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Lithium-Ion Battery Policy Statement

May 2025

The improper disposal of lithium-ion batteries is an urgent safety and environmental concern for everyone across the waste and recycling industry. Detachable lithium-ion batteries should never be placed in waste or curbside recycling bins as they may cause fires and endanger recycling infrastructure including vehicles and employees. Nor should they be delivered to waste and recycling facilities unless those facilities host a dedicated take-back program.

The National Waste & Recycling Association (NWRA) supports battery recovery policy initiatives that:

- Use uniform standards to identify the battery chemistries that can be targeted for recovery in battery take-back programs.
- Increase access of all communities to battery take-back programs, expand existing recovery programs and adding new programs where needed.
- Reduce consumer confusion by using clear, consistent messaging about why batteries should be recycled and how.
- Shift the cost of battery recovery from residents and local governments to battery producers.
- Establish one or more battery recovery organizations to establish plans to involve producers; set performance goals; fund recovery and education programs and underwrite administration costs. The battery recovery organizations should be a non-governmental organization.
- Increase the recovery of critical materials such as detachable lithium-ion back into the supply chain.

Although states have begun implementing Battery Recovery legislation to include detachable lithium-ion batteries and expanding programs on a state-by-state basis, NWRA is also supportive of discussions about a national framework for battery recovery that meets the goals of our battery stewardship initiative and draws the state programs into a consistent national approach.

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Background

Lithium-metal and alkaline batteries are typically not rechargeable and are designed for single-use applications. Lithium-ion batteries are rechargeable and are most often used in electronics that need regular recharging after use.

The entire lithium-ion battery chain is predicted to increase exponentially over the next several years.[1] Along with increased use of the batteries comes increased concern with the problems caused by improper disposal.

Nationally, lithium-ion batteries cause an average of 18 fires per recycling facility per year annually, and battery-related fires have increased by 41% in the past five years.[2] More than half of those reported waste sector fires require local fire department response, further taxing already-stressed local government services. Catastrophic fires can destroy recycling facilities, transfer stations, and collection vehicles hampering recycling programs and damaging environmental protections put in place to protect public health and the environment. Repairing and replacing damaged facilities can cost tens of millions of dollars with those costs shared with residents and businesses through regular service fees.

The best solution is to use take-back programs designed for safe collection and recovery. To avoid confusion about batteries, it is best to divert all battery chemistries for recovery rather than limiting it to a single type. Both small and medium format batteries should be included in these diversion programs.

NWRA is committed to raising awareness and supporting policy initiatives that promote effective take-back programs, ensuring these batteries are safely and responsibly disposed, with end-of-life certainty.

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[1] McKinsey Battery Insights, 2022 analysis projects the Li-ion chain from mining through recycling could grow over 30% annually from 2022 (700 gigawatt hours) to 2030 (4.7 terawatt hours), when it would reach a value of more than $400 billion and a market size of 4.7 TWh.

[2] Timpane, Michael T., RRS, 2023. Metrics on Lithium -based Battery Threat to U.S. Single Stream Materials Recovery Facilities (“MRFs”) Summary Opinion.