

**Office for Product Safety and Standards**

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18 The Priory Queensway
Birmingham
B4 6BS

Mrs Anita Bhardwaj
Area Coroner, H.M. Coroner's Court,
Gerard Majella Courthouse
Boundary Street,
Liverpool L5 2QD

3 February 2025

Dear Mrs Bhardwaj,

Thank you for your Regulation 28 Report to Prevent Future Deaths, dated 9 December 2024, following your investigation and inquest into the death of Luke Marshall Albiston O'Donnell, who died in hospital following a house fire on 4 August 2024, caused by a lithium-ion e-bike battery.

I was very sorry to hear of Luke's death. If you have the opportunity, please do pass on my deepest sympathies to his family.

The Office for Product Safety and Standards (OPSS), within the Department for Business and Trade, is the UK's national product regulator. We are aware that as the use of e-bikes has become more widespread, there has been an increasing number of fire incidents associated with them, some of which have tragically resulted in fatalities such as the one which sadly took Luke's life. The safety of these products is a priority across Government and OPSS has a programme of work to understand and act on the issues that have been causing these fires.

In your report, you raise a key concern over a lack of communication and media coverage regarding the dangers that can be associated with these products. To raise awareness, the Government launched the [Buy Safe, Be Safe campaign](#) in October 2024, that aims to highlight the serious risks associated with buying and using unsafe e-bikes and their batteries. The campaign focuses on encouraging consumers to only buy safe products from reputable sellers, only replace items with products recommended by the manufacturer and to use professionals if converting or repairing e-bikes and e-scooters.

OPSS is currently working with other Government departments, as well as external stakeholders including Electrical Safety First, the Royal Society for the Prevention of Accidents, local authorities, fire and rescue services and retailers to amplify these important safety messages through their networks and communication channels.

The *Buy Safe, Be Safe* campaign builds on previous activity, including an 'important safety message' published in December 2023, which contained advice for consumers who own, or are thinking of purchasing, e-bikes or e-scooters. This can be read here: [Government Safety Message on e-bikes and e-scooters - GOV.UK](#)

OPSS has also supported other Government departments' safety messaging for e-bikes, e-scooters and lithium-ion batteries, including Department for Transport [guidance for product owners and public transport operators](#), and guidance concerning [fire safety in the home](#), published by Fire England. We are determined to continue raising awareness of the risks posed by unsafe products, working with industry, other stakeholders and across Government.

Alongside this, our programme of work focuses on understanding, identifying and acting to remove unsafe e-bikes, e-scooters or lithium-ion batteries from the market. In January, OPSS published [independent research commissioned](#) from Warwick Manufacturing Group (WMG) into the safety of lithium-ion batteries commonly used in e-bikes and e-scooters. The research includes technical analysis of battery safety, product inspections and laboratory testing. It takes forward our understanding of how battery failures occur during real-world use and environments, and the types of processes and materials used in product manufacture that achieve safer design and safer use of lithium-ion batteries. We are carefully considering its findings and a summary of our recent regulatory activity on this subject [is set out on gov.uk](#).

OPSS has already commissioned the British Standards Institution (BSI) to develop a Publicly Available Specification (PAS) for lithium-ion battery systems for e-bikes, conversion kits and other similar products. Businesses can use a PAS, which is a type of voluntary product standard, to demonstrate their compliance with product safety regulations. The development of the PAS will be led by a technical expert steering group, including representatives from industry and academia as well as OPSS and BSI.

Many of the serious fires that have occurred in e-bikes have involved a process known as thermal runaway, in which the temperature of individual battery cells contained within a battery reaches a critical point at which exothermic reactions occur, resulting in the release of flammable and potentially toxic gases that ignite, causing a fire and/or explosion. In December 2024, the Secretary of State introduced new statutory guidelines for lithium-ion batteries supplied for use with e-bikes or e-bike conversion kits. The guidelines clarify that lithium-ion batteries for e-bikes must have mechanisms to address the risk of thermal runaway to be considered a safe product and meet product safety regulations. The new statutory guidelines apply in Great Britain and cover all lithium-ion batteries for e-bikes, including those sold online or sold for use with a conversion kit. Businesses must take account of the guidelines when assessing whether the battery is a safe product under the General Product Safety Regulations 2005.

It is an offence to place a lithium-ion battery on the market if it is not a safe product, and OPSS and Local Authority Trading Standards have powers to take enforcement

action, including removing these products from the market or prosecution for the most serious cases.

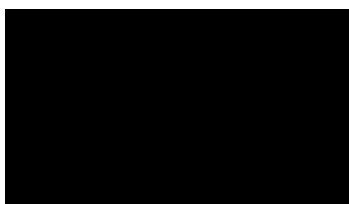
OPSS is actively enforcing these requirements and last year took enforcement action to remove from sale unsafe models of Unit Power Pack (UPP)-branded e-bike batteries, that have been linked to several serious fires in the UK. We have also published a further 21 product recalls and 29 other product notifications about unsafe or non-compliant e-bikes, e-scooters or their batteries which contain advice for consumers, retailers and local authorities on actions they should take to protect people from harm.

The Government has recently introduced the Product Regulation and Metrology Bill into Parliament with a view to future proofing the UK's product safety framework. Once enacted, it will enable Ministers to make regulations to capture new and innovative products, and to clarify the responsibilities that online platforms have with regard to product safety.

OPSS is continuing to prioritise work to raise public awareness and improve the safety of e-bikes, e-scooters and lithium-ion batteries. I believe the actions we have already taken through the *Buy Safe Be Safe* campaign, the new statutory guidelines and enforcement action are making a material difference to consumer safety in this area that can help to prevent tragic fatalities like Luke's in the future. We are currently assessing what additional steps we can take to build on the WMG findings to improve safety even further.

Thank you for writing to OPSS on this matter. I would be grateful if you could share a copy of this letter, and the links enclosed, with any of your colleagues who may find it useful.

Kind regards,



Chief Executive
OPSS



Full web addresses referred to in this letter

Buy Safe, Be Safe

<https://www.gov.uk/guidance/buy-safe-be-safe-avoid-e-bike-and-e-scooter-fires>

Government Safety Message on e-bikes and e-scooters (December 2023)

<https://www.gov.uk/guidance/government-safety-message-on-e-bikes-and-e-scooters>

Department for Transport guidance

<https://www.gov.uk/government/news/new-guidance-to-enhance-e-bike-and-e-scooter-safety>

Fire England guidance

<https://fireengland.uk/fire-safety/charging-your-e-bike-or-e-scooter>

Warwick Manufacturing Group research

<https://www.gov.uk/government/news/government-publishes-research-report-into-e-bike-battery-safety>

OPSS regulatory activity update

<https://www.gov.uk/government/publications/personal-light-electric-vehicle-plev-battery-safety-research/opss-regulatory-activity-update-e-bikes-e-scooters-and-lithium-ion-batteries>