



Leading the charge for recycling.™

# **After the Flames: Navigating Battery Fire Clean-Up and Recovery**

**12 November 2025  
Mark Steadman  
Call2Recycle**

**ANNUAL  
FALL JOINT  
CONFERENCE**



# Safety Moment – Charging Management



# Call2Recycle's Stewardship Services

- Non-profit founded in 1994 to address the emergence of EPR legislation, operating with a commitment to safety and environmental excellence.
- Funded primarily by battery and battery-containing product manufacturers (our Stewards) and, more recently, fee-based services, to responsibly collect and recycle batteries at end of life across the U.S.
- In the U.S., we're primarily a voluntary program except in certain states (e.g., VT, MN, NY) where we design and administer all features of a battery stewardship program (public education, collection, and recycling) where collections of some (but not always all) chemistries are mandated.

# Call2Recycle Capabilities



## *Stewardship Services*

Fulfills manufacturer obligations in the U.S., including compliance with extensive state and federal regulations.



## *Mid-Large Format Battery Recycling Programs*

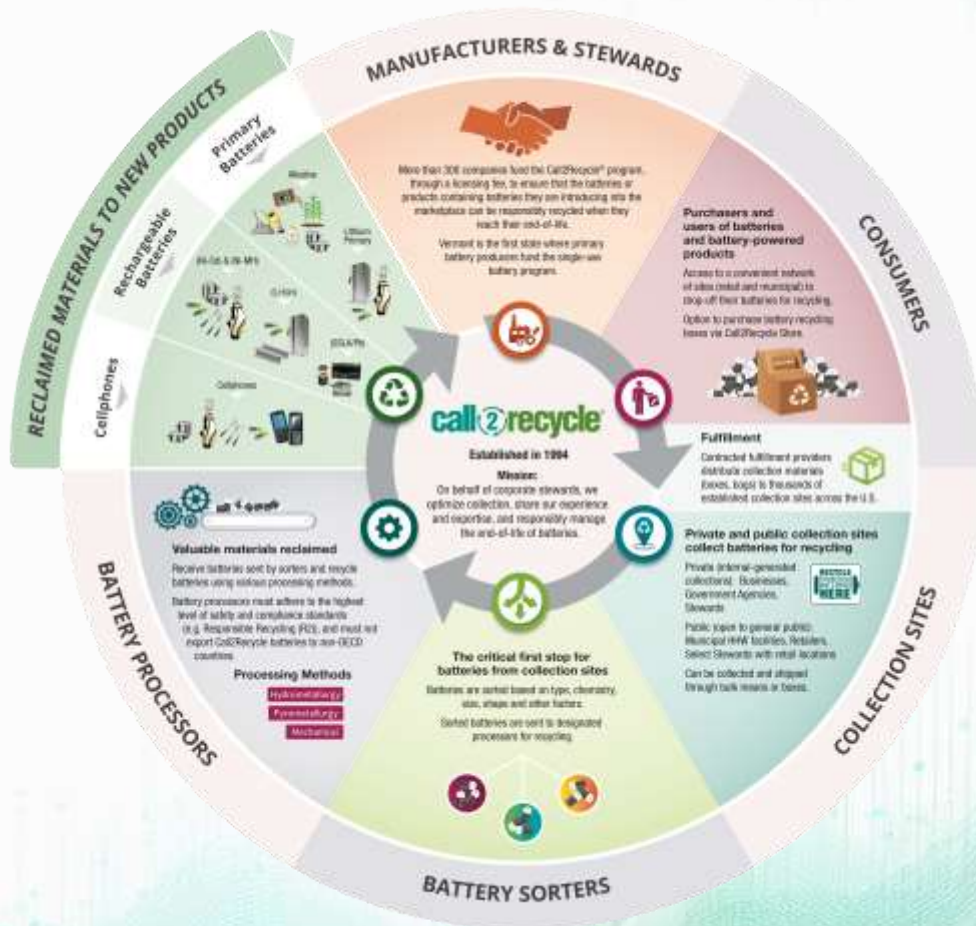
Private or Public Collection Program; small or large quantities; flexible, safe and convenient options; batteries ranging e-bikes to outdoor power equipment to EVs.



## *Battery Recycling Services & Solutions*

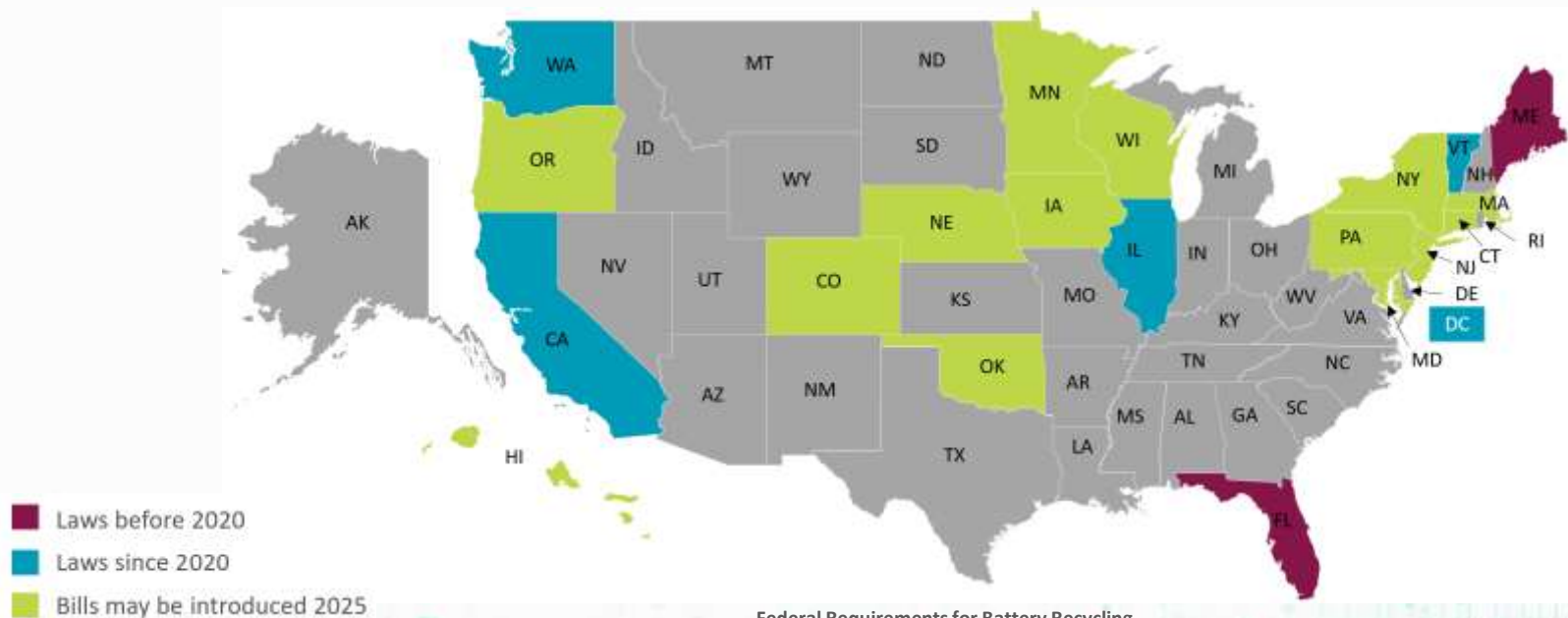
Customized safety solutions for battery & product returns, damaged, defective, or recalled batteries; safe handling, storage, and shipping

# Call2Recycle Operations Overview





# | 2025 Legislative Update



## Federal Requirements for Battery Recycling

In the U.S., federal law requires, with certain exceptions, used nickel cadmium (Ni-Cd) and small sealed lead acid (Pb) batteries to be managed as Universal Waste (40 CFR Part 273). The Universal Waste Rule prohibits handlers (e.g., contractors) from disposing of waste Ni-Cd and Pb batteries and further indicates that these batteries must be sent for recycling.

# Electrification Transformation

Call2Recycle's goal with the massive battery growth – across ALL sectors - is to make the safe disposal and responsible management as seamless as we have for consumer batteries for the past 28 years.



**e-bike  
battery recycling**  
powered by Call2Recycle | endorsed by People for Bikes

- Call2Recycle administers the first, voluntary industrywide e-bike battery recycling program in the U.S. - the first transportation sector united under one battery recycling solution.
- Supported by more than 50 e-bike brands with more than 1,900+ collection sites trained and actively accepting e-bike batteries for recycling.



**high energy  
battery recycling**  
powered by Call2Recycle

- Call2Recycle administers the first, voluntary high-energy battery (over 300-watt hours) recycling program in the U.S.
- Supported by seven manufacturers of outdoor power equipment to responsibly recycle batteries at select dealers and national retailers.



**EV battery services**  
powered by Call2Recycle

- Facilitating pilots with OEMs to design programs to safely and compliantly get batteries to processors.
- Call2Recycle's battery logistics management software platform, GreenTraxEV, allows users to safely and compliantly get batteries from multiple end points to processors or re-purposers.

# **Synergies between Call2Recycle & Clean Gulf**

- **Safety-first mindset and leadership**
- **Training guides success**
- **Comprehensive partner for proactive planning and remediation solutions**
- **Awareness and education focused**
- **Value driven organizations**





# **Battery Fire Headlines**

## Battery Fires In The News – Q1 2025 / Q3 2025

- **AP – “Fire at battery plant in Moss Landing”**
- **Newsday – “E-bike battery starts fire in Salt Lake apartment”**
- **MSN – “6 injured, 1 critically in Lithium battery fire in Queens”**
- **ABC – “Charleston home damaged in; generic Lithium the cause”**
- **NPR – “Massive scrapyard fire caused by Lithium battery in NJ”**
- **CBS – “Couple die in house fire caused by E-bike battery”**
- **Today – “EV Lithium battery fire destroys Morris, IL building” 2021**
- **Fox2 – “Massive fire destroys Interco-Fredericktown plant”**

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# Call2Recycle Remediation Process Overview

- **Site assessment**
- **Safe vs. Compliant**
- **Identify battery vs. scrap metal**
- **Identify battery chemistry**
- **Chemistry and condition on packaging**

 **LITHIUM ION MUST BE HANDLED WITH CARE**   
**TO AVOID FIRE INCIDENTS**

## What happens in the Field





# Call2Recycle The Consequence

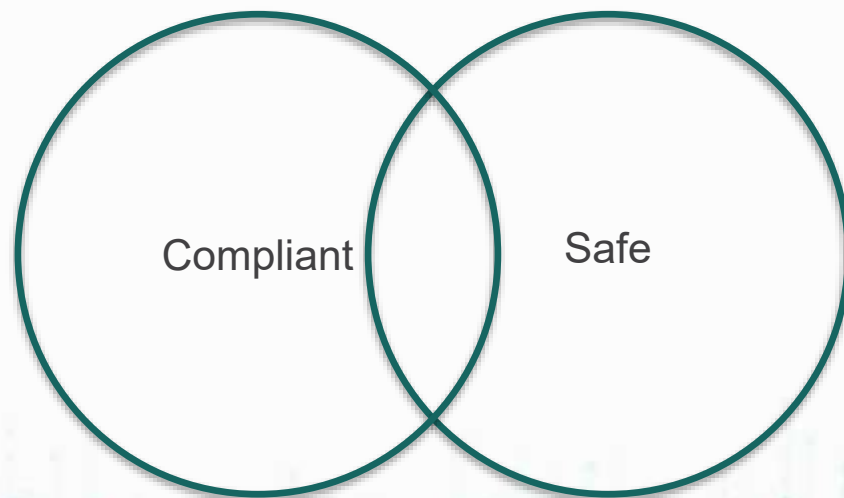




# Call2Recycle The Consequence



# Where Safety and Compliance Meet



# Call2Recycle **Compliant, but not Safe**





Call2Recycle  
**Compliant, but not Safe**



Call2Recycle

# Compliant, but not Safe





## Safe, but not Compliant

- Mixed-chemistry EOL batteries shipped in a drum with fire suppressant.
- Mixed-chemistry EOL batteries shipped in a box.
- Damaged batteries shipped without training or shipping papers.
- Multiple damaged (DDR) lithium-ion batteries in a drum with fire suppressant.
- Larger EOL lithium-ion batteries (>300Wh) shipped in a box.



# Call2Recycle Special Permits



August 13, 2023

U.S. Department of Transportation  
Pipeline and Hazardous Materials Safety Administration

100 New Jersey Avenue, NE  
Washington, DC 20590

DOT-SP 20851  
(DOT-SP REV 10/2019)

**EXPIRATION DATE: 2025-03-10**

OVER RENEWAL, SEE 49 CFR 107.106

- GRANTEE:** Call2Recycle, Inc.  
Atlanta, GA
- PURPOSE AND LIMITATIONS**
  - This special permit authorizes the manufacture, mark, sell, and use of certain UN Standard packaging for transporting rail oil and/or used lithium ion cells and batteries and lithium ion batteries contained in equipment. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous versions.
  - The safety analysis performed in development of this special permit only considered the benefits and risks associated with transportation in commerce. The safety analysis did not consider the benefits and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
  - In accordance with 49 CFR 107.107(a), party status may not be granted to a manufacturing special permit. These packages may be used in accordance with 49 CFR 173.23a.
- REGULATORY SYSTEM AFFECTED:** 49 CFR Parts 106, 107 and 173-106
- REGULATIONS FROM WHICH EXEMPTED:** 49 CFR Subparts C, G, and H of Part 173 in that shipping papers, emergency response information, and marking are exempted the lithium ion batteries according 309-50, except as specified herein.
- Basis:** This special permit is based on the application of Call2Recycle, Inc. dated December 6, 2022, submitted in accordance with § 107.107 and the public governing thereon.

DOT-SP 21706



DOT-SP 14879



DOT-SP 16463



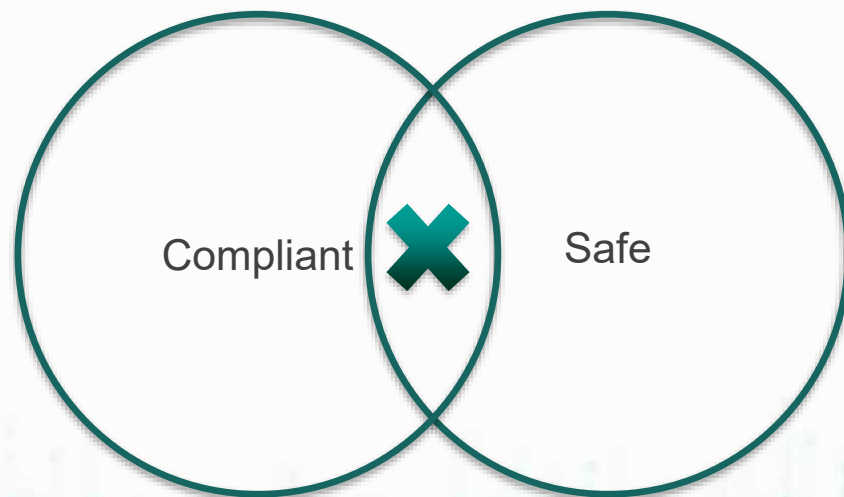
DOT-SP 16532



DOT-SP 20851



# Where Safety and Compliance Meet





**Post incident battery  
clean up**

**KNOW BEFORE YOU GO!**

# KNOW BEFORE YOU GO!

- On Scene
  - Who's in charge at the scene?
  - Fire Watch needed?
- Financially Responsible Party
  - Who is responsible for the clean up?
  - Has this been cleared with the Insurance Company (if applicable)
- Battery Details
  - SDS
  - Dimensions
  - Condition, etc.
- Staffing
  - PPE Required
  - Properly Trained Staff – Electricians, Engineers, Techs



# KNOW BEFORE YOU GO!

- Packaging / Equipment
  - Fully regulated hazmat or SP
  - Crates
  - Drums
  - Packing material
  - Discharging Unit
  - Crain
  - Forklift
- Transportation
  - Dry Van
  - Flatbed
- Recycler
  - Battery Chemistry
  - Other “Stuff”
  - Volume / Delivery Appointments
  - Recycling Certificates

# Laguna Hills, CA

Warehouse/Corporate Park

Amazon E-Bike Fulfillment  
Business

13,800 lbs of fire damaged  
lithium-ion, E-Bike & E-  
Motorcycle batteries >300 Wh

DOT Special Permit:  
SP-21531

\$1.2M Total Costs



# Laguna Hills, CA (packaging)





# Columbus, OH

Tractor-trailer fire, LTL carrier

10,000 lithium battery pouch cells

Cause of fire: wire terminals were not secured.

\$250k + Total Costs



# Morris, IL

66,000 SqFt Battery Warehouse Fire

176,000+ lbs. of fire damaged lithium-ion batteries

213,000+ lbs. of mixed chemistry

Drafted, approved & applied DOT Special Permit: SP-21363

Additional shipping methods included SP-16532 and Fully Regulated DOT compliance per 49 CFR 173.185(f)

\$2.5M Total Costs







# **Pain Points**

**As a full-service partner, our goal is to enter situations prepared to address pain points through:**

- **DOT vetted and approved packaging**
- **Training and education**
- **Logistics**
- **End-site disposition**

# Sample of Battery Recycling Solutions

## End-Of-Life Battery Collection & Recycling



Nested Battery  
Recycling Kit



Large Battery  
Recycling Kit



Small Battery  
Recycling Kit



Battery  
Recycling Kit  
(Pallet of 50  
Flat Boxes)



55-Gallon Drums



Gaylord Boxes

## Damaged, Defective or Recalled (DDR) Lithium-Ion Battery Management



Small DDR  
Li-Ion Battery  
Recycling  
Pail



Large DDR  
Li-Ion Battery  
Recycling  
Pail



DDR Li-Ion  
Recycling Kit



DDR Li-Ion  
Recycling Kit



55-Gallon  
DDR Li-Ion  
Battery Drum

# Product Spotlight

OneDrum

Say **Goodbye** to the hassle of sorting, bagging, and taping batteries ...

Say **Hello** to **OneDrum™**

OneDrum™ allows the safe and efficient placement and transportation of large volumes of consumer single-use AND rechargeable batteries in one drum without sorting by chemistry or individually bagging or taping any battery terminals (including coin cell batteries).



**1 All-in-One Solution**  
Includes packaging, labels, instructions, logistics, recycling, tracking, and reporting of consumer batteries.

**2 Steel Drums**  
Packing Group 1 55-gallon steel drums keep contents safe and secure during transit

**3 CellBlockEX®**  
The innovative fire extinguishing agent made from recycled glass cushions batteries and protects against short circuits

**4 Special Permit**  
Ships under a US DOT-issued Special Permit, exclusive to OneDrum, which fully satisfies US DOT's requirements for transporting mixed batteries, while eliminating the need for 49 CFR training, special paperwork, or labeling.

Scan for  
more  
info



# Product Spotlight

LIBIKs

## Lithium-Ion Battery Incident Kit (LIBIK)



Scan for more info





# The Path Forward



# Q&A time



thank you!

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