Date of Hearing: April 25, 2022

ASSEMBLY COMMITTEE ON NATURAL RESOURCES
Luz Rivas, Chair
AB 2440 (Irwin) – As Amended March 28, 2022

SUBJECT: Responsible Battery Recycling Act of 2022

SUMMARY: Establishes the Responsible Battery Recycling Act of 2022 (Act), which establishes a stewardship program for the collection and recycling of covered batteries and covered battery-embedded products (covered products).

EXISTING LAW:

1) Establishes the Integrated Waste Management Act and provides the Department of Resources Recover and Recycling (CalRecycle) with the responsibility for overseeing the management of solid waste in California.

2) Creates the Hazardous Waste Control Law and provides the Department of Toxic Substances Control (DTSC) with responsibility for overseeing the management of hazardous waste in California.

3) Enacts the Rechargeable Battery Recycling Act of 2006, 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.

4) 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.

5) Enacts the Cell Phone Recycling Act 2004, which requires all retailers of cell phones to have in place a system for the collection, reuse, and recycling of cell phones and requires DTSC to provide information on cell phone recycling.

THIS BILL:

1) Defines terms used in the bill, including:

    a) "Covered battery" as a device consisting of one or more electrically connected electrochemical cells designed to receive, store, and deliver electric energy. Includes an intact, unbroken battery from which the electrolyte has been removed and battery packs or sets of batteries that are connected or encapsulated within a casing to form a complete unit. Excludes from this definition:

        i) A primary battery weighing over two kilograms;
        ii) A rechargeable battery weighing over five kilograms and having a Watt-hour rating of more than 300 Watt-hours;
        iii) A lead-acid battery;
        iv) A battery contained in a motor vehicle, as specified; and,

v) A fuel cell electrical generating facility.

b) "Covered battery-embedded product" as a product containing a battery or battery pack that is not designed to be removed from the product by the consumer. Excludes from this definition:

i) A medical device;
ii) A covered electronic device, as defined by the EWRA; and,
iii) An energy storage system, as specified.

c) "Distributor" as a company that has a contractual relationship with one or more producers to market and sell covered products to retailers.

d) "Importer" as:

i) A person qualifying as an importer of record, as specified, for a covered product sold into the state that was manufactured outside of the United States; and,
ii) A person importing a covered product sold into the state that was manufacture or assembled by a company outside the state.

e) "Producer" as the person who manufactures the covered product and who sells, offers for sale, or distributes them in the state. If there is no person who is the procurer of a covered product, the producer is the person who imports the covered product into the state. If there is no person who is the producer who imports the covered products into the state, the producer is the person who sells the covered products in or into the state.

f) "Rechargeable battery" as a battery that contains one or more voltaic or galvanic cells, electrically connected to produce electric energy, and that is designed to be recharged. Rechargeable battery does not include a battery that contains electrolytes as a free liquid or that employs lead-acid technology, except as specified.

g) "Recycling efficiency rate" means the ratio of the weight of covered products recycled by a producer or stewardship organization to the weight of covered products received by the producer or stewardship organization.

h) "Retailer" as a person who sells covered products to a person through any means.

i) "Stewardship organization" as an organization exempt from taxation under Section 501 (c)(3) of the federal Internal Revenue Code of 1986 that is established by a group of producers in accordance with the bill to develop and implement a stewardship program.

j) "Stewardship plan" as a plan developed by a stewardship organization or producer for the collection, transportation, recycling, and the safe and proper management of covered products.

k) "Stewardship program" as a program established by a producer or stewardship organization for the free and convenient collection, transportation, recycling, and the safe and proper management of covered products pursuant to a stewardship plan approved by CalRecycle.

2) Requires CalRecycle, on or before January 1, 2025 and in consultation with DTSC, to adopt regulations to implement the bill.

3) Requires producers, no later than 90 days after the effective date of the bill, to provide CalRecycle with a list of covered products that the producer sells or offers for sale in the state. Requires producers or a stewardship organization to update the list on or before January 15 of each year or upon request.

4) Authorizes producers to form one or more stewardship organizations to develop and implement the covered product recycling program established by the bill, and requires producers to comply with the Act's requirements individually or through a stewardship organization.

5) Prohibits a producer from selling, distributing, offering for sale, or importing a covered product in or into the state unless the producer is in compliance with the Act.

6) Establishes a process for persons who are nor producers to request exemptions from CalRecycle.

7) Within six months of the effective date of the regulations adopted by CalRecycle, requires a producer or stewardship organization to develop and submit a stewardship plan for the collection, transportation, recycling, and the safe and proper management of covered batteries or for covered battery-embedded products in the state in an economically efficient and practical manner.

8) Requires the stewardship plan to include specified standards and elements, including:

    a) Provide for a free and convenient collection system for covered products in each county of the state, including drop off, as specified;
    b) An explanation of the producer's or stewardship organization's plan to meet the recycling efficiency rate established by CalRecycle;
    c) The establishment and administration of a means for fully funding the stewardship program, as specified, in a manner that equitably distributes the costs among member producers;
    d) A description of the process by which covered products will be processed and recycled, as specified;
    e) Strategies to serve areas that face unique challenges associated with proper waste management and a comprehensive statewide education and outreach program;
    f) Develop strategies to implement proper labeling to ensure proper collection and recycling;
    g) A contingency plan in the event that the stewardship plan expires, is disapproved, or is revoked.

9) Requires stewardship plans to be reviewed by the stewardship organization every five years, and revised if necessary, subject to approval by CalRecycle.

10) On or before January 1, 2025, requires CalRecycle to establish an advisory body for covered product stewardship that includes, but is not limited to, representatives from local government, recyclers, retailers, the household hazardous waste industry, nongovernmental organizations, environmental organizations, community-based justice and public health

organizations, and the solid waste industry. Requires producers or stewardship organizations to consult with the advisory body when establishing or updating a stewardship plan. Requires producers or stewardship organizations to include the recommendations of the advisory body into stewardship plans, to the extent feasible.

11) Requires producers or stewardship organizations to submit the proposed stewardship plan to DTSC for review at least 90 days before submitting the plan to CalRecycle. Requires that a producer or stewardship organization to submit the determinations made by DTSC when submitting the stewardship plan to CalRecycle.

12) Requires producers and stewardship organizations to have an approved plan by December 31, 2025, and requires that the stewardship plan be fully implemented within 270 days of approval.

13) Requires retailers with five or more locations in the state to make all locations available as collection sites for covered products smaller than an unspecified weight.

14) Requires producers and stewardship organizations to submit a proposed stewardship program budget with the stewardship plan for the subsequent five years. Requires the budget to include:

    a) Anticipated revenues and costs of implementing the stewardship program, including administrative expenses for CalRecycle and DTSC;
    b) A recommended funding level sufficient to cover the budgeted costs and to operate the stewardship program in a prudent and responsible manner over a multiyear period; and,
    c) Any additional information that CalRecycle deems necessary.

15) Establishes the Covered Battery and Covered Battery-Embedded Product Recycling Fund (Fund), to be funded by the reimbursement provided by producers and stewardship organizations and to be used by CalRecycle and DTSC to implement and enforce the bill's requirements.

16) Requires producers and stewardship organizations to arrange for an independent audit annually, and requires CalRecycle to annually review the audit for compliance. Authorizes CalRecycle to conduct an audit, as necessary.

17) Requires producers and stewardship organizations to prepare and submit to CalRecycle an annual report including specified information about the covered products collected and recycled and related information. Requires CalRecycle to approve, disapprove, or conditionally approve the report.

18) Requires CalRecycle to begin reporting a list of producers that are in compliance with the bill, and the reported brands of the covered products for each producer, by July 1, 2027 and annually thereafter.

19) Requires retailers and distributors to monitor the CalRecycle website to determine if covered products are in compliance with the bill. Prohibits the sale, distribution, and importation of covered products that are not in compliance.

20) Authorizes CalRecycle to impose administrative penalties up to $10,000 per day on producers, stewardship organizations, manufacturers, distributors, retailers, importers, recyclers, or collection sites for violations of the bill. For knowing or intentional violations, authorizes penalties up to $50,000 per day.

21) Authorizes CalRecycle to revoke a stewardship plan, require resubmittal of a plan, or remove a producer from the list of compliant producers if it determines that the producer or stewardship organization has not met a material requirement of the program.

22) Repeals the Rechargeable Battery Recycling Act of 2006 and the Cell Phone Recycling Act 2004 on January 1, 2027.

FISCAL EFFECT: Unknown

COMMENTS:

1) **Author's statement**:

> Many Californians don't realize that all batteries are hazardous waste; and that throwing batteries, and products embedded with batteries, in curbside waste bins poses a threat to recycling facilities and human life. With more of our everyday items running off of batteries, it is imperative that we take swift action to stamp out the risk of devastating fires at our waste facilities and safely allow recovery of the valuable minerals inside batteries. AB 2440 will establish a comprehensive program to address this crisis and protect our communities from battery fires.

2) **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.

   The hazardous waste regulations identify seven categories of hazardous wastes that can be managed as universal wastes. 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.

3) **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 (AAA, AA, C, D, button cell, 9-Volt, and small sealed lead-acid batteries). These batteries would be "covered batteries" under this bill.

   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. A multitude of products that light up, from greeting cards to children's shoes to throw pillows, contain embedded batteries. Many of these products would be "covered battery-embedded products" under the bill if the battery is not designed to be removed from the product by the consumer.

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 be sent to a facility permitted to accept hazardous waste batteries, universal wastes, 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, current collection efforts are not succeeding.

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. 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 for 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) **California Rechargeable Battery Recycling Act**. Most portable electronic devices use rechargeable batteries, and millions of rechargeable batteries are sold in California each year. In 2005, to help promote proper disposal of rechargeable batteries by the public, the Legislature enacted the California Rechargeable Recycling Act, AB 1125 (Pavley, Chapter 572, Statutes of 2005), which requires retailers to have a mechanism to accept rechargeable batteries from consumers for recycling. Retailers who have less than one million dollars in

gross sales annually are not subject to the law's requirements. Rechargeable batteries that are contained in, or packaged with, a battery-operated device are not subject to this law.

To track how effective this program is, the law requires DTSC to survey battery handling and/or recycling facilities and post the estimated amount of each type of rechargeable batteries returned for recycling in California during the previous calendar year. DTSC receives data voluntarily submitted by major California battery recyclers to estimate how many rechargeable batteries, by type (e.g., nickel-cadmium, nickel metal hydride, etc.), are collected in each calendar year.

According to DTSC's website, the following are approximate quantities of rechargeable batteries collected for recycling in California in 2020: 408,823 pounds of lithium ion batteries; 252,969 pounds of nickel cadmium batteries; 77,766 pounds of nickel metal hydride batteries; and, 4,810,578 pounds of small sealed lead acid batteries. While exact data on battery recycling is difficult to obtain, n average the amount of each battery type collected is trending downward.

6) **Product stewardship**. Product stewardship, also known as extended producer responsibility, is a strategy for shared responsibility for end-of-life product management on the producers, and all entities involved in the product chain, instead of the general public. Product stewardship encourages product design changes that minimize a negative impact on human health and the environment at every stage of the product's lifecycle. This allows the costs of treatment and disposal to be incorporated into the total cost of a product. It places primary responsibility on the producer, or brand owner, who makes design and marketing decisions. It also creates a setting for markets to emerge that truly reflect the environmental impacts of a product, and to which producers and consumers respond. CalRecycle has developed a product stewardship framework and checklists to guide statutory proposals that would allow CalRecycle and other stakeholders to implement product stewardship programs.

   There are several statewide product stewardship programs in California, all of which are overseen by CalRecycle. They include carpet, paint, mattresses, and home-generated pharmaceutical and sharps waste.

7) **This bill**. AB 2440 establishes a product stewardship program for covered products in order to improve the collection and recycling of these batteries in hopes of keeping them out of the solid waste stream. Proper collection and management of covered products will reduce the number of fires at solid waste handling operations, which will protect the health and safety of solid waste facility employees and the public and reduce air emissions associated with solid waste facility fires, and ensure that the collected covered products are managed in accordance with hazardous waste laws and regulations.

   This bill includes many of the critical elements of an effective product stewardship program. As with other stewardship bills, the author should continue to work with this committee, CalRecycle, and stakeholders to ensure that the program created by the bill is effective and enforceable.

   This bill does not specify the minimum number of collection sites per capita or the maximum battery size retail locations must take back. According to the author, these amounts are being negotiated with stakeholders and will be determined as negotiations continue.

Additionally, the timelines for stewardship plan submittal to DTSC and CalRecycle, and for DTSC and CalRecycle approval, appear to overlap and may need to be revised. The author should work with the departments and stakeholders to revise the timelines, if necessary.

8) **Suggested amendments**. The *committee may wish to make the following amendments to the bill:*

   a) Remove the requirement that CalRecycle must grant an exemption to a person who is not a producer. CalRecycle routinely works with interested parties to determine their roles and responsibilities under its various product stewardship programs. A process to exempt individuals that are not producers is unnecessary and adds unnecessary complexity and cost.

   b) Clarify that the stewardship plan must include plans to meet a minimum recycling efficiency rate for each battery chemistry, as established by CalRecycle.

   c) Clarify that collection sites must comply with all applicable laws, regulations, and rules to be included in the program.

   d) Authorize a producer or stewardship organization to suspend or terminate a collection site that does not comply with all applicable laws and regulations, and make a related technical and clarifying change to this provision.

   e) Require that all handling, collection, transport, and recycling of covered products comply with all applicable state and federal regulations.

   f) Clarify that retailers must begin complying with the sales prohibition, as specified, when CalRecycle approves a stewardship plan.

   g) Remove the blanket penalty exemption for any producer or stewardship organization that can demonstrate that it received false or misleading information from a member of the stewardship organization or other party.

   h) Make related technical and clarifying changes.

9) **Related legislation**. SB 1215 (Newman) is substantially similar to this bill and is awaiting hearing in the Senate Appropriations Committee.

10) **Double referral**. This bill was passed the Assembly Environmental Safety and Toxic Materials Committee 7-1 on April 5th.

REGISTERED SUPPORT / OPPOSITION:

Support

Active San Gabriel Valley
California Product Stewardship Council (CO-SPONSOR)
California Resource Recovery Association
California State Association of Counties
California Waste Haulers Council

Californians Against Waste (CO-SPONSOR)
Central Contra Costa Sanitary District
City of Colton
City of Lake Elsinore
City of Roseville
City of Thousand Oaks
City of San Jose
Clean Water Action
CR&R, Inc.
Delta Diablo
Environmental Working Group
League of California Cities
Los Angeles County Sanitation Districts
Marin Household Hazardous Waste Facility
Monterey Regional Waste Management District
Napa Recycling & Waste Services
RecycleSmart
Republic Services - Western Region
Republic Services, Inc.
Resource Recovery Coalition of California
RethinkWaste (CO-SPONSOR)
Rural County Representatives of California
Santa Clara County Recycling and Waste Reduction Commission
Sea Hugger
Stopwaste
Urban Counties of California
Waste Management
Western Placer Waste Management Authority
Zero Waste Company
Zero Waste Sonoma

Opposition

Association of Home Appliance Manufacturers
California Retailers Association
Consumer Technology Association
National Electrical Manufacturers Association
Toy Industry Association

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