SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
2021-2022 Regular

Bill No:	SB 244		
Author:	Archuleta		
Version:	1/21/2021	**Hearing Date:**	3/15/2021
Urgency:	No	**Fiscal:**	Yes
Consultant:	Rylie Ellison		

SUBJECT: Lithium-ion batteries: illegal disposal: fire prevention

DIGEST: Requires the Department of Resources, Recovery, and Recycling (CalRecycle), in consultation with the Department of Toxic Substances Control (DTSC), to develop guidance for the proper handling and disposal of lithium-ion batteries and authorizes CalRecycle to form a working group with other state agencies on the development of this guidance document. Requires the Department of Forestry and Fire Protection (CAL FIRE) to develop protocols and training for the detection, safe-handling, and suppression of fires started from discarded lithium-ion batteries in the waste-handling system to be adopted by solid waste enterprises. Additionally, prohibits a person from knowingly disposing of a lithium-ion battery in the garbage or recycling streams, unless the container or receptacle is designated for the collection of batteries for recycling.

ANALYSIS:

Existing law:

1) Defines universal waste to include batteries. (22 California Code of Regulations (CCR) 66273.1(a)(1) et seq.)

2) Prohibits a universal waste handler from disposing of universal waste, except that a universal waste handler may take batteries, among other things, to a destination facility for disposal. (22 CCR 66273.31)

3) Prohibits the disposal of a battery anywhere besides a destination facility. (Health and Safety Code (HSC) § 25190 et seq.)

4) Under the California Rechargeable Battery Recycling Act of 2006, prohibits many retailers from selling rechargeable batteries in California unless they have a system in place for collecting used rechargeable batteries from consumers. (Public Resources Code (PRC) § 42451)

5) Under the Cell Phone Recycling Act of 2004, requires a retailer selling a cell phone to have a system in place for collection of used cell phones for reuse, recycling, or proper disposal. (PRC § 42490-42499)

6) Under the Electronic Waste Recycling Act of 2003, assesses a recycling fee on retail sales of covered electronic devices (such as televisions) and tasks CalRecycle with administering a payment system for collectors and recyclers to cover the average net costs of recovering and recycling covered electronic waste. (PRC § 42460 et seq.)

7) Requires the Secretary for Environmental Protection to convene the Lithium-Ion Car Battery Recycling Advisory Group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion batteries sold with motor vehicles in the state. It also requires the advisory group to submit, on or before on or before April 1, 2022, policy recommendations to the Legislature aimed at ensuring that as close to 100% as possible of lithium-ion batteries in the state are reused or recycled. (PRC § 42450.5)

This bill:

1) Requires CalRecycle, on or before July 1, 2024, and in consultation with DTSC, to develop a guidance document for use by local governments to better inform, educate, and increase public awareness as to the proper handling of, and the risk of fire due to the mishandling or improper disposal of, lithium-ion batteries and products that contain lithium-ion batteries, and to reduce the likelihood of illegal disposal.

2) Authorizes CalRecycle to work with other state agencies to convene a working group to advise on the content, development, and promotion of the guidance document.

3) Requires CAL FIRE, before January 1, 2023, in consultation with relevant state agencies and stakeholders, to develop a model protocol and training that identifies best practices for the detection, safe handling, and suppression of fires that originate from discarded lithium-ion batteries or products that contain lithium-ion batteries on or in solid waste or recycling collection vehicles, transfer or processing stations, or disposal facilities, as provided.

4) Requires a solid waste enterprise, as defined, before July 1, 2023, after consulting with the county fire marshal of every county in which the solid waste enterprise conducts solid waste collection operations, to adopt, or update if necessary, a protocol and arrange any necessary training for relevant

employees that identifies procedures to follow for the detection, safe handling, and suppression of fires that originate from discarded lithium-ion batteries or products containing lithium-ion batteries on or in solid waste or recycling collection vehicles, transfer or processing stations, or disposal facilities.

5) Prohibits a person from knowingly disposing of a lithium-ion battery in a container or receptacle that is intended for the collection of solid waste or recyclable materials, unless the container or receptacle is designated for the collection of batteries for recycling pursuant to the universal waste provisions within the Health and Safety Code.

Background

1) *Lithium-ion batteries.* Lithium-ion batteries are widely used in electronics like laptops, smart phones, digital cameras, and cordless power tools. The addition of lithium-ion batteries to the market is expected to increase up to seven-fold in the next five years as the technology improves and they are used in more products of all sizes, from Apple AirPods to electric vehicles. All batteries, including lithium-ion batteries, are considered hazardous waste in California when they are discarded, because they contain toxic and/or corrosive substances.

2) *Disposal of Lithium-ion batteries*. It is prohibited by law for batteries to be disposed of in the trash or household recycling collection bins intended to receive other non-hazardous waste and/or recyclable materials. According to CalRecycle, there are approximately 44 million lithium-ion batteries in California. It is estimated that between 800-2,000 tons enter the waste stream annually, while DTSC reports voluntary recovery of lithium-ion batteries is estimated at only 250 tons.

   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. Upon removing the illegally disposed batteries from the waste stream as required, the facility itself is then considered the waste generator and must comply with hazardous waste management regulations or be subject to fines.

3) *Fire hazard.* Lithium-ion batteries pose a fire hazard. If the material separating the electrodes within the battery is damaged, the electrodes can touch and heat up. This can cause the flammable materials inside the battery to combust. In 2016, Samsung was forced to recall Galaxy Note 7 phones due to incidents of

the lithium-ion batteries combusting. Lithium-ion batteries can start a fire if they are dropped or crushed, which can easily happen, such as in a solid waste truck or facility, if they are disposed of improperly. According to a California Product Stewardship Council survey in 2018, of 26 waste facilities from all over the state, 83% of waste facilities reported a fire in the past two years, 65% were started by batteries, and 40% of those fires were started by lithium-ion batteries.

Comments

1) *Purpose of Bill.* According to the author, "Nowadays lithium-ion batteries are found in just about every portable electronic device, and unfortunately, at some point they will eventually find their way into California's waste stream. This in turn has led to fires, not just in waste haulers trucks, but also at the waste haulers sorting facilities. California needs to do more to increase awareness with the public about the need to properly recycle these batteries. At the same time, California needs to implement protocols for both consumers and industry to follow in regards to the disposal of these batteries. Senate Bill 244 accomplishes both of those goals. This bill tasks the Department of Forestry and Fire Protection (CalFire) to provide their expertise, in consultation with other relevant state agencies, in developing a model protocol and training that identifies best practices for the detection, safe handling, and suppression of fires that originate in solid waste collection and recycling vehicles and facilities. Furthermore, SB 244 would require the Department of Resources Recycling and Recovery (CalRecycle) in consultation with the Department of Toxic Substances Control (DTSC) to develop a guidance document to inform, educate, and increase public awareness regarding the fire risk from improper disposal of lithium-ion batteries."

2) *Barriers to recycling lithium-ion batteries.* Much of the public is unaware of or face barriers to complying with proper recycling procedures of lithium-ion batteries, or the products containing them. Exceptions to the California Rechargeable Battery Recycling Act mean that retailers who gross less than one million dollars annually are not required to accept rechargeable batteries for recycling. Additionally, sales of rechargeable batteries that are contained in, or packaged with, a battery-operated device are also not subject to this law and are disposed of differently, as e-waste. As a result, consumers would have to go out of their way to properly dispose of lithium-ion batteries. As an example, using Call2Recycle's online tool that locates rechargeable battery recycling stations, the closest one to the State Capitol is The Home Depot in West Sacramento, which can be difficult to get to for those without a car. There are other options, such as scheduling a household hazardous waste pickup with the

city of Sacramento. However, these services are unavailable in rural locations. Many would need to travel over ten miles to recycle their rechargeable batteries or cell phones. Mail-in kits are also unaffordable for many, with the cheapest kits available for $45.

These barriers lead to lithium-ion batteries being improperly disposed of in the trash. SB 244 would address this issue by providing guidance to local governments to better inform, educate, and increase public awareness as to the fire risk and proper handling of lithium-ion batteries and the products that contain them.

3) *Prevalence of fires from lithium-ion batteries.* Unlike other flammable waste, such as propane tanks, aerosols, fireworks, etc., lithium-ion batteries are small and often difficult for waste collectors to detect, especially during household waste pickup due to the automated nature of collection. There is little data available on the causes of fires in solid waste trucks and facilities. However, the solid waste industry is very concerned about the fire hazards posed by discarded lithium-ion batteries, especially since these batteries are hazardous waste and inside a solid waste truck could be crushed, thereby igniting the battery. While drivers of solid waste trucks do have extensive training, SB 244 is seeking to address the growing concerns by providing statewide guidance to the solid waste industry with the goal of improving prevention and suppression of waste fires caused by discarded lithium-ion batteries when they do make it into the waste stream.

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 Natural Resources and Water Committee.

Related/Prior Legislation

SB 1156 (Archuleta, 2020) was a nearly identical bill heard in this committee last year. SB 1156 died on the Senate Inactive File.

AB 1509 (Mullin, 2019) would have established the Lithium-Ion Battery Recycling Program within CalRecycle that would require manufacturers of lithium-ion batteries to provide convenient collection, transportation, and disposal of lithium-ion batteries. SB 1509 died in the Senate Environmental Quality Committee.

AB 2407 (Ting, 2018) would have required the Secretary for Environmental Protection to convene an advisory group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion batteries sold with motor vehicles in the state. The advisory group would have also been required to submit policy recommendations to the Legislature aimed at ensuring that 90% of end-of-life lithium-ion batteries discarded in the state are recycled in a safe and cost-effective manner in the state. SB 2407 died in the Senate Environmental Quality Committee.

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.

SOURCE: California Waste Haulers Council (Sponsor)

SUPPORT:

Athens Services
Burrtec
Calchamber
California Product Stewardship Council
California Retailers Association
California Waste Haulers Council
Californian's Against Waste
City of Sunnyvale
City of Thousand Oaks
Cr&r, INC.
Industrial Environmental Association
Mendo Recycle
Nema
Recology
Resources Recover Coalition of California
ReThink Waste
Rural County Representatives of California
Varner Bros., INC.
Zero Waste Sonoma

OPPOSITION:

None received

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