SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
2023 - 2024 Regular

Bill No	SB 560		
Author:	Laird		
Version:	3/22/2023	**Hearing Date:**	4/19/2023
Urgency:	No	**Fiscal:**	Yes
Consultant:	Brynn Cook		

SUBJECT: Solid waste: gas cylinders: stewardship program

DIGEST: Establishes an Extended Producer Responsibility (EPR) program for gas cylinders under 20 pounds.

ANALYSIS:

Existing law:

1) The California Integrated Waste Management Act (IWMA) of 1989, administered by the Department of Resources Recycling and Recovery (CalRecycle), generally regulates the disposal, management, and recycling of solid waste. The act establishes EPR programs for various products, including, carpet, mattresses, batteries, pharmaceutical and sharps waste, and single-use plastic and packaging. (Public Resources Code (PRC) §§ 40000 et. seq.)

2) Establishes procedures for managing hazardous waste as universal waste. (California Code of Regulations (CCR) Title 22, Division 4.5, Chapter 23)

3) Defines a "household hazardous waste (HHW)" as hazardous waste generated incidental to owning or maintaining a place of residence, but does not include waste generated in the course of operating a business at a residence. (HSC § 25218.1(e))

4) Requires counties and cities to ensure HHW is collected and requires the state to provide an expedited and streamlined regulatory structure directing the locals how to dispose of the HHW. (HSC § 25218)

This bill:

1) Establishes the Stewardship Program for Gas Cylinders which will be operated through a product stewardship organization with oversight from CalRecycle.

2) Requires producers or product stewardship organization to develop and implement a product stewardship plan to

Background

1) *California's waste goals and EPR.* Under the IWMA, CalRecycle is tasked with reducing the amount of waste that gets landfilled in California. The IWMA establishes a goal that 75% of solid waste generated in the state be diverted from landfills through source reduction, recycling, and composting by 2020. However, in 2021, the state's recycling rate was just 41%, falling far short of state's goal.

   To advance California's recycling goals, the Legislature has directed CalRecycle to establish several EPR programs. EPR is a strategy that places shared responsibility for end-of-life product management on producers and all entities involved in the product chain, instead of on the general public and local governments. EPR programs rely on industry, often via a product stewardship organization (PRO), to develop and implement approaches to create a circular economy with oversight and enforcement provided by the government. EPR programs have traditionally been used to improve the recapture and recycling rate for challenging-to-recycle materials that can pose a risk to the waste stream, like pharmaceuticals and sharps, paints, and batteries. The state also oversees EPR programs for high-volume products including mattresses, carpets, packaging and single-use plastic foodware items.

2) *Universal waste and HHW.* Many common household items contain hazardous materials that pose a threat to the health of humans, animals, and the environment if these products are incorrectly disposed of. These common items may be categorized as universal waste or the more hazardous HHW. Universal waste – such as batteries – can be handled, transported, and recycled following the simple requirements set forth in the universal waste regulations, while HHW – such as paint – is more hazardous and must be handled by specified local agencies. Neither universal waste nor HHW can simply be tossed out in the garbage bin.

3) *Gas Cylinders in the market*. Gas cylinders, including helium, propane, or forms of butane, can be either reusable or single-use items. Propane gas cylinders are often used for camping and backpacking stoves, portable heaters, lanterns, portable showers, tailgating grills, boat engines, scooters, lawn care equipment, and welding equipment. Isobutane and butane can have similar uses to propane, and are frequently used by backpackers since they have high a energy-density that makes them very light and portable. Butane is also used to

refill lighters. Small helium cylinders (under 20 cubic feet), are typically sold to households to fill party balloons.

While there is not readily available data on the total number of gas cylinders under 20 pounds sold each year in California, the number is likely in the tens of millions. Each year, there are approximately 40-60 million disposable one-pound propane cylinders sold in the United States. As California accounts for roughly 10% of the population, it is estimated that over 4 million disposable one-pound propane cylinders are sold in California each year. One-pound propane cylinders constitute just one fuel and size type of the whole universe of gas cylinders.

4) *Disposing of gas cylinders*. Properly disposing of gas cylinders can be costly. Because single-use gas cylinders are used for outdoor activities, they can be a major source of litter in outdoor spaces, which is expensive to collect and ship to waste processing facilities or landfills. Yosemite National Park employees report finding these cylinders "constantly" littered in the park. In 2021, Yosemite employees processed 24,000 cylinders that had been thrown in trash cans or left elsewhere in the park.

   If individuals "pack it out" and take these cylinders home, they can still be expensive to dispose of. While an empty gas cylinder can simply be put in a recycling bin, a gas cylinder that is not empty is hazardous and must be brought to a HHW facility. Once at the HHW facility, the cylinder will likely be stored in a large (55-gallon) drum before being transported to a recycling/processing facility to be off gassed. Once completely empty, the cylinders are punctured and then crushed, baled, and sent to the recycled metals markets. According to data provided by the author, the transportation and recycling/processing cost of a single disposable two-pound propane cylinder is approximately $3.00. This adds up quickly: local governments spend approximately $3 million a year in ratepayer funds to properly dispose of single-use propane cylinders, which are just one type of gas cylinder on the market.

5) *Are These Cylinders Being Recycled?* Based on CalRecycle data, it is estimated that only a quarter of the approximately four million disposable propane cylinders sold in California are recovered through HHW operations: the remaining cylinders, many of which may not be fully off-gassed, end up as potentially hazardous material in MRFs and landfills.

6) *Refill as a means of reducing cylinder waste.* In light of the challenges of disposing of single-use gas cylinders, some governments, businesses and environmental nonprofits have promoted refillable alternatives to disposable

cylinders. To date, CalRecycle has awarded 33 grants worth approximately $2.5 million to promote the use of refillable one or two-pound propane cylinders. In 2015, California Product Stewardship Council obtained a CalRecycle HHW grant to establish a 'Refuel Your Fun' program to help transition from single-use gas cylinders to refillable cylinders.

Refillables have a lower carbon footprint compared to single-use cylinders. The carbon footprint of a one kilogram propane gas cylinder is nearly three kilograms CO_2. The end of life for these cylinders is also carbon-intensive, requiring transporting, crushing, and baling, all before the metal is even sold as scrap. Refillables, which last for ten years, do not cycle through the waste stream as quickly as single-use items, and so do not consume as much resources and result in as much carbon output.

Comments

1) *Purpose of Bill.* According to the author, "To improve our environment and reduce the number of hazardous waste products that end up in our waste facilities, Senate Bill 560 establishes an extended producer responsibility program for small gas cylinders. Too often, these small gas cylinders, which are conveniently used for recreational purposes, are often left at our beaches or parks. Leaving someone else to dispose of them. However, properly disposing of these cylinders goes beyond putting them in a trash can. Proper disposal typically means taking them to household hazardous waste facilities, but the challenge is these facilities are not always easily accessible. When these cylinders end up in local waste facilities, the time and costs for proper disposal fall upon that local jurisdiction. SB 560 aims to reduce the number of hazardous waste products at local facilities, beaches, and parks. Instead of the local jurisdiction carrying the burden of disposal, creating an EPR program will place a shared responsibility for end-of-life product management on producers, and other entities involved in the product chain, instead of the consumers."

2) *Many Details Left Blank.* SB 560 outlines a gas cylinder EPR program, but leaves many questions unanswered. For example:

    a) *Who is the Producer?* The bill defines "producer" as the entity that produces the gas cylinders. EPR programs typically use a tiered definition of producer, putting accountability on manufacturers first, then on to importers, then on to distributors, etc. The tiered definition of producer is essential to capture products that are manufactured outside of

the state. The bill also does not specify how CalRecycle will develop the list of producers included in the program.

b) *Should There be an Advisory Board?* Gas cylinders, from their manufacture to their end of life, pass through many hands, including the businesses that fill cylinders with gas, retailers that sell the product, and local governments that have to collect them. Existing EPR programs have included non-producer stakeholders through advisory boards comprised of members of integrated industries, local agencies, and environmental justice representatives.

c) *Timelines.* The bill doesn't set any timelines for when it will take effect, when CalRecycle needs to complete regulations, when producers have to develop and submit stewardship plans to the department, and much more.

d) *Enforcement.* The bill proposes to penalize producers who do not participate in the program by preventing them from selling their products in the state. It is not clear in the bill what entity will enforce this program, or how. EPR programs are typically enforced by CalRecycle, which can impose fines on producers that are not compliant with the EPR program requirements. It's not clear why such a mechanism doesn't exist in this bill.

e) *What is the Financing Mechanism?* SB 560 specifies the producers will cover all costs of establishing and running the gas-cylinder EPR program, but it does not describe how this will be accomplished. Can producers simply pass this cost along to consumers, either by adding a separate fee to the cost of the cylinder or baking it into the overall price? If the latter, it means the state will have little ability or authority to track or assess this fee

f) *Oversight of the Financing.* Currently, SB 560 does not create a mechanism for reporting or oversight of the EPR program finances. In some EPR programs, such as for carpets, funds are initially deposited into an escrow account that is maintained by an independent accounting firm. The PRO then reviews the financial statements and makes quarterly reports to CalRecycle.

While many aspects of an EPR program should be established through regulation or in the stewardship plan itself, a well-crafted EPR program is one that provides industry with enough leeway to develop and implement waste-reduction solutions while also providing sufficient oversight to ensure the state's goals are accomplished. A poorly designed EPR may simply delay meaningful progress towards waste reduction goals.

In order to evaluate the proposed gas-cylinder EPR program, *the committee may wish to direct the author* to include more detail on how the program will operate, including a tiered definition for producer of gas cylinders, an advisory board of representatives from relevant stakeholders, a timeline for some elements of the EPR program, an enforcement mechanism for the program, and a financing mechanism for the program that specifies whether funding will come from consumers or producers.

3) *Refill vs. Takeback.* SB 560 does not specify whether the proposed EPR program will include both refillable and single-use gas cylinders or only single-use cylinders. While some strategies for collecting and transporting refillable vs. single-use cylinders may overlap, the two products require different recapture and processing infrastructure. Refillables will need an infrastructure connecting empty cylinders to refill stations, whereas single-use cylinders will need to be brought to processing facilities to be scrapped.

   SB 560 should consider how these two systems can utilize existing refillable infrastructure, and also consider how to prioritize a refill market to advance environmental goals. While making producers responsible for the end of life of gas cylinders can save local governments and ultimately Californians money, a single-use take-back system will still have a higher environmental impact than a refillable system. An EPR program that encompasses and develops end-of-life systems for both products should acknowledge and reward the relative environmental benefits of a refill system.

4) *Equity in access to cylinders and takebacks.* Small gas cylinders can be a convenient source of heat for people experiencing homelessness for daily activities like cooking meals. Refillable cylinders are more expensive than single-use cylinders and refill locations may be less accessible to individuals experiencing homelessness. For these reasons, individuals experiencing homelessness may be reliant on single-use gas cylinders. Policies developed through the stewardship plan should consider how the EPR program may impact price and access to gas cylinders for individuals experiencing homelessness, and specifically consider how to create access to take-back or refill locations for those individuals.

   To ensure that individuals experiencing homelessness have continued access to gas cylinders and to facilitate access to collection and refill sites, *the committee may wish to direct the author* that any advisory board formed as part of the program should include an advocate for individuals experiencing homelessness or similar role.

5) *Return with a twist.* In 2021, the Senate Environmental Quality Committee analyzed SB 1256 (Wieckowski) which would have banned single-use one-pound propane cylinders. However, Governor Newsom vetoed the bill, writing that:

> "An outright ban without a plan for collection and refill infrastructure could inhibit the success of building a circular system in California…I encourage the Legislature and stakeholders to work on a approach for the collection and reuse of this product that accounts for manufacturer and retail responsibility."

Following this direction, SB 560 uses an EPR approach instead of a ban to reduce gas cylinders in the waste stream. SB 560 also expands the scope of the program from one-pound propane cylinders to include all small gas cylinders that are typical household items, including single-use and reusable cylinders.

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.

Related/Prior Legislation

SB 1256 (Wieckowski, 2022) would have prohibited the sale of one-pound disposable propane cylinders after January 1, 2028. SB 1356 was vetoed in 2022.

SB 615 (Allen, 2023) requires producers of electric vehicle (EV) batteries to be responsible for the recapture, repair, reuse, or recycling of EV batteries. SB 615 is pending in the Senate Transportation Committee.

SB 707 (Newman, 2023) establishes an Extended Producer Responsibility (EPR) program for textiles with oversight from CalRecycle. SB 707 is pending in the Senate Judiciary Committee.

SB 212 (Jackson, Chapter 1004, Statutes of 2018) established an EPR program for pharmaceutical and sharps waste, with oversight from CalRecycle.

SOURCE: Author

SUPPORT:

None received

OPPOSITION:

None received

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