



May 8, 2024

California Department of Resources and Recycling
SB 54 Regulation Implementation Team
Packaging EPR Section Regulations Unit
Legal Affairs Office

Subject: SB 54 Plastic Pollution Prevention and Packaging Producer Responsibility Act Proposed Draft Regulatory Text

To whom it may concern:

Thank you for the opportunity to submit comments on behalf of Upstream on the proposed draft regulatory text for SB 54. Upstream is a US-based non-profit and leading change agency for the reuse movement in the US and Canada. We spark innovative solutions and forge strategic alliances to help people, businesses and communities shift from single-use to reuse.

Please find below our comments on the proposed regulatory text pertaining to reuse and refill as well as additional topics of interest, divided by section.

Topics Relating to Reuse:

§ 18980.2(a)(2): Categorically Excluded Materials

First and foremost, we wish to express our support for the language reiterating that materials meeting the definition of “reusable” or “refillable” are categorically exempt from the program under Article 2. This provides the strongest possible incentive for producers to invest in and explore reusable materials for packaging and food service ware. We also support the sequencing implied herein - namely that proof of a covered material meeting the reusable/refillable definitions and criteria therein is required only after the Department identifies a potential violation and issues a notice. This order of events will avoid placing onerous restrictions on producers who choose reusable packaging while still allowing for a robust process by which the Department can prevent bad actors from taking advantage of the exemption through false claims of reusability. We do suggest that CalRecycle create an easy mechanism whereby consumers may report to the Department any covered materials claiming to be reusable that they believe are suspect, such as an online reporting portal.

§ 18980.1 (34)(A)-(B): “Reusable, Refillable, Reuse, and Refill”

With respect to (34) “Reusable,” “refillable,” “reuse,” and “refill,” Upstream strongly recommends clarifying the statutory definitions of reuse and refill by specifying a difference between *returnable* and *refillable* packaging, among other changes. The distinction between returnable and refillable packaging is critically important because returnable and refillable packaging require entirely different business models, logistics and infrastructure. Returnable packaging requires a producer- or third-party-operated

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system - complete with reverse logistics (collection and transportation) and cleaning infrastructure. Returnable packaging is a *service* that producers provide to their customers as a means of delivering their products with less waste. On the other hand, refillable packaging is a *product* that producers sell to consumers and that consumers must wash and transport on their own.

Upstream generally defines reusable packaging as follows:

- **Returnable Reusable Packaging:** Packaging **designed to be recirculated** multiple times for the same or similar purpose **in its original format** in a **system** for reuse, that is **owned by producers or a third party** and is **returned** to producers or a third party after each use.
- **Refillable Packaging:** Packaging designed to be **refilled by consumers** multiple times for the same or similar purpose **in its original format**, and that is **sold or provided to consumers once** for the duration of its usable life.

While both are generally considered viable “reuse” business models, adding this clarity has crucial policy implications for the implementation of EPR programs such as SB 54. For instance, producers should receive a greater incentive to use returnable packaging because it requires more effort from them and results in greater waste reduction, while it is difficult or impossible to ensure waste reduction will result from refillable packaging, which rests entirely on the repeated efforts of consumers and requires less effort on the part of producers. Similarly, the PRO should be encouraged to invest in robust statewide infrastructure that can accommodate returnable packaging. Investing in infrastructure for refillable packaging essentially requires offering products in bulk in retail settings, or in large durable containers that customers purchase, keep at home, and refill using concentrates (typically sold in disposable sachets or flexible packages) purchased on a repeating basis, requiring no new infrastructure at all.

Especially for the purposes of SB 54, given that refillable packaging will fall under the definition of “reusable packaging” and will therefore be exempt from the program, **it should be specified that refillables must be part of a system where the producer has made the same or similar product available and accessible for consumers to refill multiple times without the need for additional single-use packaging.**

Adding this clarity will align best with continuing policy language developments in Europe and across the country, such as this year’s reintroduced packaging EPR legislation in Washington state (see [HB 2049](#)).

We specifically suggest the following edits to the regulatory language:

“Reusable,” “refillable,” “reuse,” and “refill,” have the same definition as provided in section 42041(af) of the Public Resources Code. Determinations of whether packaging or food service ware satisfies the requirements of that definition shall be subject to the provisions of this paragraph.

*(A) The terms “reuse” and “refill” refer to **usage** packaging or food service ware **systems** that **is** **accommodate returnable** or refillable **packaging** pursuant to section 42041(a)(1)(A) through (a)(1)(D) and (a)(2)(A) through (C), subsequent to the initial use of the packaging or food service ware for its original purpose.*

*(B) To be considered **returnable** or refillable, packaging or food service ware must not constitute single-use packaging or food service ware pursuant to paragraph (35) and section 42041(ai)* of the*

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Public Resources Code. Returnable reusable packaging is owned by producers or a third party manager and is returned to producers or a third party after each use in a system for reuse. Refillable packaging is part of a system wherein producers have made the same or similar product available and accessible for consumers to refill multiple times without the need for additional single-use packaging.

CalRecycle may wish to define *returnable reusable packaging* separately within this section. In this case, we suggest simply using the proposed language above as a definition.

§ 18980.1 (34)(D): “Capable of being conveniently and safely reused or refilled”

As we have previously noted in comments to CalRecycle when this topic arose as a proposed rule concept, it is inequitable to require certain higher standards of reusable packaging than are applied to single-use packaging. We are particularly concerned with the proposed language regarding the avoidance of chemical leaching and microplastic shedding from reusable packaging. While we of course do not wish for any packaging - including reusables - to contribute to the proliferation of microplastics or chemical pollution in the environment, we also acknowledge that plastic is currently by far the most cost effective material for reusable packaging. It is also durable, light weight, and readily available.

In fact, the majority of reusable packaging and food service ware currently on the market in the U.S. is made from plastics - mostly polypropylene (PP) and polyethylene terephthalate (PET).¹ Even plastic reusables have tremendous environmental benefits compared to single-use disposable packaging and service ware. For example, refillable PET bottles can save up to 40% of the raw materials and 50% of the greenhouse gas emissions from the production of single-use plastic bottles.² Oceana estimates that just a 10% increase in the share of beverages sold in refillable bottles (even if those bottles are made from PET) could result in a 22% decrease in marine plastic pollution, keeping 4.5 to 7.6 billion plastic bottles out of the ocean each year.³

One of Upstream’s core policy principles⁴ is to avoid undue barriers to the nascent reuse sector that might prevent reuse systems from scaling. It is our understanding that all plastics shed microplastic particles.⁵ Given that it will be impossible to demonstrate absolutely no microplastic shedding from plastic reusables, especially in early stages of innovation and development, this is too stringent a condition to require or imply for packaging to qualify as reusable under the Act. Furthermore, the methodologies for testing microplastics shedding and chemical leaching from packaging are underdeveloped. If the regulations imply that testing and verifying the absence of leaching or shedding of a product’s composition is required, this may prevent the timely development of viable reuse systems and infrastructure.

The Act does not hold disposable packaging to a standard of no microplastics shed and no chemical leaching; it therefore should not expect reusable packaging to achieve these standards, at least until reuse systems for packaging and food service ware have sufficiently scaled to enable a transition to more

¹ Upstream, *Reuse Business Directory*, 2023. <https://upstreamolutions.org/biz-directory>

² Oceana, *Just One Word, Refillables*, 2020. <https://oceana.org/reports/just-one-word-refillables/>

³ *ibid.*

⁴ Upstream, *Principles for Reuse/Refill in EPR & DRS*, 2023. <https://upstreamolutions.org/blog/epr-policy-principles>

⁵ National Institute of Standards and Technology, *NIST Study Shows Everyday Plastic Products Release Trillions of Microscopic Particles Into Water*, 2022.

<https://www.nist.gov/news-events/news/2022/04/nist-study-shows-everyday-plastic-products-release-trillions-microscopic>

expensive materials such as stainless steel and glass. Unless CalRecycle intends to include requirements for *all* covered materials to demonstrate zero shedding of microplastics and no chemical leaching, we urge you to remove these requirements - or suggestions of them - from reusable packaging. We note that one possible alternative for incorporating these principles of protecting human and ecosystem health from microplastics and chemical leaching is to apply them to *all* packaging by incorporating them into the eco-modulated fee structure for the program as a whole.

We also continue to strongly recommend clarifying the concept of “convenience.” Convenience is critically important to successful reuse systems, but the proposed regulatory concepts only cover safety standards. Without convenient return points for consumers or other end users, the system will not achieve high rates of return. Without high rates of return, the environmental benefits of reusables may not be realized. We suggest language to **clarify that convenience, for the purposes of reuse/refill under the Act, means the provision of sufficient return/refill points** across both public and private locations for returnable/refillable items to achieve high reuse rates that allow them to meet the threshold of “multiple cycles/uses.”

Additionally, we suggest amending the language around washing to emphasize that reusables must be cleaned, but are not always sanitized or washed. This is described further below, in the section pertaining to the definition of “single use.”

We specifically suggest the following edits:

(D) To be considered capable of being conveniently and safely reused or refilled:

*(i) For purposes of section 42041(af)(1)(C) of the Public Resources Code, packaging or food service ware must, at a minimum, be **sufficiently washable cleaned**, as set forth in section 18980.1(a)(35)(C), **and retains** its form and function during reuse and **washing-cleaning** by the producer or a third party **without posing** while avoiding or minimizing environmental or public health risks. ~~, such as chemical leaching and microplastic shedding~~. **The producer or a third party must provide sufficient accessible return points such that returnable reusable packaging is collected at a rate that satisfies the criteria in (E).***

*(ii) For purposes of section 42041(af)(2)(C) of the Public Resources Code, packaging or food service ware must, at a minimum, be **sufficiently washable cleaned**, as set forth in section 18980.1(a)(35)(C), **and retains** its form and function during reuse and washing by the consumer **without posing** while avoiding or minimizing environmental or public health risks. ~~, such as chemical leaching and microplastic shedding~~. **Producers or retailers must provide sufficient opportunities to refill the packaging, without requiring additional single-use packaging, such that the refillable packaging is reused at a rate that satisfies the criteria in (E).***

§ 18980.1 (34)(E): “Multiple Cycles”

Regarding the provision (34)(E), Upstream strongly recommends removing arbitrary requirements for “multiple cycles.” We appreciate that CalRecycle has included provisions requiring producers to demonstrate that each of their reusable or refillable packages is deserving of an exemption from the program. This is a reasoned approach that places the burden of proof where it belongs - on producers seeking exemptions. However, the best approach for this system is to allow flexibility rather than subjecting all reusable food packaging to a dishware-based standard. **We strongly suggest enabling**

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flexibility for each type of reusable packaging to be designed according to the unique needs of the product or sector it serves, while also ensuring its use is environmentally beneficial.

We also suggest including language that will allow packaging and food service ware to be certified as reusable once appropriate certification programs are developed. PR3 is already leading a process to develop global standards for reusable packaging and service ware.⁶ Once these standards are officially adopted, it will be easier for producers to gain third-party certification for their reusable packaging or food service ware than to provide individualized data to CalRecycle or the PRO. Allowing an independently verifiable third-party certification to take the place of individual exemption requests will ultimately streamline oversight and enforcement of the program while still encouraging the development of reusables. This will also align with language elsewhere in the statute and regulations regarding third-party validation for post-consumer recycled content (§ 18980.3.4. Independent Third-Party Validation for Postconsumer Recycled Content).

We specifically suggest the following revisions:

(E) For purposes of this section and section 42041(af) of the Public Resources Code, “multiple times,” “multiple cycles,” and “multiple uses” have the same meaning. For packaging or food service ware to be considered reused or refilled multiple times or for multiple cycles, or for use to be considered multiple uses, ~~usage must occur it must cycle through a reuse system~~ more than once, rather than being ~~a single use used once~~ prior to disposal as described in subparagraph (A)(i) (for packaging) or (A)(ii) (for food service ware) of paragraph (35), and shall satisfy the following conditions, as demonstrated according to procedures and methods set forth in the PRO’s approved plan, or, for entities that are not participants in a PRO plan, those in their plans (for Independent Producers) or the PRO’s approved plan.

~~(i) The item is more likely than not to be used on more than one occasion or the item is, on average, used on more than one occasion without being discarded or disposed within five years after commencement of its initial use. For food service ware and food packaging whose usage can be shown to occur, on average, over a period of shorter than five years before it has been subject to at least 780 cycles in a cleaning and sanitization process as set forth in (C)(ii), this requirement shall be reduced to such shorter period.~~

(i) The observed average number of ~~returns~~ or refills for each type of packaging or food service ware will result in the ~~packaging or food service ware~~ having lower environmental impact than ~~the its~~ equivalent single-use counterparts, or will be returned or refilled at an average rate of no less than 90% by 2030 or within five years of entering the market, whichever is later. The PRO plan shall include a procedure, including specific methods, for establishing estimates of the average number ~~or rate~~ of ~~returns~~ or refills for particular ~~products~~ packaging, food service ware, or types of products, and those estimates may be used as the observed average number of uses for purposes of this clause. Independent Producers’ plans may include their own procedure or incorporate one from an approved plan by reference. ~~This requirement may also be met by obtaining an independently verifiable third-party certification according to relevant adopted ISO or ANSI standards. Environmental impact must consider, at a minimum, the resources used~~

⁶ RESOLVE, Reusable Packaging System Design Standard, 2023. <https://www.resolve.ngo/site-pr3standards.htm>

~~throughout the lifecycle of the product, including, but not limited to, those related to:~~
~~Environmental impact must consider, at a minimum:~~

- ~~(I) Raw material extraction~~
- ~~(II) Manufacturing~~
- ~~(III) Transportation~~
- ~~(IV) End-of-life management and waste prevented or produced~~
- ~~(V) Aquatic or terrestrial pollution~~
- ~~(VI) Resources used throughout the lifecycle of the material, including but not limited to water~~
- ~~(VII) Greenhouse gas emissions~~

§ 18980.1 (35)(C): “Sufficiently Washable”

Within the definition for “Single Use,” provision (C) as currently drafted requires reusable food packaging to meet state health code washability standards for food service ware. This may place undue restrictions on the expansion of environmentally and socially beneficial reuse programs, and is likely not necessary in practice. We suggest categorizing all reusable packaging separately from reusable food service ware.

We also suggest replacing the word “washable” with the word “cleaned,” because not all reusables are washed. Some are sanitized, some are cleaned using cutting-edge technology that avoids the use of water, and others are cleaned using a combination of methods. To best capture all options while still requiring proper cleaning for safe use and handling, we suggest the following revisions:

~~(C) “Washable” or “sufficiently washable”~~ *Cleaned or “sufficiently cleaned” means, with respect to packaging or food service ware, that it can be cleaned, or sanitized as necessary, as follows for purposes of being reused and, if applicable, refilled:*

~~(i) for packaging other than food packaging, the good it can be sufficiently cleaned as necessary to be safely and hygienically reused, as applicable; or~~

~~(ii) for food service ware and food packaging, the good it maintains its shape, structure, and function after 780 cycles in a cleaning and sanitizing process that complies with the requirements of chapter 5 of part 7 of division 104 of the Health and Safety Code (commencing with section 113700), as demonstrated by test results from a laboratory having an ISO/IEC 17025:2017 accreditation issued by a body described in section 18981(b)(1).~~

If it is absolutely necessary to incorporate a threshold of 780 cycles in item (ii) [per SB 1335](#), we strongly suggest incorporating both criteria for reusable food service ware from that statute, as follows:

~~(ii) for food service ware and food packaging, the good it maintains its shape, structure, and function after 780 cycles or is covered by a warranty guaranteeing that the product will remain reusable for a minimum of one year in a cleaning and sanitizing process that complies with the requirements of chapter 5 of part 7 of division 104 of the Health and Safety Code...~~

§ 18980.6.7. Eco-modulated Fee and Fee Schedule

The following revisions are suggested to strengthen the incentives for reusable and refillable packaging and food service ware under the eco-modulated fee schedule:

(C) A PRO shall set higher base fee rates for covered material categories that lack a responsible end market. Moneys collected from this fee will be used to fund the necessary investments to develop viable responsible end markets for such covered material categories, implement source reduction measures for such covered material categories, and ~~for~~ transition to reuse and refill systems to replace such covered material categories *wherever possible*.

These small changes provide increased confidence for reuse service providers and producers that funds from the program will be spent on the transition to reusable packaging where appropriate. Additionally, the following suggested revisions provide optimized incentives for the highest-performing reuse (return and refill) systems that do not yet meet the above proposed thresholds for exemption from the program:

(i) In awarding credits pursuant to section 42053(e)(6) of the Public Resources Code, a PRO shall:

(1) Adjust credits based on the number of times a reusable or refillable alternative material is used in the supply chain prior to the end of life of the alternative material. *Reusable packaging with an average return or refill rate of 80% or greater shall be awarded the maximum credit.*

(2) If a material characterization study finds that a refillable or reusable alternative to a covered material is ~~being frequently disposed for a product~~ *not collected and recirculated or refilled sufficiently to satisfy the criteria in § 18980.1 (34), the PRO shall stop providing credits to producers who use that alternative material.*

§18980.8.1(a)(3): Plan Requirements Specific to a PRO - reuse/refill criteria & methodology

The proposed regulations specify that producers, via their collective stewardship plan, shall propose “criteria and methodology that producers must use to demonstrate that items considered reusable or refillable by the producers meet the requirements outlined [in prior sections].” We support this flexible approach, as previously mentioned. However, it should be noted that producers and PROs currently lack sufficient knowledge and expertise on reuse systems to develop such criteria on their own. We encourage CalRecycle to incorporate language such as the following to require the PRO to seek outside expertise and resources in developing these criteria and proposed metrics:

(3) Pursuant to section 42051.1(m) of the Public Resources Code, the plan shall additionally include a set of criteria and methodology for producers to demonstrate that items considered reusable or refillable by the producers meet the specifications outlined in section 42041(af) of the Public Resources Code and section 18980.2(a)(2)(A). *The PRO shall consult available resources and consult with the Advisory Board as well as outside experts in reuse systems for both returnable and refillable packaging in both the business-to-business and business-to-consumer sectors to inform the development of these criteria and methods.*

Additional Topics:

Environmental Justice: We respectfully request that CalRecycle, along with the many other state agencies named in statute, provide clarity as to how the SB 54 Plastic Pollution Mitigation Fund resources will be distributed. As articulated by the Advisory Board, additional detail in advance will help local communities plan and prepare for accessing the funds in ways that maximize the benefit to disadvantaged communities and BIPOC people and organizations historically impacted by plastic pollution and underrepresented in public policy decision-making. Please consider at least one public

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workshop on this topic specifically, and dedicate a webpage to helping the public understand the mitigation fund.

We further suggest that CalRecycle conduct a thorough environmental justice analysis of current and historical grant funding and other expenditures from state programs on environmental cleanup and pollution mitigation. We believe you will find a disproportionate benefit to wealthier, whiter communities throughout the state, which must be rectified.

One of the most direct ways to correct these historical injustices is by providing an opportunity for BIPOC communities to decide for themselves how best to spend the SB 54 mitigation dollars. We understand some representatives on the Advisory Board have proposed an option to create an endowment using a portion of the funds (say, \$100 million per year) that is managed by a BIPOC-owned or led organization. The endowment could be set aside and invested during the ten years of statutory funding so that BIPOC communities could continue to access more sustained funds into the future. This is an innovative approach that, if legally feasible, would provide more autonomy to historically disadvantaged and oppressed communities in addition to more sustained long-term funding and we encourage CalRecycle to explore this and potentially other creative options. At the very least, CalRecycle and other state agencies should directly consult BIPOC communities and Tribal Nations at the earliest stages of developing a plan for these funds.

Producer registration deadline: Upstream strongly supports comment 17b submitted by the Advisory Board: In order to register all producers as expeditiously as possible, the regulations should include a producer registration deadline no later than April 1, 2025. It is crucial for the success of this program that producers register as quickly as possible with the approved PRO.

Compostable products and packaging: Noting that compostable packaging - in particular compostable plastic - arises in multiple sections throughout the proposed regulatory text, we would like to point out that the environmental impacts from producing, using and disposing of compostable products typically outweigh the advantages. Products like paper to-go boxes and bioplastic cutlery often require more energy, water and toxic chemicals to produce than single-use plastics. What's more, they often don't effectively compost,⁷ which is in part why commercial composters are increasingly restricting or prohibiting intake of compostable packaging.^{8,9}

Compostable food service ware has higher climate impacts, requires more land and resource exploitation, and leads to greater ecological, human toxicity and aquatic impacts than single-use or reusable alternatives. Additionally, many products that claim to be compostable or recyclable aren't passing the reality test. They may not be collected at all for recycling or compost, or they may be collected but then diverted to landfill or incineration. When compostable products end up in a landfill or incinerator, the greenhouse gas footprint of these materials increases dramatically. Even when

⁷ Upstream, Reuse Wins. 6/16/2021. <https://upstreamolutions.org/reuse-wins-report>

⁸ Rosengren, Cole, "Some facilities stop accepting compostable packaging as contamination debate persists," Waste Dive. 3/8/2019. <https://www.wastedive.com/news/compostable-packaging-rexius-US-Composting-Council-Conference/550012/>

⁹ Brasch, Sam, "Keep that pizza box out of the green bin. Colorado's largest compost processor will no longer accept packaging and paper products," CPR News. 3/1/2023. <https://www.cpr.org/2023/03/01/put-that-pizza-box-in-the-trash-colorados-largest-compost-processor-will-no-longer-accept-packaging-and-paper-products/>

composted, compostable plastic has higher impacts for eutrophication (e.g., dead zones in waterways due to oxygen depletion), water use, acidification, ozone depletion, particulate emissions, land use impacts and toxicity.¹⁰ We therefore support comments submitted by others, including the Advisory Board, to limit acceptance of compostable covered materials and require minimum thresholds before allowing certain materials to qualify as compostable. We further support comments suggesting that any such thresholds or limits should be heavily vetted and supported by the latest science. This should include the strictest possible limitations on any covered materials that claim to be “home compostable,” and a limitation on the term “desirable organic wastes” to include only organics and yard trimmings.

Enforcement: Upstream supports two comments raised by the Advisory Board and others pertaining to enforcement (Article 13):

- Please ensure that the appropriate state agency has explicit authority to enforce requirements on plastic resin producers to pay into the Plastic Pollution Mitigation Fund.
- Please *remove* excessive enforcement provisions pertaining to local governments from Section 18980.13.(i). The entire purpose of this Act is to shift cost burdens for managing covered materials *away* from local jurisdictions and ratepayers *onto* producers. Producers should be the target for enforcement actions taken by CalRecycle under this Act.

Recycled Content: Upstream supports comments submitted by the Natural Resources Defense Counsel (NRDC) (in line with positions held by the Association of Mission-Based Recycles and Association of Plastics Recyclers) requesting that CalRecycle ensure consistent methodologies are set for calculating post-consumer recycled content in covered materials, and that free-attribution mass-balance methodologies and plastics-credit schemes are not allowed. It is imperative for rebuilding consumer trust in the recycling system that claims of post-consumer recycled content in a given package can be interpreted as actual recycled content in that specific package.

Public Comments on Draft PRO Plans: Please outline a specified process and time period to allow for public comments on draft PRO program plans. This is customary in packaging EPR programs that have been enacted into law across the U.S. For instance, the draft program plan submitted by Circular Action Alliance for Oregon’s packaging EPR program is currently open for public comment through the end of May. Public comments are an indispensable component of our democracy and will greatly enhance the public’s trust and confidence in this program.

Thank you very much for your consideration of our comments and suggested revisions to the draft SB 54 regulations. Please do not hesitate to contact me with any questions at sydney@upstreamolutions.org.

Sincerely,

Sydney Harris
Policy Director, Upstream

¹⁰ Mistry M, Allaway D, Canepa P, and Rivin J., Material Attribute: COMPOSTABLE – How well does it predict the lifecycle environmental impacts of packaging and food service ware? State of Oregon Department of Environmental Quality, 2018. <https://www.oregon.gov/deq/FilterDocs/compostable.pdf>