

Bipartisan Infrastructure Law: Battery Collection Best Practices and Labeling Guidelines

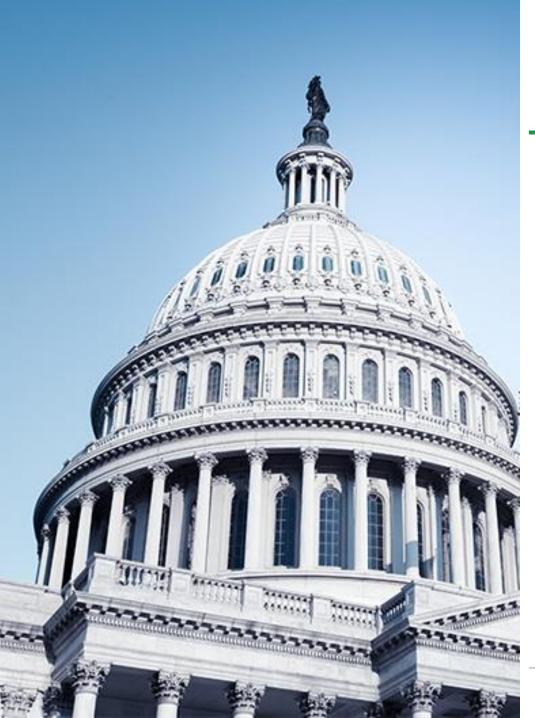
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Tribal Waste Management Program Webinar Series July 13, 2022

Session Goals

- Provide context on the Bipartisan Infrastructure Law and circular economy activities
- Introduce two new non-grant battery initiatives
 - Battery collection best practices
 - Battery labeling guidelines
- Gain input from tribal partners to provide clarification, additional experiences, and further challenges related to battery collection and labeling beyond input already received.





Recent Congressional and Policy Drivers Shaping EPA's Materials Management Work

- FY20 Appropriations directed EPA to produce a national recycling strategy
- Save Our Seas 2.0 Act in provides authority for grants, reports and a strategy
- Government Accountability Office report includes actions for EPA to strengthen recycling and recommend future policies
- FY21 Appropriations asked EPA to collect data on recycling and single-use plastics
- Bipartisan Infrastructure Law passed in November 2021 providing funding & new programs
- National Recycling Strategy released in November 2021
- 20+ pieces of proposed legislation related to recycling



Relationship to Circular Economy





Objectives:

- A. Improve Markets for Recycling Commodities
- B. Increase Collection and Improve Materials
 Management Infrastructure
- C. Reduce Contamination in the Recycled Materials Stream
- D. Enhance Policies to Support Recycling
- E. Standardize Measurement and Increase Data Collection



Battery Bipartisan Infrastructure Law Federal Funding

EPA

In coordination with stakeholders:

- Develop best practices for battery recycling
- Establish a program for voluntary battery labeling

DOE in coordination with EPA

- Develop producer responsibility
 framework
- Provide grants for battery collection and recycling projects (\$110M)

DOE

Provide grants for:

- Retailer collection systems (\$15M)
- Battery Material Processing Program (\$3B)
- Battery manufacturing and recycling (\$3B)
- Li-ion battery recycling prize competition (\$10M)
- EV battery design, recycling and reuse program (\$200M)
- RD&D on cost reduction for battery logistics and processing (\$60M)



Definitions: Battery

Battery: a device that consists of one or more electrochemical cells that are electrically connected; and is designed to store and deliver electric energy.

Batteries include:

- ✓ Small consumer/single-use batteries
- ✓ Rechargeable batteries
- ✓ Large electric vehicle and grid energy storage batteries
- ✓ Industrial batteries used in manufacturing, commercial businesses, and healthcare
- ✓ Lithium-based, nickel-metal hydride, and other chemistries



Image credit: Massachusetts Department of Environmental Protection



Definitions: Recycling

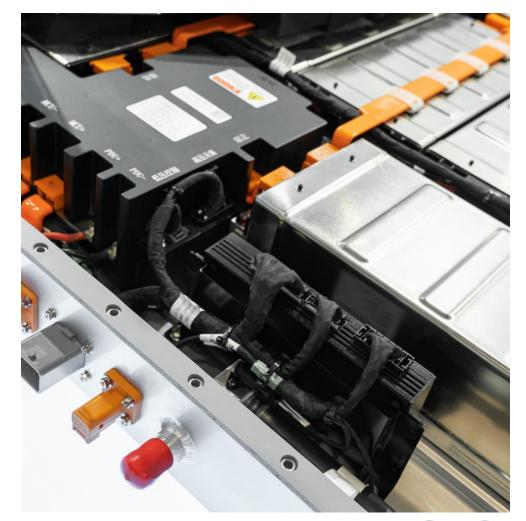
Recycling: the series of activities during which recyclable materials are processed into specification-grade commodities and consumed as raw material feedstock (instead of virgin materials) in the manufacturing of new products.





Why Are Batteries Important?

- They **power our electronics, transportation systems**, and more.
- They contain **critical minerals**, which can be recovered and reused.
- They can help tackle climate change.





What Are the Benefits of Recycling Batteries?

- Prevent valuable materials from going into the waste stream.
- Reduce energy needed, and greenhouse gases generated, to manufacture new batteries.
- Reduce the extraction of valuable and limited virgin resources.
- Avoid fires caused by improper battery disposal.
- Reduce waste going to landfills.





What Is The Battery Collection Best Practices Initiative?

Best practices will focus on:

- Identifying and increasing accessibility to battery collection locations
- Promoting consumer education
- Reducing hazards from improper disposal (fires)

Best practices will be:

- Technically and economically feasible
- Environmentally sound and safe for workers
- Beneficial to increasing the recovery of critical minerals



How Will EPA Develop The Best Practices?

- **Synthesize input** from governments, NGOs, and the private sector through feedback sessions and the Request for Information (RFI).
- Develop a draft report and provide opportunity for public comment.
- Submit the report to Congress by November 15, 2023.



What Is the Battery Labeling Guidelines Initiative?

- Labeling guidelines for end-of-life batteries
- Communication materials for battery producers, consumers, and other stakeholders about the reuse and recycling of critical materials from batteries



Example of a battery label



Input to Date from Tribal Partners

- Two national feedback sessions held on June 15 and June 30 with at least 25 tribal participants
- Request for Information (RFI) with a public comment period from June 9–July 11, 2022
- Today's Tribal Waste Management webinar



What We've Learned

- Transportation costs and logistics create barriers to battery recycling for remotely-located tribes.
- Tribes may have limited capacity to manage battery recycling, such as staffing, training, storage, and equipment.
- Best practices for battery collection must be economical to implement and sustain.



Discussion Questions

 What types of batteries should EPA include in the best practices for collection (e.g., small consumer batteries, electric vehicle and grid storage batteries, industrial batteries, etc.)?

 What are the current barriers to safe and effective battery collection and recycling? What are some examples where tribes have overcome battery management challenges?

• What **practices exist** to improve battery collection and recycling, especially to increase the safe recovery of critical minerals? Do you know of **successful tribal battery management programs** that we can learn from?



Discussion Questions

 Do you know of other successful tribal recycling programs for other materials that could be good models for batteries?

 Who are the key players in battery management in your community? What types of communication and outreach activities are most useful to reach these groups?

 What existing labeling programs for batteries or other materials should EPA use to inform a new labeling program?



Thank you!

- Sign up:
 - *Stay Connected* to learn more about our work under the Bipartisan Infrastructure Law, future strategies and reports https://www.epa.gov/recyclingstrategy/forms/stay-connected
- Learn More:
 - Battery Collection Best Practices and Battery Labeling Guidelines

 https://www.epa.gov/rcra/battery-collection-best-practices-and-voluntary-battery-labeling-guidelines
 - The Bipartisan Infrastructure Law: Transforming U.S. Recycling and Waste Management https://www.epa.gov/rcra/bipartisan-infrastructure-law-transforming-us-recycling-and-waste-management
- Questions? Email: <u>Batteries@epa.gov</u>





Thank you!