

Date of Hearing: June 29, 2026

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Isaac G. Bryan, Chair

SB 501 (Allen) – As Amended June 1, 2026

SENATE VOTE: 30-10

SUBJECT: Responsible Battery Recycling Act of 2022: covered batteries

SUMMARY: Adds medium format batteries to the Responsible Battery Recycling Act of 2022 (Act).

EXISTING LAW:

- 1) Establishes the Hazardous Waste Control Law (HWCL) and requires the Department of Toxic Substances Control (DTSC) to oversee the management of hazardous waste. (Health & Safety Code (HSC) 25100 *et seq.*)
- 2) Establishes the Integrated Waste Management Act and requires the Department of Resources Recycling and Recovery (CalRecycle) to oversee the management of solid waste. (Public Resources Code (PRC) 40050 *et seq.*)
- 3) Establishes the Rechargeable Battery Recycling Act, which requires every retailer to have a system in place, on or before July 1, 2006, for the acceptance and collection of used rechargeable batteries for reuse, recycling, or proper disposal. (PRC 42451-42456)
- 4) Establishes the Electronic Waste Recycling Act (EWRA) to create a program for consumers to return, recycle, and ensure the safe and environmentally-sound disposal of “covered devices” that are hazardous wastes when discarded. Specifies that the EWRA includes embedded battery products, as defined. (PRC 42460 *et seq.*)
- 5) Establishes the Act, which requires producers of small household batteries to establish a stewardship program for the collection and recycling of covered batteries. (PRC 4240 *et seq.*)

THIS BILL:

- 1) Revises the definition of “covered battery” to include small format and medium format batteries.
 - a) Defines “small format battery” as a rechargeable battery weighing no more than 11 pounds that has a rating of no more than 300 watthours and a nonchargeable battery weighing no more than 4.4 pounds, as specified.
 - b) Defines “medium format battery” as a rechargeable battery that weighs more than 11 pounds or that has a rating of more than 300 watthours, or both, but that does not exceed 25 pounds, or a nonrechargeable battery weighing 4.4 to 25 pounds, as specified.

- 2) Specifies that a device provided to a consumer by a producer of a product or battery to serve solely to prevent theft or tampering of the battery and not to inhibit the consumer's ability to remove, replace, or recycle the battery does not prevent a battery from being considered designed to be easily removed from a product with no more than common household tools.
- 3) Repeals exemptions from the Act for primary batteries weighing over two kilograms and rechargeable batteries weighing over five kilograms and having a rating of more than 300 watt-hours.
- 4) Revises the collection requirements to specify that 10 collection sites per county or one collection site per 15,000 people, whichever is greater, applies to small format batteries.
- 5) Establishes collection requirements for medium format batteries:
 - a) For counties with a population of 50,000 or more, a minimum of 5 collection sites per county or one collection site per 30,000 people, whichever is greater;
 - b) For counties with a population of 18,001 to 50,000, a minimum of 2 collection sites; and,
 - c) For counties with a population of 18,000 or fewer, a minimum of 1 collection site.
- 6) Specifies that if a stewardship plan for covered batteries does not include a brand of small format batteries that is sold in the state, it is not required to have collection sites for small format batteries.
- 7) Specifies that if a stewardship plan for covered batteries does not include a brand of medium format batteries that is sold in the state, it is not required to have collection sites for medium format batteries.
- 8) Clarifies that the Act's retailer take-back requirement only applies to small format batteries.

FISCAL EFFECT: According to the Senate Appropriations Committee:

- 1) CalRecycle estimates implementation costs of \$285,000 in fiscal year (FY) 2027-2028 for 2 positions, with increased ongoing annual costs beginning in FY 2028-2029 of \$512,000 for 3 positions (Covered Battery Recycling Fund) in order to conduct research on medium format batteries; support the inclusion of medium format batteries into the current producer responsibility program; coordinate with DTSC and other relevant state agencies on compliance related issues; prosecute additional enforcement actions resulting from larger regulated community; and support the overall enforcement, planning, and strategy of the updated EPR program. CalRecycle expects that the January 14, 2026 amendments to this bill could increase these costs.
- 2) Unknown but potentially significant cost pressure (Hazardous Waste Control Account) to DTSC. According to DTSC, this bill would significantly expand the number of regulated entities, resulting in increases to DTSC's enforcement activity. DTSC states that the Responsible Battery Recycling Act's current enforcement and reimbursement provision would not fund or reimburse the department for the oversight costs of this bill beyond plan review.

COMMENTS:

- 1) **Universal waste.** Universal wastes are hazardous wastes that are widely generated by households and businesses. Universal wastes include televisions, computers, batteries, fluorescent lamps, and mercury thermostats, among others.

Hazardous waste regulations (California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11 Section 66261.9) identify seven categories of hazardous wastes that can be managed as universal waste. California's Universal Waste Rule allows individuals and businesses to transport, handle, and recycle universal wastes in a manner that differs from the requirements for most hazardous wastes. The more relaxed requirements for managing universal wastes were adopted to ensure that they are managed safely and are not disposed of with solid waste. The universal waste requirements are also less complex and easier to comply with, thereby increasing compliance.

- 2) **Batteries and battery-embedded products.** State law prohibits the disposal of batteries in the trash or household recycling collection bins that are intended for non-hazardous solid waste and/or recyclable materials. Many types of batteries, regardless of size, exhibit hazardous characteristics and are considered hazardous waste when they are discarded. These include single use alkaline and lithium-ion batteries and rechargeable lithium metal, nickel cadmium, and nickel metal hydride batteries of various sizes.

Many products are sold with embedded batteries, often lithium-ion batteries, including portable electronics like laptops, smart phones, digital cameras, game consoles, children's toys, and cordless power tools.

When batteries end up in the trash or a recycling bin, operators of solid waste facilities, including transfer stations, municipal landfills, materials recovery facilities, and recycling facilities, who discover batteries in the waste or recyclable materials are required to remove and manage the batteries separately. The facility that removes the batteries from the municipal solid waste stream or recyclable materials becomes the generator of the hazardous waste batteries and must comply with hazardous waste management regulations. Facilities that do not properly manage hazardous waste may be subject to regulatory enforcement and may be liable for monetary penalties. However, it is impossible for operators to locate every battery that enters the waste stream. Sorting through solid waste and recyclables to remove batteries poses a risk to the facility and the safety of facility workers.

Depending on the type of battery and applicable management requirements, batteries are required to be sent to a facility permitted to accept hazardous waste batteries, universal waste, or spent lead acid batteries. Only facilities that are appropriately regulated can accept hazardous waste batteries. Even though it is illegal to dispose of batteries in the solid waste stream, they frequently end up in solid waste facilities.

- 3) **Battery management.** There are two key state laws that dictate how batteries should be managed at the end of their lives:

- AB 2440 (Irwin), Chapter 351, Statutes of 2022, established the Responsible Battery Recycling Act, a producer responsibility program for producers of small format batteries. This program operates by requiring a producer responsibility organization to develop a stewardship plan for the collection, transportation, recycling, and safe and proper management of covered products in the state. The stewardship plan must be approved by CalRecycle and DTSC. The program is funded through reimbursement provided by producers and stewardship organization or organizations. That fund is used to cover the costs that CalRecycle and DTSC take on to implement and enforce the program.
- SB 1215 (Newman), Chapter 370, Statutes of 2022, added covered battery-embedded products (batteries sold within a product) to the state's EWRA, which requires CalRecycle to establish a fee, paid by consumers on new or refurbished covered battery-embedded products, that covers the reasonable regulatory costs to properly manage and recycle the covered battery-embedded products and to administer the EWRA.

While AB 2440 and SB 1215 established end-of-life management frameworks for most types of small and embedded batteries, medium-format batteries, such as those that power lawn equipment, ebikes, scooters, marine motors, and portable generators.

- 4) **Battery fires.** Some batteries, particularly lithium-ion, are extremely flammable and can combust or explode if they are damaged. When these batteries enter the waste stream, they are likely to be damaged during normal solid waste handling activities. When that happens, the batteries can ignite, causing fires in solid waste vehicles and facilities and posing a risk to the health and safety of solid waste workers and the public. While determining the exact cause of solid waste facility fires is extremely difficult, it appears that fires have become more frequent as embedded lithium-ion batteries have become more common. In May of this year, a fire erupted in a garbage truck in the City of Roseville when a battery was crushed during waste collection. One materials recovery facility located in Richmond experienced six fires over just two years in 2020 and 2021. Another facility in San Carlos experienced 10 or more fires almost every year since 2017; a stark contrast to 2013, when the facility experienced two fires. The suspected causes of these fires included a drone containing a lithium-ion battery, a lawnmower battery, a Prius battery, a lithium-ion battery pack, and a cell phone. When a battery ignites in a solid waste facility, it is surrounded by flammable materials, allowing the fire to grow quickly. Even with advanced fire suppression equipment, fires shut down operations, impact workers, and affect the air quality of nearby residents. The increasing frequency of fires has also impacted solid waste operators' ability to find insurance. Insurance premiums and deductibles rise dramatically after a fire, if the facility can find insurance at all. At the San Carlos facility, insurance premiums increased from \$180,000 per year to \$1.5 million, and the facility's deductible rose exponentially, from \$5,000 to \$1.5 million. The costs associated with the fires caused by batteries are passed on to ratepayers.

5) **Author's statement:**

SB 501 expands California's extended producer responsibility program for batteries to include medium-format batteries, such as those found in ebikes, outdoor lawn equipment, and portable power systems. Batteries continue to be one of the most problematic sources of household hazardous waste due to their

ability to cause fires or explosions when improperly managed, and the high costs of proper disposal to local governments. However, the amount of batteries entering end-of-life each year is rapidly increasing. EPR programs can help address problems with safe collection and shift the cost burden of managing these products from local cities and counties, and ultimately ratepayers, to the producers designing the products. SB 501 builds on California's extensive experience with EPR programs while taking advantage of the efficiencies of expanding existing programs.

- 6) **Double referral.** This bill passed the Environmental Safety and Toxic Materials Committee 5-1 on June 16th.

REGISTERED SUPPORT / OPPOSITION:

Support

Alameda County
California Product Stewardship Council
Californians Against Waste
City of Cupertino
City of Glendale
City of Long Beach
Los Angeles County
Recyclesmart
Rethink Waste
Stopwaste

Opposition

None on file

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