
SENATE COMMITTEE ON APPROPRIATIONS

Senator Anthony Portantino, Chair
2023 - 2024 Regular Session

SB 560 (Laird) - Solid waste: gas cylinders: stewardship program

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Urgency: No

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Policy Vote: E.Q. 5 - 0, JUD. 10 - 0

Mandate: No

Consultant: Ashley Ames

Bill Summary: This bill would establish an Extended Producer Responsibility (EPR) program for gas cylinders under 20 pounds.

Fiscal Impact:

- The Department of Resources Recycling and Recovery (CalRecycle) estimates ongoing costs of about \$1 million or more annually (special fund) to create, implement, and administer a new EPR program. These costs would be offset by reimbursements paid by the producer responsibility organization.

Background:

Extended producer responsibility (EPR). EPR refers to a waste management strategy that makes the manufacturer of a product responsible for the products' entire life-cycle costs including its end-of-life costs associated with recycling or disposal. These costs have traditionally been borne by local governments (and ultimately tax payers) through municipal waste disposal programs. This traditional structure results in an "externality" or a situation where the costs of recycling or disposal are not paid by the buyer or seller of the product, but rather by a third party (such as tax payers). EPR shifts the costs of managing a product at its end of life from waste disposal programs to the manufacturer of the product. By requiring manufacturers to cover end-of-life costs, these costs are incorporated or "internalized" into the total cost of the product when it is sold. Therefore, the price that consumers pay reflects the entire cost of the product—its production and disposal. This means that the people making and using the product cover all of its costs, rather than local governments and taxpayers covering a share of disposal costs. Moreover, manufacturers have a financial incentive to design products that are inexpensive to recycle. In California, EPR is already used for carpet, mattresses, and paint.

Mixed results for California EPR programs. To date, the Legislature has enacted four EPR programs of which CalRecycle has enforcement authority – paint, carpet, mattresses, and pharmaceutical and sharps waste – showing varying degrees of success. While CalRecycle does not appear to have oversight issues with the paint stewardship program, CalRecycle was subject to an audit for its oversight of the mattress recycling program. The carpet recycling program has encountered the most challenges of the EPR programs with the enforcement history of the carpet stewardship organization being extensive and complicated. Only enacted in 2018, the pharmaceutical and sharps waste program is still in development.

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 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.

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.

Recycling gas cylinders. 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.

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 CO₂. 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.

Proposed Law: This bill would establish an EPR program for gas cylinders under 20 pounds. Specifically, this bill would:

1. Establish a stewardship program for gas cylinder products, as defined, and would authorize producers of those products to establish one or more producer stewardship organizations for that purpose.
2. Prohibit gas cylinder producers that are not participating in a CalRecycle approved stewardship plan from supplying, selling, or offering for sale gas cylinders in the state.
3. Provide that an action that is taken by a producer or producer's designee, including, but not limited to, a producer stewardship organization, is not a violation of the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), the Unfair Practices Act (Chapter 4 (commencing with Section 17000) of Part 2 of Division 7 of the Business and Professions Code), or the Unfair Competition Law (Chapter 5 (commencing with Section 17200) of Part 2 of Division 7 of the Business and Professions Code) to the extent the producer or producer's designee, including, but not limited to, a producer stewardship organization, is exercising their authority pursuant to these provisions.

Related 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.

Staff Comments: CalRecycle notes that there are costs associated with any new EPR program that range in excess of \$1 million dollars for department staff to develop and adopt regulations, administer the stewardship program, review plans and reports, assess product stewardship performance standards, conduct audits, and provide legal and administrative support to the program, among other things. The ability to recoup costs of administration and enforcement of the EPR program is common in EPR frameworks and paid for by the producer responsibility organization.