



MARINE SAFETY ALERT

Inspections and Compliance Directorate

March 10, 2022
Washington, DC

Safety Alert 01-22

LITHIUM BATTERY FIRE

On August 19, 2021, a container illegally loaded with discarded lithium batteries caught fire while enroute to the Port of Virginia. The container was being transported on a chassis from Raleigh, NC, intended for a maritime voyage to a port in China via a foreign-flagged container ship. The batteries caught fire on the highway resulting in loss of the cargo, and significant damage to the shipping container. Upon initial investigation, the responding fire department determined that the heat produced from the fire burned hot enough to create a hole through the metal container's structure. In addition, the bill of lading listed "computer parts," not lithium batteries. This is a situation that made responding to the fire more challenging and could have been potentially catastrophic had the container caught fire after being loaded aboard the container ship.

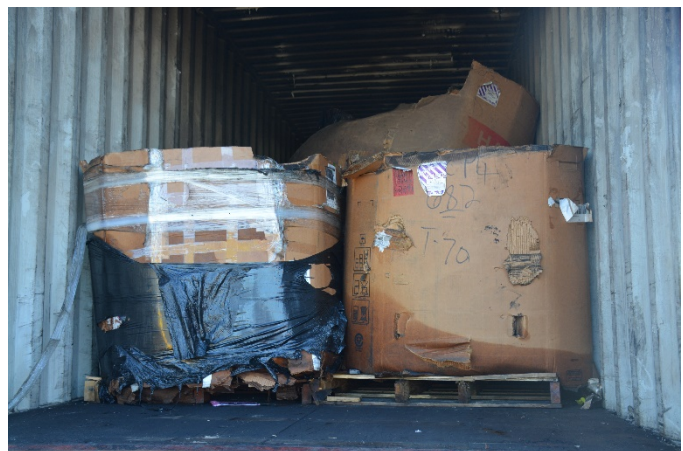


Burnt lithium batteries in fiberboard boxes.

Further investigation by the Department of Transportation (DOT) and Pipeline and Hazardous Materials Safety Administration (PHMSA) determined that the shipper failed to properly placard, label, mark and package the lithium batteries, class 9, UN 3480 and 3481, and identified the cause of fire to be residual charge/full circuit, which led to a thermal increase.

The Coast Guard seeks to increase awareness of these hazards, and **strongly recommends** units and other stakeholders:

- Disseminate this safety alert to all marine safety personnel and stakeholders within their respective port(s).
- Have awareness of the following:
 - IMDG Special provisions 376 and 377, which address additional marking requirements for lithium batteries being transported and that are damaged or defective, or being disposed of or recycled.
- Ensure damaged/defective batteries shall be packaged IAW P911 or LP 906.
- Ensure batteries for disposal or recycling adhere to P908 or LP 904.



- Ensure all packaging provisions state: cells and batteries shall be protected against short circuit. Note: Some provide additional direction such as isolating each battery and limits on package contents.
- Utilize PHMSA's Lithium Battery Guide [Lithium Battery Guide for Shippers | PHMSA \(dot.gov\)](#) and the U.S. Environmental Protection Agency's (EPA) guidance on [Used Lithium-Ion Batteries | US EPA](#)
- Have awareness of Appendix A to Subpart D of 49CFR107, which contains guidelines for civil penalties to pursue enforcement or recommend follow-on action to DOT PHMSA.



Field personnel should be on alert for these shipments and engage port stakeholders as appropriate to ensure compliance with all applicable standards and safe shipping conditions. In the event local units respond to a container fire *before* the container reaches a port or facility, the unit should contact PHMSA and/ or the Federal Motor Carriers Safety Association (FMCSA) local representatives to handle the investigation into the incident.

This safety alert is provided for informational purposes only and does not relieve any domestic or international safety, operational, or material requirements. Developed by Sector Virginia and distributed by the Office of Port and Facility Compliance. Address questions to SMB-COMDT-CGFAC@USCG.MIL, or at (202) 372-1092.