Iowa Recycling Conference

Julie Ketchum
Area Director Government Affairs
WM (Waste Management)

Background and Role Within NWRA

Background

- Solid Waste Career: Over 35 years
- MPCA: 13 years
- WM: 23 years

- Leadership Roles:
- WI DNR Waste and Materials Management Board, Chair
- WI SWANA Board Member
- WI DNR Remediation and Redevelopment Board Member
- MN Chamber Environmental Sustainability Board, Chair
- Iowa Society of Solid Waste Operations (ISOSWO), Member

NWRA Role

- PAST MN Chapter Chair
- Board of Governor's Alternate for MN
- Board of Governor's Representative: Iowa
- National NWRA Recycling Committee
- National NWRA Government Affairs Committee

Overview of Today's Presentation:

1. **WM Corporate: Investment in Recycling**

2. **Germantown MRF Retrofit**

3. **Lithium Batteries**

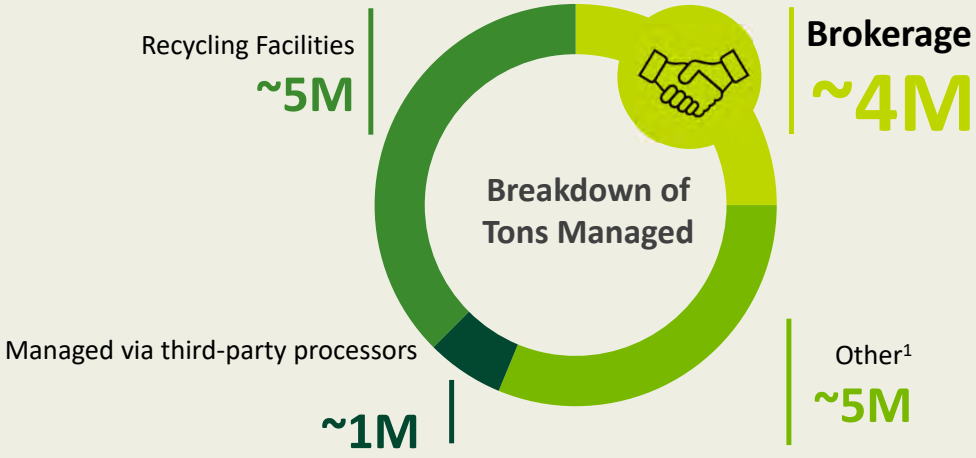
   -National NWRA Resource Recycling Systems (RRS 2023 Study)

   -Illinois, Wisconsin, MN, IA

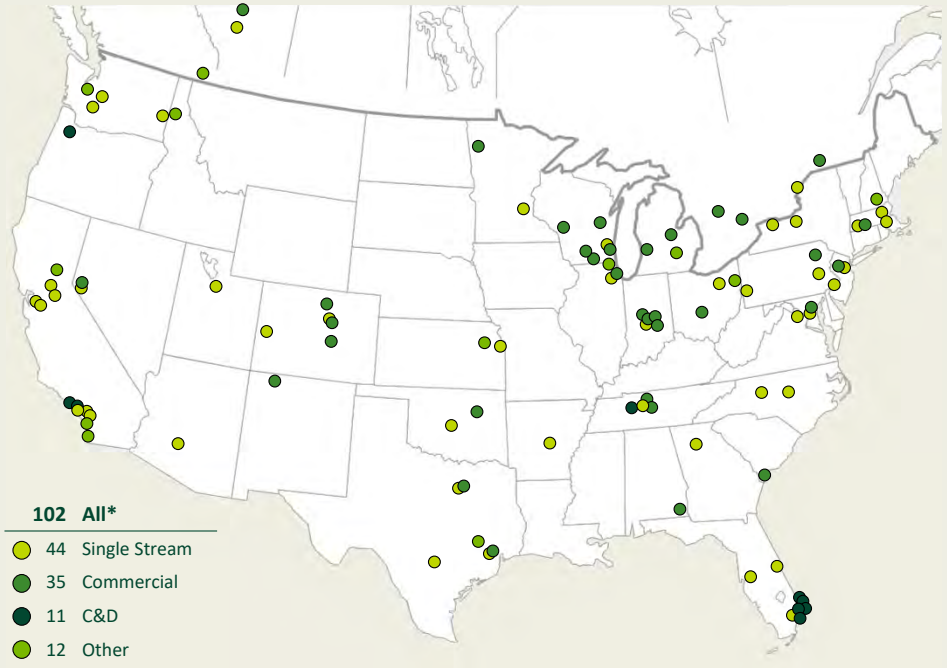
WM is the Largest Recycler in North America

15.2M tons of material recovered in 2023

Providing Critical Solutions for Key End-Market Users



Our Recycling Facilities Process 5M Tons[2]



[1] Other includes fly ash, construction & demolition wood, e-waste and other specialty materials.
[2] All data based on tons in 2023.
* Not included in map is facility in Netherlands

WM Upper Midwest Recycling

Developing Recycling Infrastructure

Further Separating Materials for Higher Value

Leveraging Patented Technology for More Efficient Sorting and Processing

Optical Sorters | Volumetric Scanners | Control Center | Cameras | Intelligent Sorting

Increasing Commodity Capture to Boost Revenue

Increasing Capture Rates and Reducing Residue

Generating higher quality material from inbound feedstock

- **Fiber**: separating higher-value paper products
- **Plastics**: further separating resin types by grade/color
- **Glass**: producing higher quality 3-mix product for end-markets

Boosting revenue from additional commodity capture

- Reducing recyclable content within residue
- Re-aligning commodity capture to shifting end-market demands
- Automating to yield higher recovery rates

State-of-the-Art Recycling Facility Overview

State-of-the-Art Recycling Facilities Expected to Accomplish the Following:

- → **Increase** capacity/throughput
- → **Reduce** labor costs
- → **Improve** commodity recovery and material quality
- → **Maximize** material values

Increasing Commodity Capture to Help Boost Revenue

Generating higher quality material from inbound feedstock

- **Fiber**: separating higher-value paper products
- **Plastics**: further separating resin types by grade/color
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- **Residue:** reducing recyclable content within residue

Twin Cities MRF Retrofit

- $24M Upgrade
- Began April 2024, material diversion
- Completed June 2024
- More efficient, more material types
- Additional OS, fiber screen, film recovery system
- Performing above expectations

Lithium Batteries

2023 National NWRA Study by RRS:

- Surveyed hundreds of MRFs
- Frequency of fires varies: weekly to monthly
- Cost of fires= $1500 to $50M
- Insurance rates increasing
- Deductibles Increasing
- Collection/Fleet: thousands of incidences

Scope of Batteries

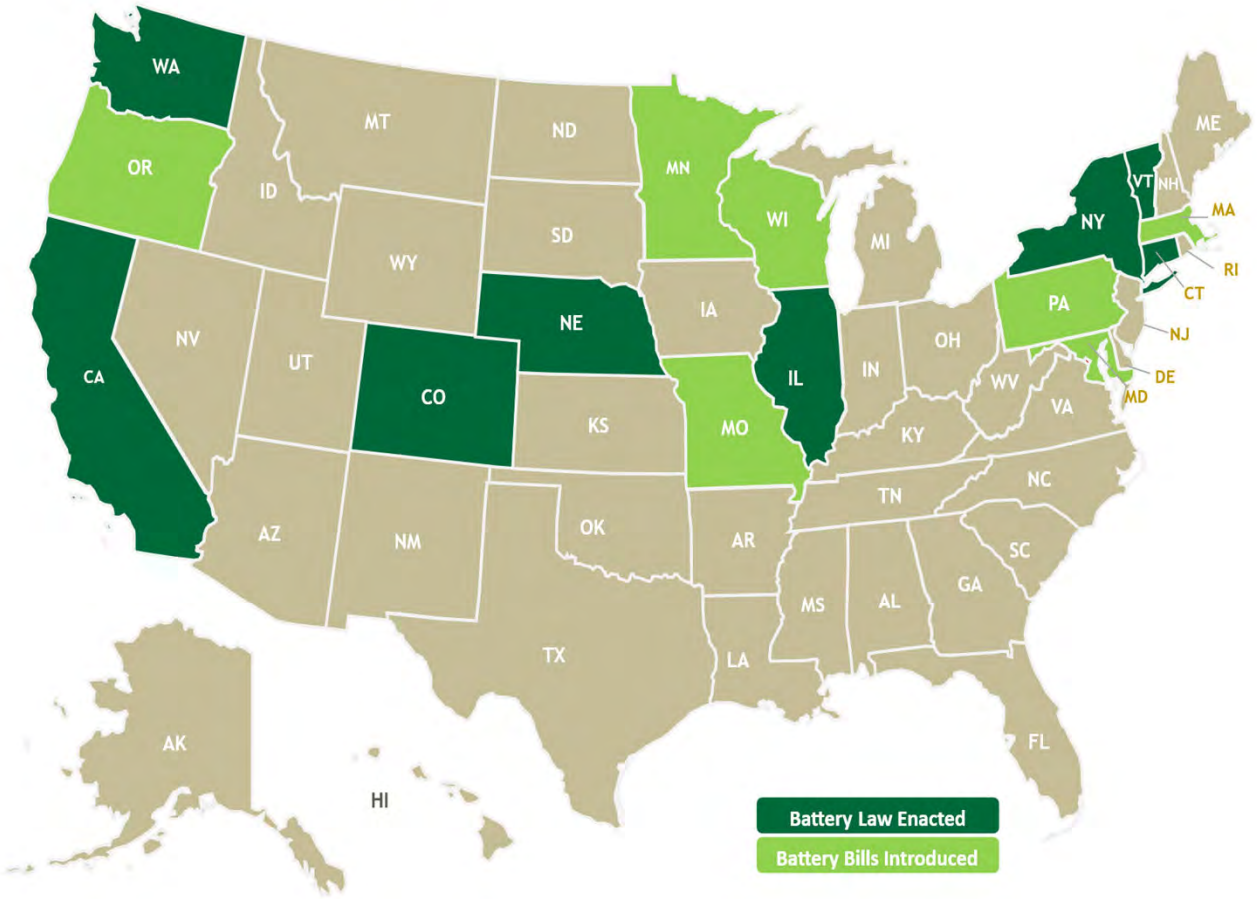
Category	Small format consumer electric and portable batteries		Mid-format batteries	Large format vehicle and motive equipment batteries	Large format stationary storage batteries
Type	Single use (Primary)	Rechargeable (Secondary)	Rechargeable	Rechargeable	Rechargeable
Use	Removable or embedded in electronics and electric devices, such as watches, hearing aids, cameras, key fobs, toys, portable radios, flashlights.	Removable or embedded in electronics and electric devices, such as phones, computers, appliances, small uninterruptable power supplies (UPS), power tools, power banks.	E-mobility including e-bikes, e-scooters. Outdoor power equipment. Portable power stations.	All scales of automotive starting and motive vehicle batteries. Materials handling equipment (forklift, crane, etc.) Recreational (golf carts, marine equipment, recreational vehicles, etc.)	Residential, including power wall, backup generators. Grid, including utility, solar, wind. Off grid and microgrid. Commercial, including building systems, data centers, server rooms, medical and hospital equipment, retail backup power.

Lithium Batteries

Illinois Legislation:

- Model legislation for other states/Council of State Governments in July 2024
- EPR = battery manufacturers pay for the program
- Stewardship Plan/Progress Reports to DNR
- Sets up Drop Sites, Public Education
- Embedded not included
- Begins 7/1/2025 with PRO submittal of Stewardship Plan to IDEQ

Battery EPR in the States



Thank You!

Garrett Prestegard, P.E.
ISOSWO President

Iowa Battery Stewardship Bill

Overview

- Extended Producer Responsibility (EPR)
- Iowa's Existing Household Battery Law
- Proposed Battery Stewardship Bill
  - How it was developed
  - Summary of the bill's framework
  - Benefits over the current system
- 2025 Legislative Session

Extended Producer Responsibility (EPR)

- Policy approach that assigns producers responsibility for the end-of-life management of their products
  - Producers are responsible for funding services that assist with managing covered products
  - Promotes recycling and a circular economy
- Most EPR laws utilize a Producer Responsibility Organization (PRO)
  - Non-profit organization
  - Producers pay fees to the PRO
  - PRO responsible for implementing programs required under EPR legislation
- Battery Stewardship Organization (BSO) = Producer Responsibility Organization (PRO)

plasticsforchange.org

Iowa's Existing Battery Law

- Limited EPR law passed in 1996
- Covered Batteries
  - Nickle-Cadmium
  - Sealed Lead-Acid Batteries
- Payment Structure
  - Producers are responsible for coordinating the establishment of battery recycling programs for covered batteries and pay for the cost of proper recycling or disposal of those batteries
  - "Industrial Generators" are responsible for paying for collection, sorting, and transportation of covered
- Producers currently utilize Call2Recycle as the BSO in Iowa

Why Does Iowa Need an Updated Battery Stewardship Law?

- Fires from lithium-ion batteries continue to be a significant issue
  - Additional measures are needed to help mitigate this issue to a greater extent
- Current Iowa law is outdated
  - Few batteries are covered under the current law
  - Battery technology can change rapidly
- Shift financial responsibility from local governments to battery producers

Battery Bill Development

- ISOSWO initiated a new battery stewardship bill in October 2024
  - Safety for frontline solid waste workers
- Bill was developed with input from numerous stakeholder
  - National Waste and Recycling Association
    - Helped develop a similar bills in other states
  - Iowa Recycling Association
  - Metro Waste Authority
  - Iowa Department of Natural Resources
  - Portable Rechargeable Battery Association (PRBA)
    - Leading organization that advocates for battery producers
- A formal draft of the bill was completed by early March

Covered Batteries

- Covered Batteries are determined by weight and power ratings, not chemistry
  - Allows for future battery chemistries to be covered
- Portable Household Batteries
  - All single charge batteries < 4.4 lbs, including alkaline
  - Rechargeable batteries < 11 lbs and a power rating < 300 watt-hours
- Medium Format Batteries
  - Single charge batteries > 4.4 lbs and < 25 lbs
  - Rechargeable batteries > 11 lbs and < 25 lbs, and power rating between 300 and 2,000 watt-hours
- Exclusions
  - Motor vehicle batteries, including EV batteries
  - Products with embedded batteries
    - Batteries not intended to be removed from a product

Battery Stewardship Bill Structure

- Makes is illegal to knowing dispose of covered batteries as regular garbage
- Producers are required to form or join a battery stewardship organization (BSO) to sell batteries in the state
  - Call2Recycle is an example of a BSO that is already operating in Iowa
- BSO is responsible for developing a program to collect covered batteries in the state on a free, continuous, and accessible basis
- Battery Stewardship Plans
  - Outline all aspects of their program
  - Establishes goals for collection rates and recycling rates
  - Requires State regulatory approval through the Iowa DNR
- Annual Reporting
  - BSO is required to provide data that tracks their progress towards meeting collection and recycling goals
  - Plans required to be renewed once every five years

Funding Structure

- Funding for the BSO would be paid by producers that are selling batteries in Iowa through fees set by the BSO
  - Fee typically based on weight and chemistry of batteries sold
- BSO is responsible for funding all aspects of the program
  - Collection, sorting, transportation, disposal/recycling, administrative costs, and regulatory oversight
- Annual fee is paid to IDNR by the BSO to cover their costs for regulatory oversight
- Resources provided to collection sites
  - Signage
  - Battery collection bins
  - Staff training
  - Reimbursement of demonstratable expenses

Additional Requirements

- BSO would be required to leverage the state's existing RCC network as battery collection sites, if they choose to participate
- BSO must implement an education and outreach program
- Labeling requirements for batteries sold in the state
  - Battery producer
  - Battery chemistry
  - Must indicate that the battery shall not be disposed of with household waste
- Requires a review of ongoing studies on embedded batteries
  - Recommended best management practices

Benefits

- Shifts the costs for running battery collection programs away from local governments and to the battery producers
- Most household batteries are covered (including alkaline)
  - Simplified messaging to the public
- Battery Stewardship Plan
  - Establishes goals for battery collection and recycling rates
  - Annual reports providing statewide data
- Additional education and outreach measures on the dangers associated with the improper disposal of batteries

2025 Legislative Session

- Introduced as a study bill (SSB 1196) to the Senate's Natural Resources and Environment Committee
  - Approved by the subcommittee and full committee
- SSB 1196 became SF 545 with companion bill HF 726
  - HF 726 was sponsored by Representative Kniff McCulla
- Bill was referred to Appropriations Committees in the Senate and House
  - Approved by Senate Subcommittee with amendment
- Concerns from some stakeholders about the structure of the bill
- ISOSWO decided to pause work on the bill to work through concerns
  - Work with stakeholders to modify the bill
  - Goal of getting a bill that all major stakeholders can support

Thank You

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Metro Waste Authority

Keep Dollars Working in Iowa

- Stewardship fees stay in-state to support local Regional Collection Centers (RCCs), education, and safe collection
- Funds strengthen Iowa's infrastructure rather than being absorbed by an out-of-state organization

Strengthen Trusted Local Network

- Leverages existing RCCs Iowans already know and trust
- Invests in outreach and education using a proven model that serves communities across Iowa