



A Few Questions to Start

- ▶ Over the past year:
 - ▶ How many alkaline batteries have you disposed of?
 - ▶ How many rechargeable batteries have you disposed of?
 - ▶ How many devices with built in rechargeable batteries have you disposed of?



All Battery Collection Program

Brown County Resource Recovery's
Hazardous Material Recovery (HMR) Facility



Prior to All Battery Collection...

- Hazardous wastes are free – it's the purpose of the program!
- But....non-hazardous (i.e., latex paint) and universal wastes (i.e., lamps & batteries) were charged \$0.30 per pound
- Due to battery fires, we stressed the importance of proper battery disposal, but....

We were placing a financial “penalty” on residents complying to our request!



Removing the Penalty:

- ▶ What is The Cost of Free?
 - ▶ Minimum \$6,000 to \$8,000 first couple years
 - ▶ Growing to \$8,000 to \$10,000 annually
- ▶ Is the cost worth reducing the risk of a potential catastrophic loss due to fire?

Yes! So...

BATTERIES

NO  **W**

INCLUDED

Rechargeable Batteries!

- Most think of the small batteries that power devices:
 - Lithium Ion
 - Lithium Polymer
 - Nickel Cadmium
 - Nickel Metal Hydride
- Would NOT include lead acid
 - Regulations already in place



**What Else is 'Now Included'
in the Battery Program?**





Carry the most potential for significant damage.



A regulatory nightmare...
but there's still a battery.



Pre-damaged batteries are one step closer to doing some damage!



Lithium metal/primary...
AND
alkaline?



Majority of landfill fires are due to battery containing devices - not individual batteries!

Why Include Alkaline?

Why Alkaline Batteries?

- ▶ The ease of education.
 - ▶ Difficult to educate battery chemistries via 30 second lesson plans, skimmed brochures, and social media posts.
- ▶ Carbon footprint: Landfill vs. Recycling
 - ▶ Increased demand for alkaline recycling to promote technology advancements to reduce, close or invert the gap
- ▶ The latex effect: Accept it and others will come



Early Results Create Optimism

Battery Collection Totals

In Pounds	2021 Total	2022 Total	2023* Total	2024 Jan-May	2024 Projected
Alkaline	9,831	8,492	10,684	5,485	13,164
NiMH/NiCd	1,425	1,782	1,316	498	1,195
Li Primary	113	225	111	48	115
Li Ion	660	676	840	207	497
Damaged	NA	NA	27	106	254
Total	12,029	11,175	12,978	6,344	15,225

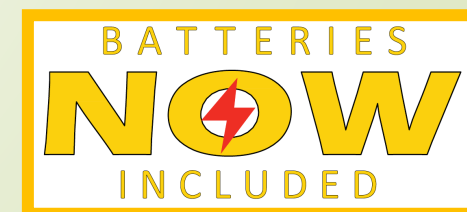
Mini survey (12 people)

Over the past year, how many of the following have your discarded?

Alkaline Batteries: 32
 Rechargeable Batteries: 2
 Battery Containing Dev: 1

BCD 803 1,025 2,000

* Free Battery and Battery Containing Device Disposal - August 1, 2023

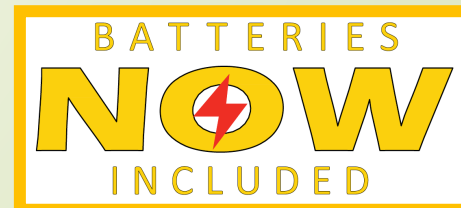


Cost Breakdown

- ▶ Rechargeable (Small) Batteries
 - ▶ Overall, \$0.50 - \$0.60 per pound charge
 - ▶ Range: credit to \$5.00+ per pound
- ▶ Large Batteries (over 300 watt hours)
 - ▶ \$0.75 per pound
 - ▶ Special Packaging Required
- ▶ Vaping Devices
 - ▶ \$3.39/lb; \$432.43 minimum (55 gallon)
 - ▶ Smaller the container, higher unit cost
 - ▶ Special Packaging Required

▶ Battery Containing Devices

- ▶ **“Data Devices” – credit**
 - ▶ Laptops: ~\$0.70 - \$1.20 per pound credit
 - ▶ Tablets: ~ \$1.00 per pound credit
 - ▶ Cell phones: ~\$3.50 - \$5.00 per pound credit
- ▶ All other BCD
 - ▶ ~ \$0.60 - \$0.80 per pound charge



BATTERIES NOW INCLUDED



Brown County Hazardous
Material Recovery Facility
2561 S. Broadway
Green Bay, WI 54304
(920) 492-4950
RR.HHW@BrownCountyWi.gov

The Brown County Hazardous Material Recovery facility now accepts household batteries & battery containing devices

FOR FREE!

What are Household Batteries?

- Alkaline
- Button Cell
- AA, AAA, C, D, F
- Nickel Cadmium
- Nickel Metal-Hydride
- Lithium Ion
- Any Rechargeable Battery



What are Battery Devices?

• Battery Containing Devices

Devices powered by batteries where the battery **IS NOT** designed to be replaced by the consumer are accepted for free.



• Battery Powered Devices

For devices powered by batteries where the battery **IS** designed to be replaced by the consumer the **battery** is accepted for free



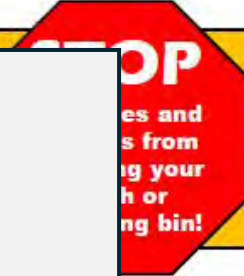
Thank You!
Chris Blan, CHMM
Resource Recovery Technician
Brown County Port & Resource Recovery
Chris.Blan@browncountywi.gov
920-492-4954

these batteries and devices from hitting your trash or recycling bins!

For batteries that can be removed from devices, tape off terminals with non-conductive tape and store in a non-metal, leak proof container before dropping off at the HMR.

Tuesday: 9AM - 3PM
Thursday: 12 PM - 6PM
www.BrownCountyRecycling.org

BATTERIES NOW INCLUDED



EVERYWHERE!
For batteries that can be removed from devices, tape off terminals with non-conductive tape and store in a non-metal, leak proof container before dropping off at the HMR.

Do Not Put Them in Your Garbage or Recycling!



potential to start fires.
What happens when a device no longer meets our needs or the battery is no longer capable of powering our devices? They are often thrown in the trash or curbside recycling bin where they can start fires!
Battery fires can happen in the home, in trucks that pick up your trash and recycling, and facilities that handle the waste.
Help protect yourself and others by bringing your household batteries and battery devices to the Brown County Hazardous Material Recovery facility for FREE!

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Open to the Public:
Tuesday: 9 am - 3 pm
Thursday: Noon - 6 pm
BrownCountyRecycling.org