

Light Electric Vehicles (e-bikes, e-scooters, e-hoverboards) -Risk of lithium-ion battery fires.

Target audience

Sydney Trains' workers, including contractors, who operate, store or charge *light electric vehicles* (LEVs) in a workplace or an area under the management and control of Sydney Trains.

The Issue

Lithium-ion batteries are found in many products, including *light electric vehicles* (LEVs). Lithium-ion batteries of all types and sizes can overheat and catch fire, with these types of fires presenting intense heat, toxic gases and self-sustaining chemical reactions, making them difficult to contain and extinguish.

Common reasons lithium-ion batteries may overheat and catch fire include:

- damage to the battery; and/or
- using incorrect charging equipment.

Battery packs can pose a significant risk if the lithium-ion battery overheats and catches fire, particularly as not all sprinkler systems are capable of suppressing or controlling a large lithium-ion battery fire.

What you must do

All Sydney Trains' workers are not permitted to operate, store or charge LEVs in offices, enclosed workplaces or areas near other people.

In addition, please note the following further information from *Fire and Rescue NSW*. Where possible, charging and parking should be;

- located externally or in open air;
- located close to the main entrance/exit if internal;
- located away from any doors or services (building access, emergency exits, lifts, building utilities, critical infrastructure, etc);
- protected by an AS 2118 automatic fire sprinkler system if internal;
- protected by fire hydrant coverage;
- protected by enhanced smoke detection and alarm systems and smoke hazard management systems;
- provided with automatic or remote emergency shutdown of charging stations; and
- not permitted within an *automated vehicle parking system* (AVPS).

Importantly, the relevant emergency response plan should be followed in the event of a fire.

If you would like further information on LEVs, please reach out to your Safety, Environment, Quality and Risk (SEQR) business partners for further information or advice.



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