



POST-STORM GUIDANCE: HOW TO HANDLE ELECTRIC VEHICLE LITHIUM-ION BATTERIES

Not all electric vehicle (EV) lithium-ion batteries will incur damage after flooding but it can happen. Submersion in water (especially in saltwater) can damage low- and high-voltage components. Although not a common occurrence, this could result in an electrical short and potential fire.

Users should be aware that smoke or strange noises from the battery could be an indication of battery damage, but it also could be damaged without immediately showing those signs.

If an EV battery is suspected to have been damaged by flooding, **do not**:

- Attempt to charge or drive the vehicle.
- Go near the EV.
- Store the EV indoors or near structures.

EVs with suspected battery damage should be towed and inspected by the dealer or a mechanic certified for hybrids or EVs before it is used.

The recommended distance between EVs with damaged lithium batteries is 50 feet.

If an EV has sustained damage and cannot be towed, request assistance from emergency responders to safely disconnect the battery pack from the vehicle.

For safe handling of EV lithium-ion batteries, emergency responders should refer to the following guidance:

- [Emergency Response Guides for Electric Vehicles and Lithium-Ion Batteries.](#)
- [Safety Risks to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles.](#)

For safe transport of EV lithium-ion batteries, transporters should refer to the following guidance from the U.S. Department of Transportation – Pipeline and Hazardous Materials Safety Administration:

- [Safety Advisory Notice – For Consumers to Transporters.](#)
- [Lithium Battery Guide for Shippers.](#)

EV batteries that are used, damaged or defective **must be** managed and transported as hazardous waste, including those that are also known to have been exposed to flooding. EV batteries that are suspected to have been exposed to flooding should be treated as hazardous waste. A county may manage the EV batteries at their hazardous waste facility under their EPA generator identification number.

A county may want to consider:

- Creating a consolidation area for EVs and/or EV batteries to facilitate the safe removal of the batteries.
- Establishing a temporary storage facility for batteries that have been removed by emergency personnel.
 - If a satellite consolidation or storage area is designated, a temporary EPA identification number will be needed.
 - A county may request a temporary identification by emailing an [Emergency Application Form for ID Number](#) to their appropriate [DEP district office](#) or to IanWaste@FloridaDEP.gov or by calling DEP's Waste hotline at 850-728-0162.

Aggregated batteries must be removed by a registered hazardous waste transporter and taken to a permitted transfer, storage and disposal facility.

Access the [NFPA Safety Bulletin on Submerged Hybrid Vehicles/EVs.](#)

