Date of Hearing: March 25, 2025

ASSEMBLY COMMITTEE ON ENVIRONMENTAL SAFETY AND TOXIC MATERIALS
Damon Connolly, Chair
AB 696 (Ransom) – As Introduced February 14, 2025

**SUBJECT**: Lithium-ion vehicle batteries: emergencies: advisory group

**SUMMARY**: Requires, on or before July 1, 2026, the Secretary for the Environmental Protection Agency (CalEPA) to convene the Lithium-Ion Car Battery Advisory Group (Advisory Group) to review, and advise the Legislature on, policies pertaining to the safety and management of lithium-ion vehicle batteries involved in an emergency situation. Requires, on or before July 1, 2028, the Advisory Group to submit policy recommendations to the Legislature aimed at ensuring best standards and practices that allow first responders to respond to lithium-ion vehicle battery emergencies in a safe and efficient manner. Specifically, **this bill**:

1) Requires, on or before July 1, 2026, the Secretary for CalEPA to convene the Advisory Group to review, and advise the Legislature on, policies pertaining to the safety and management of lithium-ion vehicle batteries involved in an emergency situation, including but not limited to, a battery fire, other nonfire damage to a lithium-ion vehicle battery, submerged vehicle recovery, and roadway collisions.

2) Requires the Advisory Group to meet quarterly until July 1, 2028, and to consult with universities and research institutions that have conducted research in the area of lithium-ion batteries, with manufacturers of electric and hybrid vehicles, and with both state and local first responders.

3) Requires the Secretary of CalEPA to appoint at least one member to the Advisory Group from each of the following:

    a) The Office of Emergency Services;

    b) The Department of Toxic Substances Control (DTSC);

    c) The Office of the State Fire Marshal;

    d) A certified unified program agency;

    e) An organization that represents first responders that respond to vehicle battery fires;

    f) A vehicle manufacturer that produces lithium-ion battery-powered vehicles;

    g) An automobile dismantler or an organization that represents one or more automobile dismantlers;

    h) An organization that represents one or more vehicle manufacturers;

    i) A lithium-ion vehicle battery manufacturer; and,

    j) A standards-developing organization that has a focus on automotive engineering.

4) Requires, on or before July 1, 2028, the Advisory Group to submit policy recommendations to the Legislature, aimed at creating best standards and practices that allow first responders to respond to lithium-ion vehicle battery emergencies in a safe and efficient manner. Requires the Advisory Group, in developing the policy recommendations, to consider both state and local solutions.

**EXISTING LAW**:

1) Establishes the Resource Conservation and Recovery Act (RCRA) to authorize the United States Environmental Protection Agency (US EPA) to manage hazardous and non-hazardous wastes throughout the waste's life cycle. (42 United States Code § 6901 et seq.)

2) Creates the Hazardous Waste Control Law (HWCL) and provides DTSC with responsibility for overseeing the management of hazardous waste in California. (Health and Safety Code (HSC) § 25100 et seq).

3) Prohibits the disposal of a lead-acid battery at a solid waste facility, or on or in any land, surface waters, watercourses, or marine waters. (HSC § 25215.2)

4) Requires CalEPA to convene the Lithium-Ion Car Battery Recycling Advisory Group 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, and requires CalEPA to appoint members to the group from specified departments, vocations, and organizations. (Public Resources Code § 42450.5)

**FISCAL EFFECT**: Unknown.

**COMMENTS**:

*Need for the bill*: According to the author, "AB 696 is an essential piece of legislation which addresses concerns surrounding California’s growing use of lithium-ion batteries. As electric vehicles become more widespread, the need for proper safety protocols for their batteries becomes increasingly urgent. The fires resulting from damaged lithium-ion batteries are difficult to contain and extinguish, endangering the lives of residents and first responders alike. In the Palisades and Eaton fires which tore through our southern California communities in the beginning of this year, the high-energy density of lithium-ion batteries presented a significant danger to first responders fighting to defend neighborhoods. These incidents make it clear: California urgently needs effective emergency protocols for handling these batteries on-scene. AB 696 would bring together state and local firefighting professionals, vehicle and battery manufacturers, and other key stakeholders to provide our first responders with evidence-based protocols to keep themselves and others safe as they protect our communities."

*California Hazardous Waste Control Law (HWCL)*: The HWCL is the state's program that implements and enforces federal hazardous waste law in California and directs DTSC to oversee and implement the state's HWCL. Any person who stores, treats, or disposes of hazardous waste must obtain a permit from DTSC. The HWCL covers the entire management of hazardous waste, from the point that the hazardous waste is generated to management, transportation, and ultimately disposal of this waste into a state or federally-authorized facility.

*Lithium-ion batteries:* Lithium-ion batteries, which are widely used in portable electronics like laptops, smart phones, digital cameras, game consoles, and cordless power tools, are also widely used as vehicle batteries in zero emission vehicles (ZEVs).

*Fire risks:* Because lithium-ion batteries contain hazardous and corrosive materials, they also pose a fire risk if not stored or disposed of properly. Therefore, any program to manage used lithium-ion batteries needs to account for this possible fire risk.

*Lithium-ion Car Battery Recycling Advisory Group*: In 2018, AB 2832 (Dahle, Chapter 822, Statutes of 2018) required the convening of the Lithium-Ion Battery Recycling Advisory Group, whose mandate included submission of policy recommendations to the Legislature to ensure "that as close to 100% as possible of lithium-ion batteries in the state are reused or recycled at end-of-life."

The Lithium-ion Car Battery Recycling Advisory Group was convened and met quarterly between fall of 2019 and spring of 2022. The Lithium-ion Car Battery Recycling Advisory Group heard from 26 experts from industry, academia, and government agencies. Lithium-ion Car Battery Recycling Advisory Group members also participated in subcommittees to identify barriers and opportunities and to develop policy recommendations specific to three key processes for end-of-life lithium-ion batteries: recycling, reuse and repurposing, and logistics.

*Recommended policies of the Lithium-ion Car Battery Recycling Advisory Group:* Two policy proposals that define end-of-life management responsibility rose to the level of majority support of the Lithium-ion Car Battery Recycling Advisory Group: core exchange with a vehicle backstop, and producer take-back. These policies complement, and do not replace, current warranty regulations and programs that require the vehicle manufacturer to properly reuse, repurpose, or recycle a removed end-of-life battery that is still under warranty.

*US EPA Guidance Memo on Lithium Battery Recycling*: On May 24, 2023, the US EPA issued a memo titled, "Lithium Battery Recycling Regulatory Status and Frequently Asked Questions," which stated:

> "US EPA has determined that most lithium-ion batteries on the market today are likely to be hazardous waste when they are disposed of due to the ignitability and reactivity characteristics. Fires at end of life are common and mismanagement and damage to batteries make them more likely.
>
> Due to the high energy density of lithium batteries, handlers may choose to discharge them before shipping them for recycling. US EPA recommends that handlers ensure that any discharge is done with all appropriate safety measures in place to prevent fires and protect the health of workers and communities. Lithium batteries may remain hazardous waste after being discharged because they contain ignitable solvents."

*Risks and Response Strategies for Lithium-ion Battery Fires:* According to the United States Fire Administration,

> "Lithium-ion batteries have emerged as the power source of choice for a vast array of modern tools and mobility devices. From toothbrushes to smartphones, construction tools to medical

devices, scooters to cars, these rechargeable power sources have transformed the way we power our homes, cities and everything in between. However, there are risks associated with lithium-ion batteries, and firefighters must be aware of the challenges they present and the measures needed to mitigate these dangers when tackling incidents involving these devices.

Lithium-ion batteries contain volatile electrolytes, and when exposed to high temperatures or physical damage, they can release flammable gases. Batteries can be ejected from a battery pack or casing during an incident thereby spreading the fire or creating a cascading incident with secondary ignitions/fire origins. Even after extinguishing a lithium-ion battery fire, there is a risk of re-ignition.

Firefighters should be cautious of potential chemical exposure during firefighting operations, and proper personal protective equipment should be donned. Firefighters need to adopt strategic cooling methods to manage these incidents effectively.

Vehicle construction and design is different for battery electric vehicle/hybrid electric vehicle makes and models, so firefighters and other first responders should get Emergency Response Guides from original equipment manufacturers to inform critical actions such as safe and effective rescue and vehicle extrication. Familiarity with these unique designs is essential for swift and effective response.

Even after extinguishing a lithium-ion battery fire, there is a risk of re-ignition. Firefighters should implement thorough post-fire assessments and continued monitoring to prevent rekindling, including during post-incident transport and placement."

*This bill:* AB 696 builds upon the work by CalEPA regarding the recycling of lithium-ion car batteries, by requiring CalEPA to convene an Advisory Group to develop best practices for first responders when responding to an emergency situation where there is a burning or otherwise damaged lithium-ion battery.

*Arguments in support:* According to the California Electric Transportation Coalition (CalETC),

"This initiative is a critical step toward enhancing first responder safety and improving best practices for handling lithium-ion vehicle batteries in emergency situations.

As California continues its transition to zero-emission transportation, ensuring the safe handling, disposal, and recycling of lithium-ion vehicle batteries is essential. AB 696 recognizes the growing risks that these batteries pose in accident scenarios, where they can reignite days after an initial fire. First responders, who are the first line of defense, require clear, evidence-based guidance to safely manage compromised batteries, reducing risks to both emergency personnel and the communities they serve.

By bringing together vehicle manufacturers, state agencies, and first responders, this advisory group will develop practical, research-backed solutions to mitigate the dangers associated with lithium-ion battery fires. AB 696 ensures that safety remains a top priority as California accelerates its adoption of electric vehicles (EVs) and strengthens its circular economy for battery reuse and recycling.

CalETC supports AB 696, as it promotes a proactive, collaborative approach to lithium-ion battery safety while reinforcing California's leadership in clean transportation and emergency preparedness."

*Arguments in opposition:* None on file.

*Related legislation:*

1) SB 615 (Allen). Requires a vehicle traction battery supplier to be responsible for ensuring the responsible end-of-life management of a vehicle traction battery if it is removed from a vehicle that is still in service or if the vehicle traction battery is offered or returned to its battery supplier, in addition to various reporting requirements. This bill is pending action in the Senate Environmental Quality Committee.

2) SB 615 (Allen, 2024). Would have required vehicle traction battery suppliers to ensure the responsible end-of-life management of a vehicle traction battery; report specified information about the vehicle traction batteries to DTSC; and, fully fund the costs of the collection of a battery for which they are required to ensure end-of-life management. Would have required DTSC, no later than July 1, 2028, to adopt regulations to implement this bill. This bill was vetoed by Governor Newsom.

3) SB 38 (Laird, Chapter 377, Statutes of 2023). Requires each battery energy storage facility in the state and subject to regulation by the California Public Utilities Commission to have an emergency response and emergency action plan that covers the premise of the battery energy storage facility.

4) AB 2832 (Dahle, Chapter 822, Statutes of 2018). Requires CalEPA to convene a research group to review, and advise the Legislature on, policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state.

5) AB 2407 (Ting, 2018). Would have required CalEPA to convene a Lithium-Ion Car Battery Recycling Advisory Group to review and advise the Legislature on policies pertaining to the recovery and reuse of lithium-ion batteries. This bill died in the Senate Environmental Quality Committee.

**REGISTERED SUPPORT / OPPOSITION**:

**Support**

California Electric Transportation Coalition

**Opposition**

None on file

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