

Date of Hearing: June 16, 2026

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

Damon Connolly, Chair

SB 501 (Allen) – As Amended January 14, 2026

SENATE VOTE: 30-10

SUBJECT: Responsible Battery Recycling Act of 2022: covered batteries

SUMMARY: Expands the Responsible Battery Recycling Act of 2022 (Act) to include medium format batteries, as defined. Specifically, **this bill:**

- 1) Defines "covered battery" as a device consisting of one or more electrically connected electrochemical cells designed to receive, store, and deliver electric energy. Specifies that a covered battery includes only a small format battery and a medium format battery that is any of the following:
 - a) A loose battery that is either sold separately from a product or that is designed to be easily removed from a product by the user of the product with no more than common household tools. Provides that a key, application, or other locking device provided to the consumer by the producer of the product that serves to prevent theft or tampering of the battery shall not prevent the battery from being considered designed to be easily removed from a product; or,
 - b) A battery that is packed with, but not installed in, the product that the battery is intended to power, when the product is offered for sale by the producer.
- 2) Defines "medium format battery" as either of the following:
 - a) 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 weigh more than 25 pounds or have a rating of more than 2,000 watthours; or,
 - b) A nonrechargeable battery, including, but not limited to, alkaline, carbon-zinc, and a lithium metal battery, weighing at least 4.4 pounds but no more than 25 pounds.
- 3) Defines "small format battery" as both of the following:
 - a) A rechargeable battery weighing no more than 11 pounds that as a rating of no more than 300 hours; or,
 - b) A nonrechargeable battery, including, but not limited to, alkaline, carbon-zinc, and a lithium metal battery, weighing no more than 4.4 pounds.
- 4) Authorizes a stewardship plan for covered batteries to not have collection sites for small format batteries if the stewardship organization does not include a brand of small format batteries.

- 5) Authorizes a stewardship plan for covered batteries to not have collections sites for medium format batteries if the stewardship organization does not include a brand of medium format batteries.
- 6) Requires, as part of a stewardship plan for covered batteries, a description of how the program operator will provide for a free drop-off and convenient collection system for covered batteries in each county that meets the following requirements:
 - a) For small format batteries, a minimum of 10 collection sites per county or one collection site per 15,000 people, whichever is greater, except as specified;
 - b) For medium format batteries, a minimum of five collection sites per county or one collection site per 30,000 people, whichever is greater;
 - c) Collection sites are not required to collect covered batteries that are damaged, defective, or recalled; and,
 - d) Collection sites shall be spread throughout the county to facilitate widespread access and convenience.
- 7) Requires a retailer with five or more locations in the state to make all locations serve as permanent collection sites for small format batteries.

EXISTING LAW:

- 1) Enacts the Electronic Waste Recycling Act of 2003 (EWRA), which established a program for consumers to return, recycle, and ensure the safe and environmentally sound disposal of video display devices, such as televisions and computer monitors, that are hazardous wastes when discarded. (Public Resources Code (PRC) § 42460 et seq.)
- 2) Creates the Hazardous Waste Control Law (HWCL) and provides the Department of Toxic Substances Control (DTSC) with responsibility for overseeing the management of hazardous waste in California. (Health and Safety Code § 25100 et seq).

Under the Responsible Battery Recycling Act of 2022. (PRC § 42420-42428)

- 3) Defines "covered battery" as a device consisting of one or more electrically connected electrochemical cells designed to receive, store, and deliver electric energy. A covered battery includes a battery that is any of the following:
 - a) A loose battery that is either sold separately from a product or that is designed to be easily removed from a product by the user of the product, with no more than common household tools, or,
 - b) A battery that is packed with, but not installed in, the product that the battery is intended to power, when the product is offered for sale by the producer.
- 4) Provides that "covered battery" does not include any of the following:

- a) A primary battery weighing over two kilograms. A "primary battery" is a nonrechargeable battery, including, but not limited to, alkaline, carbon-zinc, and lithium metal batteries;
 - b) A rechargeable battery weighing over five kilograms and having a watt-hour rating of more than 300 watt-hours;
 - c) A lead-acid battery;
 - d) A battery contained in a motor vehicle as specified.
 - e) A fuel cell electrical generating facility;
 - f) A Class I device as defined in federal law (Title 21 of the United States Code (U.S.C.) § 360c) and either of the following applies:
 - i) It is a device described in federal regulations (Title 42 of the Code of Federal Regulations (CFR) § 414.202), or
 - ii) Either of the following applies:
 - aa) The device is predominantly used in a health care setting by a provider, or
 - bb) The device is predominantly prescribed by a health care provider;
 - g) A Class II or Class III device as defined in federal law (Title 21 U.S.C. § 360c); and,
 - h) A battery that has been recalled.
- 5) Requires the Department of Resources, Recycling, and Recovery, (CalRecycle), in consultation with the DTSC, to adopt regulations to implement the Act with an effective date no earlier than April 1, 2025.
- 6) Requires a retailer with five or more locations in the state to make all locations serve as permanent collection sites for covered batteries.

FISCAL EFFECT: Unknown.

COMMENTS:

Need for the bill: According to the author, "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."

Universal waste: Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers, other electronic devices, batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

The 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 wastes. Any unwanted item that falls within one of these waste streams can be handled, transported, and recycled following the simple requirements set forth in the universal waste regulations (CCR, Title 22, Division 4.5, Chapter 23) versus the more stringent requirements for hazardous waste.

California's Universal Waste Rule allows individuals and businesses to transport, handle, and recycle certain common hazardous wastes, termed 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 in the trash. Universal waste requirements are also less complex and easier to comply with than the HWCL, thereby increasing compliance.

Regulation of batteries: State law, the HWCL, prohibits the disposal of batteries in the trash or household recycling collection bins intended to receive other non-hazardous 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 batteries and rechargeable lithium metal, nickel cadmium, and nickel metal hydride batteries of various sizes (AAA, AA, C, D, button cell, 9-Volt, and small sealed lead-acid batteries).

These batteries, sold individually, are "covered batteries" under Responsible Battery Recycling Act of 2022 (AB 2440 Irwin, Chapter 351, Statutes of 2022).

If batteries end up in the trash or a recycling bin, owners/operators of solid waste transfer stations, municipal landfills, and recycling centers 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.

Depending on the type of battery and applicable management requirements, batteries must be sent to a facility permitted to accept hazardous waste batteries, universal wastes, or spent lead acid batteries. Only facilities that have a DTSC permit or other type of authorization to treat, store, or dispose of hazardous wastes may accept hazardous waste batteries. Persons that do not have a DTSC permit may accept and store universal waste batteries and spent lead acid batteries if they operate according to the regulations specifically tailored for those types of batteries.

Responsible Battery Recycling Act of 2022: AB 2440 (Irwin, Chapter 351, Statutes of 2021) enacted the Responsible Battery Recycling Act of 2022. It requires producers of covered batteries to establish a stewardship organization (also known as producer responsibility

organization or PRO) that will set up and run a stewardship program that will provide for the free and convenient collection of covered batteries from consumers.

Implementation of the Responsible Battery Recycling Act of 2022: Since the enactment of the Act, CalRecycle has had several workshops including:

- 1) October 18, 2023 – Informational session on the Act
- 2) April 3, 2024 – Informal Regulatory Concept Workshop
- 3) July 11, 2024 – Informal Regulatory Concept Workshop
- 4) May 29, 2025 – Informal Rulemaking Workshop

As of the writing of this analysis, CalRecycle has not initiated a formal rulemaking to implement the Act.

This bill: SB 501 expands the Responsible Battery Recycling Act of 2022 to include medium format batteries. Since the regulations for the Act have not been officially started, the addition of the medium format batteries is will timed to fit within CalRecycle's future regulation.

Ongoing conversations: There is ongoing dialogue with the author of the bill and stakeholders that could result in further refinement and clarification within the bill. Additionally, the author may wish to consider adding language requiring the collection locations of small and medium format batteries to have sufficient training on fire prevention and suppression.

Arguments in support: According to the co-sponsors of the bill: the California Product Stewardship Council, Californians Against Waste, and Rethink Waste:

"The three signatories are the original co-sponsors and played an instrumental role in passing AB 2440 (Irwin), which created the Responsible Battery Recycling Act of 2022 and requires producers of covered batteries to establish a stewardship program for the collection and recycling of covered batteries.

We support the proposed language to expand the Responsible Battery Recycling Act of 2022 in a thoughtful manner. The addition of medium format batteries will improve the program to be more exhaustive of larger batteries on the market not currently included in the program that still pose a serious danger to the waste stream. We encourage safeguards and precautions for the collection infrastructure to ensure they are not burdened by size or volume from expanded collection. We also believe holding producers accountable for green design and reuse provisions will be key to driving circularity."

Arguments in opposition: According to Redwood Materials,

"On behalf of Redwood Materials, we write with urgent concerns regarding SB 501, the Household Hazardous Waste Producer Responsibility Act. While we support the bill's goal of promoting safe and responsible lithium-ion battery recycling, we believe it is impractical to include lithium-ion batteries within a broad, one-size-fits-all hazardous waste recycling program.

This approach fails to fully utilize the expertise of advanced battery recyclers and California's well-established e-waste and metal recycling infrastructure.

As drafted, the bill risks stifling effective and innovative market-driven solutions by monopolizing battery collection to a single third-party, 501(c)(3) entity that does not actually recycle the materials they receive. We oppose this bill and believe that lithium-ion batteries should be excluded from this legislation's proposed requirements. The state should instead look to propose a different legislative program for such batteries, one that integrates market-based solutions, education and strengthens both California's recyclers and America's domestic battery recycling industry."

Double-referral: Should this bill pass the Assembly Environmental Safety and Toxic Materials Committee, it will be re-referred to the Assembly Natural Resources Committee.

Related legislation:

- 1) AB 2440 (Irwin, Chapter 351, Statutes of 2022). Creates the Responsible Battery Recycling Act of 2022, which requires producers of covered batteries, as defined, to establish a stewardship program for the collection and recycling of covered batteries.
- 2) SB 1215 (Newman, Chapter 370, Statutes of 2022). Expands the EWRA to include battery embedded products.
- 3) SB 289 (Newman, 2021). Would have enacted the Battery and Battery-Embedded Product Recycling and Fire Risk Reduction Act of 2021, which would have required the producers of batteries and battery-embedded products to establish a stewardship program for those products, with full implementation on or before June 30, 2025. This bill was held on the suspense file in the Senate Appropriations Committee.
- 4) AB 1509 (Mullin, 2019). Would have established the Lithium-Ion Battery Recycling Program within CalRecycle, which would have required manufacturers of lithium-ion batteries to provide convenient collection, transportation, and disposal of lithium-ion batteries. This bill was not heard in the Senate Environmental Quality Committee and subsequently died on file.
- 5) AB 2832 (Dahle, Chapter 822, Statutes of 2018). Requires the Secretary for the California Environmental Protection Agency to convene a research group to review and advise the Legislature on policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state.
- 6) SB 212 (Jackson, Chapter 1004, Statutes of 2018). Requires entities that sell drugs or sharps in the state to individually, or with other entities, develop and implement a statewide home-generated drug stewardship plan, or a home-generated sharps waste stewardship plan, or both, for the collection and proper disposal of home-generated drug and sharps waste. Requires CalRecycle to oversee and enforce each stewardship plan.
- 7) AB 1125 (Pavley, Chapter 572, Statutes of 2005). Enacts the Rechargeable Battery Recycling Act of 2006, which requires retailers of rechargeable batteries, by July 1, 2006, to

establish a system for accepting rechargeable batteries for reuse, recycling, or proper disposal.

- 8) AB 2901 (Pavley, Chapter 891, Statutes of 2004). Enacts the Cell Phone Recycling Act of 2004 which requires all retailers of cellular telephone to have in place a system for the collection, reuse and recycling of cell phones. Requires DTSC to provide information on cell phone recycling.
- 9) SB 20 (Sher, Chapter 526, Statutes of 2003). Enacts the Electronic Waste Recycling Act of 2003 to provide for the convenient recycling of covered electronic devices in California.

REGISTERED SUPPORT / OPPOSITION:

Support

5 Gyres Institute
 7th Generation Advisors
 Alameda; County of
 American Sustainable Business Council
 Atlas Disposal
 Atrium 916 Creative Innovation Center for Sustainability
 Ban Sup (single Use Plastic)
 California Product Stewardship Council
 California Professional Firefighters
 California Resource Recovery Association
 California State Association of Counties (CSAC)
 California Teamsters Public Affairs Council
 Californians Against Waste
 Calpirg, California Public Interest Research Group
 Center for Environmental Health
 Circular Polymers
 City and County of San Francisco
 City of Buena Park
 City of Cupertino
 City of Roseville
 City of San Jose
 City of Santa Maria
 Clean Water Action
 Cleanearth4kids.org
 Climate Reality Project Riverside County Chapter
 Climate Reality Project San Diego
 Climate Reality Project San Francisco Bay Area Chapter
 Climate Reality Project, Los Angeles Chapter
 Climate Reality Project, Orange County
 Climate Reality Project, San Fernando Valley
 Coastal Environmental Rights Foundation
 County of Alameda
 County of Humboldt
 County of Los Angeles Board of Supervisors

County of Mendocino
County of Santa Barbara
County of Santa Barbara Resource Recovery & Waste Management Division
Cupertino; City of
Del Norte Solid Waste Management Authority
Dh Casters
Facts: Families Advocating for Chemical & Toxics Safety
Friends Committee on Legislation of California
Friends of Harbors, Beaches and Parks
Gross Garbage Group
Heal the Bay
League of California Cities
Long Beach; City of
Los Angeles County
Marin Sanitary Services
Mendocino County Department of Transportation
Merced County Regional Waste Management Authority
Napa Recycling & Waste Services
National Stewardship Action Council
Netzero360 Sustainable Waste Solutions
Northern California Recycling Association
Plastic Pollution Coalition
Product Stewardship Institute
Recology
Recyclesmart
Recycling Partnership; the
Regen Monterey
Republic Services
Resource Recovery Coalition of California
Rethink Waste
Rural County Representatives of California (RCRC)
Sacramento Splash
Sacramento; County of
Sagebrook Advisors
San Francisco Baykeeper
San Joaquin County Board of Supervisors
San Jose; City of
Sea Hugger
Sierra Club California
South Bayside Waste Management Authority (sbwma) Db a Rethinkwaste
Stopwaste
Swana California Chapters Legislative Task Force
Tehama County Solid Waste Management Agency
The Last Plastic Straw
Upstream
Waste Connections, INC.
Western Placer Waste Management Authority (WPWMA)
Zero Waste Marin
Zero Waste Marin Joint Powers Authority

Zero Waste Sonoma

Opposition

Motorcycle Industry Council
Redwood Materials, Inc.

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