BATTERY REGULATORY OVERVIEW

Bernie Kotlier, Executive Director, California and Nevada LMCC Todd Coy, Executive Vice President, KBI

CALIFORNIA REGULATORY HIGH LEVEL

- In California, lithium ion batteries are considered a universal waste CCR 66273
- In order for a material to be a Universal Waste it must first be a hazardous waste.
- UW regulations provides for a lower level of regulatory burden for transportation, storage, and reporting.
- □ Batteries must be intact.
- Does not reduce or impact Department of Transportation Haz Mat requirements or exceptions to the regulations thereof.

BATTERY BILLS IN MOTION

There are a few battery bills that have been stayed but are expected to be introduced in the 2020 sessions.

□ Washington State 2496 - Killed

Washington DC LB 506 – No expected movement until Spring/Summer 2020

□ Main 1594 – Expected to not pass

California AB 1509 – Still active

□ Most of the bills are aimed at post consumer sized batteries.

□ Washington state calls for batteries weighing up to 25 Lbs.

□ All of the bills call for some type of stewardship program

Uncertain how the bills may be modified, or changed, and what, if any, impact to EOL EVB's may result.

Information provided by PRBA

CA BATTERY BILLS IN MOTION

California SB 1509

- > Would establish the Lithium Ion Battery Recycling Program.
- Has product stewardship component.
- On or before January 1 2022 to adopt regulations to implement the program.
- There has been discussions on providing an industry sponsored all battery recycling bill that can be introduced as an alternative bill.

BATTERY BILLS IN MOTION

California SB 424

- > Not a battery bill per se.
- Bans single use vaping products.
- Has product stewardship component.
- Will capture batteries in the collection scheme think JUUL and similar devices.

California AB 2832

California's Lithium Ion bill AB 2832 was changed from a battery collection stewardship bill to, instead, form a California Advisory Board that is designated to make recommendations to the CA legislature by 2022.

CALIFORNIA LITHIUM ION ADVISORY GROUP UPDATE

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BACKGROUND

Assembly Bill 2832 – Dahle

 Requires the Secretary for Environmental Protection...To convene the Lithium – Ion Car Battery Recycling Committee to review and advise the Legislature on policies pertaining to the recovery and recycling of lithium – ion batteries sold with Motor Vehicles in the state.

The bill would require the advisory group to consult with specified entities, and, on or before April 2022 to submit policy recommendations to the Legislature:

Aimed at ensuring as close to 100% of motor vehicle lithium ion batteries are re-used or recycled at end of life and at a cost effective manner.

ADVISORY GROUP COMPOSITION

15 Members

- A vehicle manufacturer.
- □ An organization that represents one or more vehicle manufacturers.
- An electronic waste recycler or an organization that represents one or more electronic waste recyclers.
- □ An automotive repair dealer or an organization that represents one or more automotive repair dealers.
- An automobile dismantler or an organization that represents one or more automobile dismantlers.
- □ An environmental organization that specializes in waste reduction and recycling.
- □ A representative of the energy storage industry.
- □ A lithium-ion vehicle battery manufacturer.
- □ A standards-developing organization that has a focus on automotive engineering.

ADVISORY GROUP GOALS

- "To advise the Legislature on policies pertaining to the recovery and recycling of lithiumion vehicle batteries sold with motor vehicles in the state"
- "Consult with universities and research institutions that have conducted research in the area of battery recycling, with manufacturers of electric and hybrid vehicles, and with the recycling industry"
- "(By) April 1, 2022, the (AG) shall submit policy recommendations to the Legislature ... aimed at ensuring that as close to 100 percent as possible of lithium-ion vehicle batteries in the state are reused or recycled at end-of-life..."
- "The policy recommendations shall reflect entire life cycle considerations for lithium-ion vehicle batteries ... including:
 - Opportunities and barriers to the reuse of those batteries as energy storage systems
 - □ Best management considerations for those batteries at end-of-life, and
 - □ The overall effect of different management practices on the environment."

ADVISORY GROUP STATUS

□ 1st Meeting held November 18th 2019

Brief meeting, introductions, overview of activities and expectations of the AG.

□ 2nd Meeting held January 27th 2020

- Overview of various battery industry segments
- > AG was involved in the dialog
- > Areas of needed clarification were identified.
- Schedule and future topics were discussed.
- > Next meeting is scheduled for April 6th.

ADVISORY GROUP PLANNING

2020 AG Meeting Schedule and Agenda:

Jan 27 – Background Materials, Goal and Scope

- April 6th Strategies for Battery Reuse
- July 13th Material Recovery and Battery Recycling
- □ TBD (Q4) Logistics and Infrastructure

Slides Provided By. Dr. Hanjiro Ambrose UC Davis

ADVISORY GROUP PLANNING

April 6th Meeting Agenda:

Strategies for Battery Reuse

Performance potential of second-life batteries

Types and scale of applications for reuse

Economic and environmental implications

- Pilots, examples, and early data
- Innovation and emerging strategies
- Technoeconomic challenges and other barriers

ADVISORY GROUP...NEXT STEPS

□ Identify "intent" of Assembly Bill 2832

"Motor Vehicle" has the same definition as in Section 415 of the Vehicle Code

415 (a) A "motor vehicle" is a vehicle that is selfpropelled.

- Potentially a very broad and encompassing purview.
- Assure that we are focused on the intent of the bill.
- General consensus is to focus on "Large Format Batteries".

ADVISORY GROUP....NEXT STEPS

Identify individuals within the sphere of specified entities (universities, research institutions, manufacturers of electric and hybrid vehicles, and the recycling industry) in which to consult.

□ This could include:

- Department of Toxic Substance Control to discuss permitting requirements.
- Representatives from EU or other jurisdictions.
- MRF representatives.

ADVISORY GROUP...GENERAL OBSERVATIONS (

The group is well represented by a diverse membership.

Scheduled meetings may not provide adequate time for full discourse of the topics.

Discussions are open to all areas of thought and collaboration.

CALIFORNIA LITHIUM ION ADVISORY GROUP UPDATE

THANK YOU

Todd Coy Executive Vice President KBI Bernie Kotlier Executive Director California and Nevada LMCC