



SENATOR JOSH NEWMAN (SD-29)

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SB 289 (Newman): Better Battery Recycling and Fire Risk Reduction

Sponsors: RethinkWaste
California Product Stewardship Council
Californians Against Waste

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SUMMARY

Because of the hazardous metals and corrosive materials that batteries contain, California classifies batteries as hazardous waste and bans them from solid waste landfills. When improperly discarded, lithium-ion (Li-ion) batteries in particular pose serious fire, health and safety hazards.

Unfortunately, because of a combination of increased consumption and a lack of convenient disposal options, higher levels of toxic batteries are entering the waste stream. Among other negative consequences, this has resulted in an alarming number of material recovery facilities, waste collection trucks, and landfills experiencing fires caused by improperly disposed of Li-ion batteries. These fires endanger the lives of workers and pollute the atmosphere and surrounding areas, while causing expensive damage to city and county waste collection vehicles, equipment and facilities.

SB 289 would require the installation of battery collection bins at retailers that supply batteries, to provide an easily accessed channel for consumers to safely place batteries into the bins for proper disposal rather than simply discarding them into the garbage, as is commonplace.

ISSUE

Li-ion batteries are rechargeable batteries that store high levels of energy in relation to their size. Their combination of high energy density and light weight allows them to efficiently power portable electronics, such as phones, laptops, and power tools.

While Li-ion battery reactivity permits storing high energy in small units, that capacity also makes them dangerous when mishandled. When a Li-ion battery is crushed or punctured, it can overheat and even explode.

Resource Recycling Systems estimates that 75% to 92% of Li-ion batteries are discarded improperly. Moreover, as the result of innovations in manufacturing and packaging, Li-ion batteries have become harder to distinguish from other battery types by the average consumer. In a recent examination of the workflow of a single MRF in California, 11 loose Li-ion batteries were found in the waste stream on average each hour, posing a serious fire risk.

According to a 2018 California Product Stewardship Council survey, 20 of the 26 MRFs surveyed experienced at least one fire during the previous two years, 65% of which were attributed to discarded batteries. Forty percent of those batteries were identified as Li-ion.

These fires can be catastrophic. In 2016, a Li-ion battery ignited a fire inside RethinkWaste's MRF in San Carlos. The resulting blaze forced the facility to close for 90 days and totaled nearly \$8.5 million in damages. Since the fire, RethinkWaste has been able to secure full insurance coverage only through a combination of separate policies with

seven companies, resulting in seven times the premium costs. If another fire occurs, RethinkWaste may be unable to secure insurance moving forward, and the prohibitive cost of self-insuring may force the facility to close permanently.

Without dramatically reducing the number of Li-ion batteries entering California's waste stream, we will undoubtedly suffer additional fires that will jeopardize MRF operations and also could result in loss of life.

A more efficient, end-to-end system for batteries in California through proper collection and sorting of Li-ion and other batteries offers an opportunity for the recycling and reuse of the valuable and finite minerals inside the batteries, reducing toxic environmental impact while supporting economic growth.

SOLUTION

SB 289 would create a collection and recycling program to more efficiently and effectively collect used batteries and ensure they don't wreak havoc on our waste stream. Key aspects include:

- Requiring free and easily accessible collection bins at select retail locations across the state by June 30, 2025.
- Accepting loose and product-embedded batteries for all common household battery types, including Li-ion, alkaline, nickel-cadmium and nickel metal hydride batteries to avoid consumer confusion.
- Requiring the producers of batteries and product-embedded batteries sold in the state to develop, finance, and implement this program in collaboration with CalRecycle to recover and recycle their products.

SUPPORT

RethinkWaste

California Product Stewardship Council

Californians Against Waste