

Safety Advice

Sharing information to improve safety

Target audience

All Sydney Trains and Contractors who may come across hazards associated with micro-mobility devices or vehicles.

The purpose of the Safety Advice is to highlight important safety information such as warning signs, control and reporting of the hazard.

The Issue

Electric bicycles (e-bikes), electric scooters (e-scooters), electric mobility (e-mobility) scooters, and self-balancing scooters (hoverboards), known as micro-mobility devices or Light Electric Vehicles (LEVs) are growing in popularity. LEVs commonly contain lithium-ion batteries and come with associated risks and hazards (including fire and explosion, radiation, heat, chemical and electrical).

What should I do if my battery is smoking or on fire?

If the device or battery starts to smoke or emit flames:

- Evacuate the area and close doors if safe to do so to slow the spread of fire and ensure no one goes back inside the building for any reason. Vented battery gases, vapour and smoke are highly toxic and flammable and must not be inhaled.
- Call Triple Zero (000) and wait in a safe location for firefighters to arrive. In addition, call the Security Control Centre (SCC) on 02 9379 4444.
- If the incident has potential to impact the Rail Operations, call the Signaller or Shunter (depending on the location of the incident). If the Signaller or Shunter do not respond, call the Network Incident Manager in the Rail Operations Centre (ROC) on 02 9379 1743.
- Follow procedures outlined in the local Site Incident Management Plan (SIMP).
- If anyone has been exposed to spilt electrolytes, flying debris, smoke or vapours, or flames, seek urgent medical assistance. Burns should be immediately treated with cool running water for 20 minutes. Burns larger than a 20-cent piece requires emergency care. Treat with cool running water immediately, call Triple Zero (000), and follow the advice of the operator.

Warning signs

Thermal runaway events involving lithium-ion batteries can occur rapidly and can often be quite violent, involving toxic smoke and vapours, flames, and metal projectiles.

Warning signs to look out for in a device or battery include:

- Pungent odours.
- Discolouration, blistering, bulging, or swelling of the casing.
- Heating up and feeling extremely hot to touch.
- Abnormal popping, hissing or crackling sounds, smoke and fumes.
- Never touch a swollen or ruptured device or battery with bare hands as the heat and/or chemicals can cause severe burns.

If overheating

We do not recommend handling anything that is on fire. Only attempt the following if safe to do so without injuring yourself and putting others in danger.

- If a small battery or device such as a phone or tablet starts overheating: Unplug it from the power outlet if it is on charge.
- Avoid inhaling any smoke or fumes.
- If possible, remove it to an outside area away from any combustible material and away from windows or doorways.
- If trained to use a nearby fire blanket or a fire extinguisher (dry chemical powder or carbon dioxide), only attempt to use them from a safe distance away from any smoke or vapours. These may be used to prevent the spread of fire to the surroundings but are not likely to fully extinguish a lithium-ion battery fire.
- There is a good chance that the battery might reignite if it has not been sufficiently cooled.

Contact your SEQR Representative or Line Manager if you have any questions.



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