

MANUFACTURING SAFETY ALERT

Ask Yourself
“Could it happen here?”

DESCRIPTION OF EVENT

Lithium-ion Battery Explosion

On a hot day with an outside temperature of 33C, an employee was using an Icom IC-F1000S hand-held radio to communicate their distance to the log yard.

When they arrived at the yard, the radio was no longer needed, and the employee left it on the passenger seat of their vehicle.

Later, when they returned to the vehicle, they noticed a dark tint on the inside of the window. When they opened the door, they discovered that the radio had ignited, resulting in significant damage to the interior of the vehicle. The fire extinguished itself due to the limited oxygen within the vehicle.

The radio was equipped with a lithium-ion battery, which can explode or combust especially when exposed to high temperatures, particularly when left in a hot vehicle.

SUGGESTED ACTIONS

- Update Safe Work Procedures (SWP): Incorporate guidelines for tasks that use tools powered by lithium batteries.
- Enhance Field Level Hazard Assessments (FLHAs): Include the hazards and risks associated with lithium-ion batteries.
- Exercise Caution with Hot Batteries: When handling a hot battery, use appropriate protective equipment such as gloves and safety glasses. Avoid direct contact with unprotected skin.
- Responding to Battery Fires: If a battery begins to smoke or catch fire, ventilate the area immediately by opening windows and doors to allow fresh air to circulate and clear any fumes. Ruptured lithium-ion batteries can release toxic gases.
- Emergency Response: Do not attempt to extinguish a lithium-ion battery fire, as they can be difficult to extinguish and can pose a risk to personal safety. Call 911 and alert the fire department.
- Proper Disposal: Dispose of lithium-ion batteries (or any battery) at a designated recycling centre to minimize environmental impact.



MOST IMPORTANT TAKE AWAY

Lithium-ion batteries are used to power many types of tools and applications.

Ensure you are aware of the significant hazards of overheating and take precautions.

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Manufacturing Advisory Group



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