SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
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Author:	Ting, et al.		
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SUBJECT: Solid waste: thermoform plastic containers: postconsumer thermoform recycled plastic: commingled rates

DIGEST: Establishes minimum recycled content requirements for thermoform plastic containers (thermoforms), as specified; redefines "commingled rate" for purposes of California's Bottle Bill program; and requires CalRecycle to exclude thermoform plastic for purposes of calculating the commingled rate for each type of plastic container.

ANALYSIS:

Existing law:

1) Under the Integrated Waste Management Act of 1989 (IWMA), establishes a state recycling goal of 75% of solid waste generated to be diverted from landfill disposal through source reduction, recycling, and composting. Requires each state agency and each large state facility to divert at least 50% of all solid waste through source reduction, recycling, and composting activities. IWMA also requires a state agency and large state facility, for each office building of the state agency or large state facility, to provide adequate receptacles, signage, education, and staffing, and arrange for recycling services, as specified (PRC §§ 41780.01, 42921, 42924.5)

2) Under the California Beverage Container Recycling and Little Reduction Act (Bottle Bill):

    a) Requires that each new glass container manufactured in the state contain a minimum of 35% 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 every month (PRC §14549).

b) Requires, between January 1, 2022, and December 31, 2024, the total number of plastic beverage containers 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. PRC §14547)

c) Requires CalRecycle to recalculate commingled rates paid for beverage containers and postfilled containers, as specified. (PRC §14549.5)

i) Defines "commingled rate" as the ratio of empty beverage containers to all other containers of the same material type, as determined by CalRecycle. (PRC §14506.7)

d) Prohibits recycling centers and processors from paying curbside programs more than the applicable statewide average curbside commingled rate unless the curbside program has received an individual commingled rate from CalRecycle. (PRC §14573.51)

3) Establishes the Rigid Plastic Packaging Container (RPPC) law, which requires that specified plastic containers that are made of plastic, capable of at least one closure, and hold a product sold in California to meet one of the following compliance options (PRC §42310):
   a) Contain a minimum of 25% postconsumer recycled content;
   b) Be source reduced by at least 10%, as specified;
   c) Be routinely reused or refilled at least 5 times;
   d) Achieve a 45% recycling rate; or,
   e) The product manufacturer consumes sufficient California-generated postconsumer recycled content equivalent to achieving a 25% postconsumer recycling rate.

This bill:

1) For purposes of this bill, defines the following:

   a) "Producer" as:
      i) A person who manufacturers thermoform plastic containers (thermoforms) in the state under that person's own name or brand and who sells or offers for sale the thermoform in the state;
      ii) If there is no person who meets this requirement, a person who imports the thermoform as the owner or licensee of a trademark or

brand under which the thermoform is sold or distributed in the state; or

iii) If there is not person who meets the above two requirements, a person or company who offers for sale, sells, or distributes the thermoform in the state;

iv) Producer does not include a person or company that produces, harvests, and packages an agricultural commodity on the site where the agricultural commodity was grown or raised.

b) "Thermoform plastic container" as a plastic container, such as a clamshell, cup, tub, lid, box, tray, egg carton, or similar rigid, nonbottle packaging, formed from sheets of extruded resin and used to package items such as fresh produce, baked goods, nuts, and deli items.

i) Does not include:

a) A lid or seal of a different material type from plastic;

b) Thermoforms that are medical devices, medical products that are required to be sterile, prescription medicine, and packaging used for those products;

c) A refillable thermoform that ordinarily would be returned to the manufacturer to be refilled and resold;

d) A plastic beverage container subject to the California Beverage Container Recycling and Litter Reduction Act; and

e) A thermoform of a resin type for which the total amount of the resin type sold in California annually is either:

(1) Less than 1,000,000 pounds for a resin type other than expanded polystyrene; or

(2) Less than 50,000 pounds of expanded polystyrene.

f) A thermoform that is designed to be composted and is eligible to be labeled "compostable."

c) "Postconsumer thermoform recycled plastic" means plastic produced from the recovery, separation, collection, and reprocessing of thermoforms that would otherwise be disposed of or processed as waste after consumer use.

2) Requires that the total thermoforms sold by a producer in the state to, on average, contain the following minimum amount of postconsumer recycled plastic per year:

a) Commencing January 1, 2024, no less than 10 percent postconsumer recycled plastic per year;

b) Commencing June 1, 2027, either:
   i) No less than 20 percent postconsumer thermoform recycled plastic per year if the recycling rate for each resin type of thermoform plastic container is equal to or exceeds 50 percent for calendar year 2026; or
   ii) No less than 25 percent postconsumer thermoform recycled plastic per year if the recycling rate for each resin type of thermoform plastic container is less than 50 percent for calendar year 2026.

c) Commencing June 1, 2030, either:
   i) No less than 20 percent postconsumer thermoform recycled plastic per year if the recycling rate for each resin type of thermoform container is equal to or greater than 75 percent for calendar year 2029; or
   ii) No less than 30 percent postconsumer thermoform recycled plastic per year if the recycling rate for each resin type of thermoform container is less than 75 percent for calendar year 2029.

3) Commencing January 1, 2024, subjects a producer that does not meet the above-described minimum content requirements to an annual administrative penalty and, commencing March 1, 2025, requires the administrative penalty be collected annually, unless a reduction in the penalties has been approved.

   a) Allows the administrative penalties be paid to CalRecycle in quarterly installments or pursuant to a CalRecycle-approved alternative payment schedule, not to exceed 12 months. Authorizes CalRecycle to grant a one-time extension, at the discretion of the director of CalRecycle, of up to an additional 12 months if needed due to unforeseen circumstances.

   b) Requires administrative penalties be deposited into the Thermoform Recycling Enhancement Penalty Account, which is created by the bill, and permits those moneys to be expended, upon appropriation, for the purpose of supporting the recycling, collection, and processing infrastructure of thermoforms in the state.

4) Commencing March 1, 2025, requires CalRecycle to invoice annually any assessed administrative penalties for the previous calendar year based on that year's postconsumer thermoform recycled plastic requirements. Requires the penalty amount to be determined in accordance with a specified formula and based on the amount of virgin plastic and postconsumer thermoform recycled plastic used and reported by the producer.

5) Authorizes CalRecycle to conduct audits and investigations and take enforcement actions against a producer, including enforcement action against a producer that fails to pay or underpays the assessed or audited administrative penalty after notice and hearing.

    a) Requires CalRecycle to keep confidential all business trade secrets and proprietary information about manufacturing processes and equipment that CalRecycle gathers or becomes aware of through the course of conducting audits or investigations.

    b) Authorizes a producer to obtain a copy of CalRecycle's audit of that producer.

6) Allows for a reduction of the administrative penalties if all the following apply:

    a) CalRecycle considers granting a reduction based the following:
        i) Anomalous market conditions;
        ii) Disruption in, or lack of supply of, recycled plastic due to an unforeseen circumstance or event;
        iii) If the recycling rate is 60 percent or higher, lack of available supply due to purchases from industries outside of the packaging industry;
        iv) Other factors that have prevented a producer from meeting the requirements.

    b) The producer submits to CalRecycle a corrective action plan detailing the reasons why the producer will fail to meet or has failed to meet the minimum postconsumer thermoform recycled plastic requirement and the steps the producer will take to comply with the minimum postconsumer thermoform recycled plastic requirements within the next reporting year.

        i) Authorizes CalRecycle to approve the corrective action plan, and to reduce the administrative penalties after the corrective action plan is approved and implemented.

        ii) Requires administrative penalties to accrue from the point of noncompliance with the minimum postconsumer thermoform recycled plastic requirement if CalRecycle disapproves the corrective action plan or if the producer fails to implement the plan.

7) Requires a corrective action plan to include:
    a) A compliance deadline not to exceed 24 months from the date of the original notice of violation;

b) A description of each action the producer is required to take to remedy the violation;
c) Applicable compliance deadlines for each action; and
d) Description of penalties that may be imposed if a producer fails to comply.

8) Requires a producer to annually report to CalRecycle, under penalty of perjury and in a form and manner prescribed by CalRecycle, the amount in pounds and by resin type of virgin plastic and postconsumer thermoform recycled plastic used to manufacture its thermoforms sold or offered for sale in the state in the previous calendar year. Requires CalRecycle to post this information on its website.

9) Requires importers and manufacturers of thermoforms whose annual total sales exceed a certain amount of thermoforms for all resin types (except expanded polystyrene) or a certain amount of expanded polystyrene equivalent and who first sell the container in or into the state to do all of the following:

a) Register and pay a registration fee to CalRecycle for the reasonable regulatory costs related to implementing and enforcing the bill's requirements in relation to the importer's or manufacturer's activities;
b) Annually report to CalRecycle thermoform sales for the previous calendar year;
c) Report to CalRecycle the amounts of all thermoforms sold in or imported into the state as follows:
    i) The amount in pounds of containers imported into or sold in the state, by each purchaser; and
    ii) The resin type of the containers and the amount in pounds and types of postconsumer resin, if any, in those containers, by each producer.
d) Maintain records of all sales and information regarding the source of any postconsumer resin for verification purposes, as required by CalRecycle.

10) Requires entities that purchase in the state more than a certain amount of thermoform for all resin types (except expanded polystyrene) or a certain amount of expanded polystyrene equivalent in any calendar year to meet both of the following:

a) The total thermoform purchases in a calendar year must either:
    i) Have an average postconsumer content that meets or exceeds the applicable minimum content requirements; or
    ii) Demonstrate with proof of export documentation that the average postconsumer content of thermoforms purchased in the calendar year that were not exported out of the state have an average postconsumer

content that meets or exceeds the applicable minimum content requirements.

b) Maintain records of purchases, as required by CalRecycle.

11) Requires entities that export from the state more than a certain amount of thermoform for all resin types (except expanded polystyrene containers) or a certain amount of expanded polystyrene equivalent, in any calendar year, to report to CalRecycle the total pounds of thermoforms exported by resin type.

12) Exempts specified actions from being considered a violation of the Cartwright Act and the Unfair Practices Act, except as specified.

13) Under the Bottle Bill Program,

a) Redefines "commingled rate" to mean the ratio empty beverage containers to all other containers of the same material type *and form*, as determined by CalRecycle.

b) Requires CalRecycle, for purposes of calculating the commingled rate for each type of plastic container, to exclude thermoform plastic.

Background

1) *Solid waste in California.* For over three decades, CalRecycle has been tasked with reducing disposal of municipal solid waste and promoting recycling in California through the IWMA. Under IWMA, the state has established a statewide 75 percent source reduction, recycling, and composting goal by 2020 and over the years the Legislature has enacted various laws relating to increasing the amount of waste that is diverted from landfills. According to CalRecycle's State of Disposal and Recycling for Calendar Year 2019, published February 12, 2021, 42.2 million tons of material were disposed into landfills in 2019.

According to CalRecycle's report, an estimated 28.9 million tons of waste were recycled or diverted in California in 2019, resulting in a statewide recycling rate of 37%, down from 40% in 2018, and a peak of 50% in 2014. Based on these trends, it is unlikely that the state will meet its diversion goals.

2) *Market challenges for recyclable materials.* The U.S. has not developed significant markets for recyclable content materials. In California, approximately one third of recyclable material is exported. China used to be

where the world sent their recyclable material, but beginning in 2017, the country began significantly restricting the types of materials and levels of contamination that would be accepted. Commencing earlier this year, China announced that it would no longer be accepting all waste imports. Before this year's blanket waste ban, China accepted 32 types of scraps for recycling and reuse and limited contamination levels of those materials to 0.5 percent. The initial ban left waste-exporting countries such as the U.S. scrambling to find alternative destinations, including Southeast Asian nations like Thailand, Vietnam, and Indonesia, which quickly became overwhelmed by the volume of refuse received. Soon after, those countries began to impose their own bans and restrictions on waste imports. Without a global market to send these "recyclable" materials, the contents of many blue recycling bins are being diverted to landfills.

3) *Thermoforms*. Thermoforms include a wide range of plastic packaging created by heating sheets of plastic and then formed into a specific shape in a mold. Common thermoforms include plastic "clamshell" trays used for take-out food, plastic egg cartons, and bakery trays. Most thermoforms are PET, but can be made from a wide range of plastic resins, including polypropylene (PP), and PS, including expanded polystyrene (EPS). In California, thermoforms have included relatively high quantities of recycled content; however, the source of its PET has been PET bottles, not thermoforms. While providing an important market for recycled bottle plastic, recycling PET bottles into thermoforms means that the bottle is recycled once and then discarded (thermoforms usually end up in landfills). Under AB 793 (Ting), Chapter 115, Statutes of 2020, bottle manufacturers are required to include recycled content to ensure that bottles are recycled back into bottles.

   In jurisdictions that accept thermoforms in curbside recycling, only thermoforms made out of PET are usually accepted. The majority of PET thermoforms collected are baled with other PET, primarily bottles, even though bottles and thermoforms generally cannot be recycled together. As a result, recyclers separate the thermoforms from the bottles and the thermoforms are discarded.

4) *The cost of plastic pollution*. According to a 2021 report published by the United Nations Environment Progamme (UNEP), *"Neglected – Environmental Justice Impacts of Maine Litter and Plastic Pollution,"* 99 percent of plastics are produced from petrochemcials, which are sourced from fossil fuels. New plastic, known as "virgin" material, is less expensive than recycled plastic and weak oil prices have widened the gap. The economic slowdown of the COVID-19 pandemic has punctured demand for oil, which, in turn has cut the price of

new plastic. Between 1950 and 2015, 8.3 billion metric tons of new plastic have been produced, less than 10% of which has been recycled. About 80 percent (4.9 billion metric tons) of this plastic is accumulating in landfills and the natural environment. Plastic pollution winds up in rivers, waterways and oceans, aggregating pollutants, harming wildlife, and impacting communities that depend on the ocean for their sustenance and livelihoods.

In 2017, the world's plastic production reached 348 million metric tons, a 20% increase in five years and a 20,000% (20-fold) increase since 2015. This increase in production has rapidly accelerated in the last few decades, and more than half of the plastics ever created were produced in the last 15 years. Without action, the annual plastic flows to the ocean are expected to grow from 11 million metric tons in 2016 to 29 million metric tons in 2040, with consequences to communities and ecosystems.

Plastic production. While the conversation around plastic has focused on its end of life, plastic pollution starts with fossil fuel extraction, and continues through manufacturing, transportation, usage, and finally disposal. Hundreds of petrochemical facilities throughout the United States create the pellets used in the production of plastic products. About 14% of oil is used in petrochemical manufacturing, a precursor to producing plastic. By 2050, it is predicted to account for 50% of oil and gas demand growth. California ranks third in the nation in oil refining capacity; our 17 refineries have a combined capacity of nearly 2 million barrels per day. Oil drilling and refining disproportionally impact low-income communities of color. In the United States, about 56% of the people who live within three kilometers of a large commercial hazardous waste facility are people of color. In California, that figure soars to 81%. In the Los Angeles area, over 580,000 people live within five blocks of an active oil or gas well. Every step in the production of plastic, from extraction to manufacturing, impacts air and water quality and human health.

Environmental costs. Plastic, most of which does not decompose, is a significant driver of climate change. According to the UNEP report, plastic, when discarded, does not break down and instead releases fillers as gas and contaminated liquid and break down into increasingly smaller pieces. This allows plastics to accumulate as toxins and microplastics in the environment. The manufacture of four plastic bottles alone releases the equivalent greenhouse gas emissions of driving one mile in a car, according to the World Economic Forum. The United States burns six times more plastic than it recycles, according to research in April 2019 by Jan Dell, a chemical engineer

and former vice chair of the U.S. Federal climate committee.

According to the report, *Plastic & Climate: The Hidden Costs of a Plastic Planet*, greenhouse gases are emitted at each stage of the plastic lifecycle: 1) fossil fuel extraction and transport, 2) plastic refining and manufacture, 3) managing plastic waste, and 4) its ongoing impact to oceans, waterways, and landscape. According to the report, greenhouse gas emissions from the plastic lifecycle threaten the ability of the global community to meet carbon emission targets. In 2019, the production and incineration of plastic will have added more than 850 million metric tons of greenhouse gases into the atmosphere, which is equal to the emissions from 189 five-hundred megawatt coal power plants.

Plastic is primarily landfilled, recycled, or incinerated – each of which produces varying amounts of greenhouse gas emissions. Landfilling emits the least greenhouse gas emissions on an absolute level, although it presents significant other risks. Recycling has a moderate emissions profile but displaces new virgin plastic on the market, making it advantageous from an emissions perspective. Incineration leads to extremely high emissions and is the primary driver of emissions for plastic waste management. Further, plastic packaging represents about 40% of plastic demand. It is estimated that in 2015, incineration of plastic packaging totaled 16 million metric tons of carbon dioxide equivalents.

Some, however, argue that other packaging products can cause more emissions than plastics; because plastic is light, it is indispensable for the world's consumers and can help reduce emissions. Some say that it is upon the governments to improve waste management infrastructure.

Health costs. A problem not often discussed are the additives and chemicals that can be found in plastics, some of which could have negative impacts on human health. According to the report *Plastic & Health: The Hidden Cost of a Plastic Planet*, plastic poses distinct risks to human health at every stage of its lifecycle. This includes the extraction and transport of fossil feedstocks for plastic; the refining and production of plastic resins and additives; consumer products and packaging; toxic releases from plastic waste management; fragmenting and microplastics; additional exposure to plastic additives as plastic degrades; and ongoing environmental exposures by contaminating and accumulating in food chain through agricultural soils, terrestrial and aquatic food chains, and water supply.

The report recognizes, however, that there are gaps in knowledge that prevent researchers from being able to fully evaluate the health impacts of plastic. These include not knowing exactly what chemicals are in plastic and its production processes; limited research into the impacts and movement of plastic and microplastics through terrestrial environments, marine ecosystems, and food chains; and limited understanding of the impacts of microfibers and other plastic microparticles that are increasingly being documented in human tissues.

Costs to California's economy. A National Oceanic and Atmospheric Administration Marine Debris Program economic study published in 2014 examined the costs of marine debris to Californians. The study focused on Orange County, and found that residents lose millions of dollars each year avoiding littered, local beaches in favor of choosing cleaner beaches that are farther away and more costly to reach. In one scenario, the study found that reducing marine debris by just 25% would save Orange County residents $32 million in June-August; eliminating marine debris entirely would save an estimated $148 million.

A 2013 report produced for the Natural Resources Defense Council by Keir Associates estimates that Californians are shouldering $428 million annually to try to prevent litter from becoming marine debris that damages the environment, tourism, and other economic activities.

Costs to the ocean and marine life. Plastics are estimated to comprise 60-80% of all marine debris and 90% of all floating debris. According to the California Coastal Commission (Commission), the primary source of marine debris is urban runoff (i.e., litter). By 2050, by weight there will be more plastic than fish in the ocean if we keep producing (and failing to properly manage) plastics at predicted rates, according to *The New Plastics Economy: Rethinking the Future of Plastics*, a January 2016 report by the World Economic Forum.

According to a recent report, 24 expeditions from 2007-2013 estimated that there are 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 due to excessive UV radiation exposure and subsequent photo-degradation. These plastic pieces are

confused with small fish, plankton, or krill and ingested by birds and marine animals. Over 600 marine animal species have been negatively affected by ingesting plastic worldwide. Last year, 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, hydrophobic chemicals present in the ocean in trace amounts (e.g., from contaminated runoff and oil and chemical spills) have an affinity for, and can bind to, plastic particles where they enter and accumulate in the food chain.

Comments

1) *Purpose of Bill.* According to the author, "Thermoform plastic packaging such as clamshells revolutionized the ability of California farmers to transport their fresh produce to consumers nationwide. There are approximately 200 million pounds of thermoform waste discarded every year in California and growing. The state currently has a low collection rate for the material. In order to encourage efficient use of recyclable plastics, this bill sets a minimum recycled content standard. AB 478 helps create a circular economy to produce, collect, recycle and reprocess post-consumer plastic thermoformed containers."

2) *Comparison to AB 793*. AB 793 requires plastic beverage containers that are a part of the California's Bottle Bill program to contain a minimum amount of postconsumer recycled plastic. Under AB 793, plastic beverage containers are required to contain a minimum of 15 percent postconsumer recycled plastic by 2022, 35 percent by 2029, and 50 percent by 2030. This bill, in comparison, requires thermoforms to contain at least 10 percent by 2024; either 20 percent or 25 percent depending on the corresponding recycling rate by June 1, 2027; and either 20 percent or 30 percent depending on the corresponding recycling rate by June 1, 2030.

   Minimum postconsumer recycled content. The recycled content that is required of thermoforms in this bill is lower than what is required of plastic beverage containers in AB 793. This, according to the author, is to account for the different supply chains for the two types of product. Because California exports much of its thermoforms out of state, it is harder to get that material back. These overall lower minimum postconsumer recycled requirements take

this into consideration.

Tethering minimum postconsumer recycled content to recycling rates. Unlike AB 793, which requires the minimum postconsumer recycled content amount to increase over time regardless of recycling rates, AB 478 creates a tiered structure within each compliance period and links the minimum amount of postconsumer thermoform recycled plastic of a particular resin type to the recycling rate of that same resin type. The minimum amount of postconsumer content still increases over time, but the amount of increase is dependent on a corresponding recycling rate. If the recycling rate for a particular resin type is low, the minimum content requirements will be higher; and vice versa. Bumping up the minimum content requirements, according to the author, will drive up the recycling rate for that resin type.

While the provisions do not explicitly state that the minimum postconsumer thermoform recycled plastic of a particular type of resin is tied to the recycling rate of that particular resin type, that is the author's intent.

The committee may wish to amend the bill to make this clarification.

3) *Getting cleaner material*. Instead of redeeming their CRV deposit at a recycling center, many consumers opt to throw their empty beverage containers into their recyclable bin (aka "blue bin") along with other "recyclable" material. The contents of that bin are picked up by curbside programs, which are operated by a solid waste hauling company (haulers), and are sorted by material into bales at Material Recovery Facilities (MRFs). Haulers can sell these bales to recycling centers and processors and receive a CRV "commingled rate," based on the weight of the bale. These bales are subject to a CRV commingled rate because the bales consist of both CRV material (such as plastic bottles) and non-CRV material (such as thermoforms). Although PET thermoforms are often baled with other PET products (usually bottles), the two, as noted above, generally cannot be recycled together. Thus, the recyclers end up separating the thermoform from the bottles and discarding the thermoform. Baling the two different materials together contributes to contamination issues, which can make otherwise recyclable material, unrecyclable.

By requiring CalRecycle to exclude thermoform plastic when calculating the commingled rate for each type of plastic container, AB 478 is prohibiting thermoform from being included in those bales upon which a commingled rate is paid. Thus, if a hauler wants to receive a CRV commingled rate on the bales, thermoform cannot be included in those bales. This will help provide a supply

of postconsumer thermoform plastic containers for recycling and has the added benefit of providing higher quality CRV material for recycling PET bottles.

Will the commingled rate stay the same? The commingled rate is the ratio of CRV material to all other containers of the same material type. CalRecycle determines the ratio based on surveying bales at recyclers. Because those bales will no longer include thermoform, and thus will have a higher ratio of CRV material, some have questioned whether CalRecycle will adjust the commingled rate to reflect that increased ratio. PRC §14549.5 requires CalRecycle to, at least annually or more frequently as CalRecycle determines to be necessary, review and recalculate the commingled rates. It is reasonable to expect CalRecycle to survey bales and recalculate the commingled rates to determine the new ratio of CRV to non-CRV material.

Other impacts to haulers. The prohibition against including thermoforms in commingled bales may affect haulers and the operations of their MRFs. It is argued that the curbside programs, and the corresponding MRF operations, have been following rules that had been set by CalRecycle, and as a result have designed and operated systems as such. Extracting thermoform can be labor intensive and may result in haulers needing to invest in appropriate technology to separate the material. In addition to this being expensive, the integration of this technology may require reconfiguration of the MRF itself. Based on the current flow of materials, MRFs remove about one or two bales of thermoform per day, amounting to about a single truckload per month. Until a MRF collects enough material to fill a truckload, the MRF will have to store the material onsite, leading to a potential capacity issue. Ensuring thermoform is not included in the commingled bales will involve extra work and extra investment on the part of the haulers, costs which may be passed on in local rates. From their perspective, the extra effort will be done for a commodity with an unknown market value.

However, haulers are not required to sell bales of material for the commingled rate to recycling centers and processors. It is an optional transaction. A hauler could choose not to resell the CRV material; they currently do so because it is profitable. While this bill does not specifically require a hauler to store and bale thermoforms, requiring thermoforms to have minimum postconsumer thermoform recycled plastic will create a market, providing an incentive for haulers to start doing so.

5) *What is recyclable?* The Statewide Commission on Recycling Markets and Curbside Recycling, formed pursuant to the California Recycling Market Development Act (AB 1583, Eggman, Chapter 690, Statutes of 2019), is

required, by July 1, 2021, (1) to issue policy recommendations to achieve certain market development goals, solid waste diversion goals, and organic waste disposal goals; and (2) to identify products that are recyclable, compostable, and regularly collected in curbside recycling programs. The commission was required to issue preliminary recommendations by January 1, 2021.

As a part of its preliminary recommendations, the Commission recommended developing a Statewide Standardized Acceptance List of Recycle items. Under this recommendation, a product that meets certain criteria would be allowed to be marketed and labeled as "recyclable" when sold in the state and to use the "chasing arrows" recycling symbol.

If the Legislature adopts this recommendation, and if the list does not include thermoforms, it could affect the ability to collect thermoforms for recycling. As an item not on the official statewide recycling list, consumers may throw the item in the trash bin where it will be harder to collect or will have contamination issues. Future minimum postconsumer content legislation of hard-to-manage material will face similar issues unless the Legislature includes a process to add new materials to the list as future recycling programs are enacted.

6) *The effect of National Sword on California recycling*. The shift in policy of the international markets have resulted in a major disruption in recycling commodities markets, a sign that California can no longer rely on exporting to manage its recyclable materials. As a result, material is being stockpiled at solid waste facilities and recycling centers or disposed of in landfills. Because California has historically relied on being able to export a significant percentage of these materials, the state now has to figure out a new plan to manage these materials.

   Recycling requires markets for the material to close the loop. The recent policies of other jurisdictions provide California with the opportunity to reduce waste, build infrastructure for the manufacture of recycled materials, and build domestic markets to successfully and responsibly manage its own recyclable materials.

   This bill, by creating minimum postconsumer content standards, creates a market for thermoforms, a material that historically is sent to landfills where it contributes to greenhouse gas emissions and other environmental issues. By requiring CalRecycle to exclude thermoform from the commingled rate, it separates the thermoform from other recyclable material, helping to collect

additional postconsumer thermoforms and also address contamination issues of both CRV material and thermoforms being baled together.

Related/Prior Legislation

SB 54 (Allen) prohibits producers of single-use, disposable packaging or single-use, disposal food service ware from offering for sale, selling, distributing, or importing in or into the state those products manufactured after January 1, 2032, unless it is recyclable or compostable. SB 54 passed out of this committee with a vote of 5-1 and is currently on the Senate Inactive File.

SB 343 (Allen) prohibits a person from offering for sale, selling, distributing, or importing into the state any product or packaging using a deceptive or misleading claim about its recyclability, including the display of a chasing arrows symbol or any other symbol or statement indicating recyclability, unless CalRecycle has determined the product or packaging is recyclable. SB 343 passed out of this committee with a vote of 5-0 and is has been referred to the Assembly Judiciary Committee.

AB 661 (Bennet) requires state agencies, if fitness and quality are equal, to purchase recycled products instead of nonrecycled products, without regard to cost; and amends the State Agency Buy Recycled Program to modify its product categories and minimum content and recyclability requirements. AB 661 was held in the Assembly Appropriations Committee.

AB 881 (Gonzalez) establishes standards for mixed plastic waste exported for recycling in order to be credited toward a local jurisdiction's solid waste diversion rate. AB 881 is set to be heard in this committee on June 28, 2021. At the time this analysis was written, AB 881 had not been heard yet.

AB 962 (Kamlager) specifies that returnable glass beverage container can be included in the Bottle Bill by allowing the returnable glass beverage container to be considered cancelled for purposes of the program if the processor transfers the empty container to a CalRecycle-approved washer. AB 962 is set to be heard in this committee on June 28, 2021. At the time this analysis was written, AB 962 had not been heard yet.

AB 1201 (Ting) prohibits a person from selling a plastic product labeled with the term "compostable," "home compostable," or "soil biodegradable" unless the product meets specified standards and satisfies specified criteria and would authorize CalRecycle to adopt regulations for plastic product labeling. AB 1201 is set to be heard in this committee on July 7, 2021.

AB 1276 (Carrillo) expands and revises the statute that prohibits the distribution of single-use plastic straws, except upon request, to apply to all single-use food accessories and food service ware distributed by food facilities or third party food delivery platforms. AB 1276 is also set for hearing in this committee on July 1, 2021.

AB 793 (Ting, Chapter 115, Statutes of 2020) requires plastic beverage containers subject to the California Beverage Container Recycling and Litter Reduction Act to contain minimum amounts of postconsumer recycled plastic annually, beginning with 15 percent by 2022, and increasing to 35 percent by 2029 and 50 percent by 2030.

DOUBLE REFERRAL:

If this measure is approved by the Senate Environmental Quality Committee, the do pass motion must include the action to re-refer the bill to the Senate Judiciary Committee.

SOURCE: rPlanet Earth

SUPPORT:

350 Silicon Valley
California Alliance of Nurses for Healthy Environments
County of San Diego
Elders Climate Action, Norcal and Socal Chapters
Global Plastics Recycling
Monterey Bay Aquarium Foundation
National Stewardship Action Council

OPPOSITION:

American Chemistry Council
American Institute for Packaging and Environment (AMERIPEN)
Food Packaging Institute
Foodservice Packaging Institute
Plastics Industry Association
Western Growers Association

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