entire premise of this bill – which is to create those markets? If beverage manufacturers are exempt from the requirements due to market conditions, those markets will not develop. The purpose of gradually increasing the recycling content requirements is to allow enough time for the market to adjust to the content requirements. Exempting beverage manufactures from these requirements will hinder any progress in creating those markets and will not help with the recycling issues the state currently faces. Further, there is no limit on the number of extensions or renewals that CalRecycle may grant for a corrective action plan, potentially allowing a beverage manufacturer to not comply with the minimum content standards in perpetuity.

However, it is also argued that market conditions is just one of multiple factors that CalRecycle must consider in each determination. CalRecycle must also consider the availability of supply. However, could a claim from beverage manufacturers that market conditions prevent them from complying with the bill's requirements expose CalRecycle to a risk of litigation if CalRecycle ultimately finds that, despite the beverage manufacturers' claim, the minimum content requirements should not be waived or reduced due to the availability of material?

Ultimately, the bill's success of creating a market for recycled plastic will depend on CalRecycle's implementation and the degree to which waivers and reductions are provided and the requirements enforced.

- 5) *Duplicative Reporting.* AB 901 (Gordon), Chapter 746, Statutes of 2015, changed how organics, recyclable material, and solid waste information is reported to CalRecycle. Disposal, recycling (including reclaimers), and compost facilities, as well as exporters, brokers, and transporters of recyclables or compost will be required to submit information directly to CalRecycle on the types, quantities, and destinations of materials that are disposed of, sold, or transferred inside or outside of the state. It also granted CalRecycle enforcement authority to collect this information. Regulations to implement

AB 901 went into effect on March 5 last year.

The data acquired by the new regulations will inform CalRecycle's understanding of material flows within the state's recycling infrastructure; allow CalRecycle to better estimate total recycling and composting; and, enable CalRecycle to track progress towards several state goals and programs, including the state's 75% recycling goal, mandatory commercial recycling, and organics diversion programs. This information will allow CalRecycle to implement various improvements in areas such as increased responsiveness to changes in the recycling landscape, operational efficiencies, and the targeting of state resources to recycling infrastructure to foster a circular economy.

CalRecycle also collects information regarding the number of plastic beverage containers processed by in-state reclaimers under the Plastic Market Development Payment (PMDP) Program, which is intended to develop California markets for recycled empty plastic beverage containers. CalRecycle makes payments of up to \$10 million annually to certified entities and California product manufacturers. Up to \$150 per ton, as determined by CalRecycle, may be paid to certified entities (i.e., reclaimers) for washing and producing flake, pellet, or other forms usable for a product manufacturer from empty plastic beverage containers collected in the state for recycling and product manufacturers using plastic material from the certified entity to manufacture a plastic product in the state. Certified entities and product manufacturers must each submit a PMDP Claim Form to CalRecycle for each calendar quarter in which the payment is being claimed. The reporting submitted under the PMDP Program provides CalRecycle with comprehensive information regarding the amount, type, and end use of plastic processed by reclaimers. In 2017, reclaimers reported 16,967 tons of polyethylene terephthalate (PET) and 2,590 tons of high-density polyethylene (HDPE).

The reporting requirement in this bill seems duplicative of the extensive reporting requirements reclaimers are already subject to under AB 901 and the PMDP Program.

- 6) *Defining "bottle-grade" for purposes of reporting.* "Bottle-grade" is not a term currently used in statute, and this bill provides a definition of that term. However, some argue that the definition of "bottle-grade," as proposed by this bill, only captures a portion of the available universe of plastic that can be used in the manufacture of beverage containers and is not a true representation of what is actually available. There is no one standard because different beverage manufacturers use different specifications in the manufacturing of their plastic bottles. By defining the term more narrowly than what is actually available and



used in practice, the definition, it is argued, excludes portions of available recycled plastic that is generated by in-state reclaimers. If only a fraction of the available plastic is being reported to CalRecycle, how does that inaccurate amount affect CalRecycle's evaluation of the availability of plastic for purposes of waiving or reducing the minimum content standards, allowing a corrective action plan, or issuing, waiving, or reducing a penalty for noncompliance?

- 7) *Availability of plastic is not limited to California.* California-based reclaimers process recycled plastic beverage containers collected through the state's Bottle Bill [a few also accept clamshells (i.e., berry containers)] into recycled pellet or flake for the manufacture of new plastic products. Because these containers held food (including beverages), as defined by federal regulation, the recycled material is suitable for use in food packaging. Demand in California has been primarily for clamshells rather than bottles, because most beverage containers contain little, if any, recycled content. Some material is sold outside of California for other purposes, depending on demand. The supply of recycled content material is not limited to California reclaimers. Other states, particularly those with Bottle Bill laws, are also producing food grade recycled plastic. Like virgin plastic, recycled content plastic is internationally traded.

The bill requires CalRecycle, when determining whether to adjust the minimum recycled content requirement, to consider certain factors including the availability of recycled plastic and changes in market conditions, including supply and demand for postconsumer recycled plastics. However, the language is silent on what data CalRecycle is to use. It seems that the purpose of the reclaimers reporting requirement is to aid CalRecycle in making this determination. However, as discussed above, the amount of reported recycled material available may not accurately reflect true supply amounts and, moreover, recycled material available from California reclaimers is not a true indicator of the availability of recycled plastic on the global market.

*The committee may wish to amend the bill to require CalRecycle to consider supply and demand for postconsumer recycled plastics, collection rates, and bale availability both domestically and globally and to consider California's and other beverage container recycling programs when considering the availability of suitable recycled plastic.*

**Related/Prior Legislation**

AB 792 (Ting) is very similar to this bill. AB 792 was vetoed by the Governor due to cost concerns and the burden waiver petitions allowed under the bill would put on the state.

SB 168 (Wieckowski, 2018) would have required CalRecycle to adopt minimum recycled content standards for plastic beverage containers. SB 168 did not receive enough votes to get off of the Assembly Floor.

**SOURCE:** Authors

**SUPPORT:**

5 Gyres Institute  
7th Generation Advisors  
American Beverage Association  
California Chapters of The Solid Waste Association of North America's Legislative Task Force  
California League of Conservation Voters  
Californians Against Waste  
Center for Oceanic Awareness, Research, & Education  
City and County of San Francisco  
Container Recycling Institute  
Defenders of Wildlife  
Heal the Bay  
Monterey Bay Aquarium  
Natural Resources Defense Council  
Nature Conservancy  
Nestle Waters North America, INC.  
Northern California Recycling Association  
One Earth Recycling  
Plastic Oceans International  
Plastic Pollution Coalition  
Plastic Recycling Corporation of America  
Recology  
RecycleSmart  
Republic Services INC.  
RethinkWaste  
San Francisco Department of The Environment  
Save Our Shores  
Seventh Generation Advisors  
Sierra Club California

StopWaste  
Surfrider Foundation  
The Story of Stuff Project  
Tomra North America, INC.  
UPSTREAM  
Wishtoyo Chumash Foundation  
Zero Waste USA

**OPPOSITION:**

None received

**-- END --**