

August 11, 2025

Collect
Recycle
Innovate

National Waste
& Recycling Association™

SAFETY MONDAY



Lithium-ion Battery Fire Hazards



ONE SPARK IS ALL IT TAKES



Lithium-ion batteries pose serious fire risks when:

- Damaged, crushed, or exposed to heat
- Found in waste collection, MRFs, and transfer stations

They can:

- Ignite instantly or hours later
- Cause thermal runaway, toxic smoke, explosions, and rapid fire spread
- Endanger workers, damage equipment, disrupt operations
- Release toxic gases like hydrogen fluoride



Identify & Intercept

- Recognize battery-powered items—even ones that appear “dead”
- Train staff to spot and pause operations if found mid-sort
- Stop batteries before they enter trucks or sorting lines



Divert & Dispose Right

- Never place lithium-ion batteries in curbside garbage or recycling
- Promote local battery drop-off locations (eco-stations, depots)
- Use clearly labeled battery bins with visual aids



Respond & Report

- Ensure fire extinguishers and suppression systems are in place
- Train all staff on site-specific fire response plans
- Log all incidents, even near-misses, for continuous improvement



Remember

Safe handling, proper disposal, and staff training are critical to preventing lithium-related fires in waste and recycling environments.

Content Provided By:

Harsimran Kaur, EHS Compliance Admin GFL Environmental Inc.