

Assemblymember Mullin, 22nd District Assemblymember Berman, 24th District

AB 1509 – LITHIUM-ION BATTERY FIRE PREVENTION ACT

PROBLEM

Lithium-ion (Li-ion) batteries are increasingly common in our everyday products. Call2Recycle's data estimates California consumes 64 million Li-ion batteries, or 1.63 batteries per Californian, annually.

When improperly disposed of, these batteries pose a serious fire, health, and safety hazard. As the increased rate of consumption has led to higher levels of batteries that end up in the waste stream, an alarming number of fires have resulted at our material recovery facilities (MRFs), transfer stations, waste collection trucks, and landfills.

These fires cause immense damage to cities' and counties' waste collection and processing vehicles, equipment, and facilities while also endangering the lives of their workers.

BACKGROUND

Li-ion batteries are lightweight, rechargeable batteries that store high levels of energy in relation to their size. Their high energy density allows them to power portable electronic devices, such as cell phones, tablets, laptops, and power tools.

While lithium's lightness and reactivity make it great for storing high levels of energy in small units, it also makes these batteries extremely dangerous when mishandled. When Li-ion batteries come into contact with metal, or are crushed, punctured, or dropped, the batteries can cause a fire or explosion.

Resource Recycling Systems estimates between 75-92% of Li-ion batteries are improperly disposed of. Fire Rover reported in 2017 that more than 1,700 fire incidents occur annually from Li-ion batteries at US and Canadian MRFs. This report further showed that 1,700 is likely a low estimate, as many smaller fire incidents go unreported daily.

When fires do occur, they can be catastrophic. In September 2016, a Li-ion battery ignited a fire at RethinkWaste's municipal solid waste transfer station and recycling center in San Mateo County. As a result, RethinkWaste was forced to shut down their facility for 90 days, and pay nearly \$8.5 million in repairs over the next year. Because of these damages, securing proper insurance to operate the facility has been immensely difficult as insurers say the amount of risk involved is too high. As a result, RethinkWaste has only been able to get full insurance coverage through a combination of seven companies.

Since the fire, RethinkWaste has implemented measures to remove Li-ion batteries from the waste stream. However, to date these efforts have been largely unsuccessful. They find an average of 5.48 batteries in their waste stream every *hour*. Any one of these batteries could result in another fire, jeopardizing both the facility's complete operations, and the lives of the workers.

With the growing demand for rechargeable and portable technology, if nothing is done to improve proper disposal, the number of Li-ion batteries entering the waste stream will only continue to increase along with the threats they impose.

SOLUTION

AB 1509 would create a recycling program for both loose Li-ion batteries and ones embedded in products to prevent them from being improperly disposed of in the waste stream. Segregating them from our waste stream will significantly reduce the fire and safety risks these batteries impose.

SUPPORT

California Product Stewardship Council (C0-Sponsor) Californians Against Waste (C0-Sponsor) Rethink Waste (Co-Sponsor)

MORE INFORMATION

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