Electric Vehicle Battery Recycling and Reuse Working Group Meeting Minutes

Date: August 27, 2025 **Time:** 9:00 AM

Location: Hawai'i State Department of Health and Zoom

Members Present

Hawai'i State Energy Office:

- Monique Zanfes, Managing Director of Energy Efficiency and Renewable Energy
- Mark Glick, Chief Energy Officer
- Munashe Silverberg, Renewable Energy Analyst
- Stephen Walls, Deputy Energy Officer
- Kevin Moy, Energy Resilience Project Specialist
- Christopher Yunker, Managing Director of Resilience, Clean Transportation and Analytics

Hawai'i Department of Health:

- Lenora Mau, Solid Waste Section
- Lene Ichinotsubo, Acting Branch Chief, Solid and Hazardous Waste Branch
- Kelly Ann Lee, Project Coordinator, Solid and Hazardous Waste Branch
- Michele Freitas, Hazardous Waste Program Supervisor

Fire Department:

- Ricardo Yost, Chief of Fire Operations
- Greg Jenkins, Retired Fire Captain/Hazmat Specialist

Working Group Representatives:

- Archie Morgan, Vice President, Matson
- Mike Gaffney, Pasha Hawai'i
- Ed Washburn, Pasha Hawai'i
- Tiffany Yajima, Attorney, Government Affairs, Alliance for Automotive Innovation
- Thor Toma, Senior Vice President, Servco Pacific

- John Redman, Senior Manager Global Dangerous Goods, General Motors
- Danielle Spalding, Senior Vice President, Cirba Solutions
- Eric Frederickson, Call2Recycle
- Todd Coy, Executive Vice President, KBI
- Daniel Zotos, Director of State Policy, Redwood Materials
- Marc Boolish, PRBA (Rechargeable Battery Association)
- Michael Cooney, University of Hawai'i, Hawai'i Natural Energy Institute
- Will Giese, Solaray Corporation
- Rocky Mould, Executive Director, Hawai'i Solar Energy Association
- Henry Gabriel, Acting Refuse Division Chief, City and County of Honolulu
- Laura Kaakua, Energy Security and Community Outreach Manager, Hawai'i Department of Transportation
- Nik Nikolaidis, T&N Computer Recycling Services/Electronic Recycling Pacific
- Nick Garofalo, Radius Recycling (Schnitzer Steel Hawai'i Corp)
- Jordan Brandt, Owner/Manager, Voltek Hybrid and EV Repair
- Aki Marceau, Director of Electrification of Transportation, Hawaiian Electric
- Darla Arians, Director of Policy and Programs, Product Stewardship Institute

Meeting Overview

This inaugural meeting of the Electric Vehicle Battery Recycling and Reuse Working Group was conducted pursuant to Act 209, passed by the Hawaii state legislature in the 2025 legislative session. The working group will operate until the end of 2026 to examine how to maximize the recycling and reuse of electric vehicle batteries and recommend electric vehicle battery management practices. Issues identified in the meeting include how there are no reliable tests to determine if used batteries are damaged or defective, creating massive liability issues, federal transportation regulations (49 CFR) are inadequate for modern battery technologies, with no DOT updates expected until 2029 or later, battery chemistry confusion persists—even "safe" lithium iron phosphate batteries have caused major maritime fires, and emergency response protocols vary between islands and lack standardization.

Key Discussion Points

Opening Remarks

Mark Glick provided context on the Hawai'i State Energy Office's role under HRS 196-71, emphasizing the office's mandate to achieve energy efficiency, renewable energy resilience, and clean transportation goals. Stressed the importance of addressing the issues identified in Act 209 holistically.

Lenora Mau outlined the Hawai'i Department of Health's authority under Chapter 342G (integrated solid waste management) and 342J (hazardous waste management requirements).

Act 209 Requirements

Working group requirements were discussed. The legislation requires the working group to:

- Examine how to maximize recycling and reuse of electric vehicle batteries
- Recommend electric vehicle battery management practices
- Coordinate with other organizations working on similar objectives
- Develop policy recommendations for the legislature
- Submit a report with findings and recommendations before the 2027 legislative session

Current Challenges and Perspectives

Michael Cooney (University of Hawai'i) emphasized four critical points:

- 1. Any solution must address all battery types and formats, not just EV batteries
- 2. A stewardship program with dedicated funding is necessary to capture 95% of batteries
- 3. A single pretreatment plant is needed on the island to render batteries safe for shipping
- 4. Insurance companies will ultimately dictate shipping policies and costs

Chief Ricardo Yost (Fire Department) highlighted safety concerns, noting that fire response protocols for EVs differ significantly from internal combustion engine vehicles. He emphasized the need to consider all battery applications, including residential energy storage systems.

Eric Frederickson (Call2Recycle) clarified misconceptions about lithium iron phosphate (LFP) batteries, noting they can catch fire despite common beliefs about their safety. He referenced the Genius Star 11 vessel fire involving LFP batteries.

Discussion and Q&A followed.

Shipping Company Updates

Archie Morgan (Matson) reported that Matson has temporarily suspended accepting EVs and plug-in hybrids "out of an abundance of caution" following several significant maritime incidents worldwide. The company is conducting an internal review of safety practices with experts and hopes to provide updates soon.

Mike Gaffney/Ed Washburn (Pasha) stated Pasha continues shipping EVs and plans to maintain this policy. They conducted hazard analyses with a consultant and actively implement mitigation measures accordingly. They do not accept damaged, recalled, or recycled batteries.

Discussion and Q&A followed.

Technical and Regulatory Challenges

John Redman (General Motors) noted that while emergency procedures exist for moving damaged batteries from accident scenes under 49 CFR 178, there are no authorizations for transporting damaged batteries beyond initial emergency response.

Greg Jenkins (Hi Hazmat) highlighted gaps in current federal regulations (49 CFR), noting they lack adequate scope for modern battery characteristics and that responsibility falls heavily on shippers.

Several working group members emphasized the difficulty in testing whether used batteries are damaged or defective, creating liability concerns for shippers and insurance companies.

Discussion and Q&A followed.

Best Management Practices for Emergency Response

Lenora Mau (Department of Health) requested working group approval to continue developing best management practices for towing companies and temporary storage operators handling damaged EVs. This work builds on previous collaboration with Oʻahu stakeholders and would extend to the neighbor islands. The group expressed no objections to this initiative.

John Redman (General Motors) offered GM's assistance, noting that OEMs have emergency response guides but acknowledged the complexity of moving damaged batteries beyond initial emergency response.

Discussion and Q&A followed.

Tentative Meeting Schedule and Topics

- August 2025, Meeting Inaugural all-hands meeting (Introductory Meeting)
- September 2025, Meeting Current Landscape, Intro to End-of-Life Options

- November 2025, Meeting End-of-Life Options
- February 2026, Meeting Management Practices
- May 2026, Meeting Recycling Options
- August 2026, Meeting Policy Recommendations
- November 2026, Meeting Optional

Administrative Notes

- The working group operates under Hawai'i's Sunshine Law
- Meetings are recorded and minutes will be made available within 40 days
- A SharePoint site will be created for resource sharing
- Permitted interaction groups may be formed for specific technical issues
- A feedback survey is available for ongoing input

Action Items

- 1. **Department of Health** will continue developing emergency response best management practices for neighbor islands and report back in February 2026
- 2. **Meeting materials and survey link** will be distributed to all participants
- 3. **Next meeting** scheduled for September 2025 to cover current EV adoption landscape and end-of-life options overview

Public Comment

One member of the public was present to observe the meeting.

Meeting Adjourned

The meeting adjourned at approximately 11:00 AM.