



The Fire Chief's Association of Broward County Safety Guidelines for EV/Lithium-Ion Battery Incidents



- A smoking, hissing, or popping battery upon arrival presents responders with a highly toxic and flammable mixture. **ALWAYS WEAR FULL PPE AND SCBA**, especially during extrication events.
- Lithium-Ion jet fires can reach 4000+ Degrees Fahrenheit, protect yourself and exposures
- Consider using a thermal imaging camera to help with the 360 size-up.
- Never touch or have a tool touch any orange (high voltage) wires
- Establish tactical priorities (life-safety, fire, extrication, victim care).
- Stabilize the vehicle (Chock Wheels-Set Emergency Brake-Place in Park-Ensure Ignition is OFF).
- Move vehicle key at least 25 feet Away from the Vehicle or place EV Plug.
- Secure a continuous and sustainable water supply from the fire hydrant.
- Multiple attack lines to suppress and cool the fire and the battery if available personnel are on scene or one attack line and a master stream (Fast Attack Ground Monitor)
- Consider that this could be a combined fire, extrication, and hazmat incident
- The smoke/vapor cloud is very dense, toxic, and flammable. Consider protective hose lines/ventilation tactics for a flammable, toxic atmosphere based on location
- Assign sufficient fire personnel and apparatus on the scene for an extended operation to monitor the battery for possible re-ignition confirmed with TIC for temperature changes
- When turning the vehicle over to a Secondary Responders (Towing Company), brief their personnel on the hazards and request a flatbed
- If possible, follow the tow truck to the storage area, and place the battery-powered vehicle in a space away from other vehicles, buildings, or combustibles. (Recommended 50 X 50)
- Do not handle undamaged or damaged cells during overhaul without proper PPE and non-conductive tools
- Bunker Gear should be sent to a professional cleaning service if exposed to smoke/off-gassing lithium-ion batteries and labeled.