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Adam Smith
Assistant Coroner
Inner North London
St Pancras Coroner's Court
Camley Street
London, N1C 4PP

24 October 2023

Dear Mr Smith,

## **Regulation 28: Prevention of Future Deaths Report**

## Mizanur RAHMAN

Thank you for your Regulation 28 Report (Prevention of Future Deaths) dated 29 August 2023, following your investigation and inquest into the death of Mizanur Rahman who died on 9 March 2023 as a result of smoke inhalation from a fire in a charging lithium-ion e-bike battery.

May I first say how sorry I was to hear of Mr Rahman's death. If you have the opportunity, please convey my deepest sympathies to his family and friends.

I would like to assure you that an urgent programme of activity is being carried out across Government, including by the Office for Product Safety and Standards (OPSS); the Home Office; and the Department for Transport, looking at the root causes to understand why fires in e-bikes are occurring, so we can take action to tackle the issue.

OPSS has engaged with both the London Fire Brigade (LFB) and Tower Hamlets London Borough Council Trading Standards in relation to the tragic fire on 5 March. LFB initially notified OPSS of the fire in line with our agreed procedure under the terms of our Memorandum of Understanding. Unfortunately, in this case, LFB has not been able to identify the specific manufacturer or model of conversion kit or battery involved from the remains of the product.

UK product safety laws require all consumer products to be safe. E-bikes and e-scooters, their batteries and chargers must comply with essential safety requirements set out in the Supply of Machinery (Safety) Regulations 2008, the General Product Safety Regulations 2005 or Electrical Equipment (Safety) Regulations 2016. These require manufacturers to ensure the safety of products before they are placed on the market and to provide consumers with information on the safe use of these products, such as safe charging practices. In addition, importers and distributors, including online, have obligations regarding the safety of the products they import or distribute.

OPSS and Local Authority Trading Standards (LATS) have access to powers to enforce the law and we are prioritising action to identify and test e-bikes, modification kits and chargers so that products found to be unsafe are removed from the market.

The Office for Product Safety and Standards is part of the Department for Business and Trade. We strive to enhance protections for consumers and the environment and drive increased productivity, growth and business confidence.

On 20 October OPSS published for designation, updated standard EN 15194:2017+A1:2023 for Electrically Power Assisted Bicycles. The previous version of this standard did not adequately address the safe integration of batteries into battery packs and the incorporation of battery packs into an end-device. As a result, it was designated by government with a restriction that meant that manufacturers had to go beyond the requirements of the standard to comply with the essential safety requirements in the law. Improvements to the standard have been made by the standards bodies and we are satisfied that it now meets the essential safety requirements with regards to battery safety. As a result, we plan to remove the restriction that applied to battery packs so that manufacturers who follow the designated parts of the standard would be presumed to comply with legal requirements for safety.

I can also confirm that OPSS is reviewing all relevant voluntary standards in this area to identify any areas where additional or updated standards would be beneficial to support the essential safety requirements in the law.

We have already identified e-bike conversion kits as an area where, although there are legal safety requirements, there is no specific standard. We plan to commission the British Standards Institution (BSI) to prepare a fast-track standard (a publicly available specification) to cover technical and safety standards for conversion kits to help manufacturers comply with existing safety regulations.

The issues involved in e-bike safety are complex as products may be safe when used alone but not when used in combination or when modified or converted. We know from LFB, and as you have mentioned in your report, that the e-bike involved in this fire was heavily modified including a retro-fitted additional battery cage and motor.

OPSS has established a multi-disciplinary safety study to understand data and evidence of risks in this area and we have commissioned new research into battery safety, including compatibility issues, from Warwick Manufacturing Group (WMG - part of Warwick University). We are seeking the input and expertise of stakeholders including Electrical Safety First, the Fire and Rescue Services, the National Fire Chiefs Council, and the London Fire Brigade so we can better understand and tackle the complex issues involved.

Ensuring consumers have access to clear and accurate information on safety issues is also a priority. In September OPSS published information for consumers to raise awareness of safe purchasing, use and charging practices and to draw attention to the new Fire England guidance on safe charging published in August.

As you note in your report, the Government is also considering longer term reforms. A consultation on the Product Safety Review was launched on 2 August and is inviting views on the future approach to product safety regulation. As part of that consultation, the Government is considering how to use regulations in future to enable a more agile and responsive regulatory framework, particularly where new technologies emerge.

Thank you again for sharing the findings of your report into Mr Rahman's death. I can assure you that the safety of e-bikes is a priority for government, and urgent work is taking place to address the issues that you have highlighted.

Yours



Chief Executive
Office for Product Safety and Standards