Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

Sixty-fourth session
Geneva, 24 June - 3 July 2024
Item 4 (a) of the provisional agenda

Electric storage systems:
Testing of lithium batteries

Reuse, repair and repurposing of lithium-ion cells and batteries and implications on safety and UN 38.3 testing requirements

Submitted by PRBA – The Rechargeable Battery Association and Advanced Rechargeable and Lithium Batteries Association (RECHARGE)*, **

I. Introduction

1. PRBA and RECHARGE have previously presented information on how governments and non-governmental organizations (NGOs) are promoting concepts associated with a “circular economy” and how lithium ion cells and batteries are often identified as products that should be “reused” (i.e., remanufactured or repaired) and “repurposed” before being shipped for final disposal and recycling at end-of-life. Our previously introduced informal documents on this matter identified how reusing, repairing or repurposing lithium ion cells and batteries may have implications on the applicable technical, regulatory, and safety requirements found in the Manual of Tests and Criteria section 38.3 on lithium battery tests and the Model Regulations that are associated with the safe transport of these dangerous goods.

2. Based on comments and questions that were received on the informal documents from the sixty-third session, PRBA and RECHARGE are now simply proposing a new provision and note be added to section 38.3.2.1 that highlights the potential design changes resulting from repurposing, remanufacturing or repairing of a battery and need for retesting. Unlike previous informal documents that included definitions and a more complex approach to addressing these issues, we believe this simplified approach will provide the necessary guidance for the industry and authorities enforcing the dangerous goods regulations.

* A/78/6 (Sect. 20), table 20.5.
** The document was submitted late to the conference services for processing without the explanation required under paragraph 8 of General Assembly resolution 53/208 B.
II. Proposal

3. Add a new subparagraph (g) under the NOTE in section 38.3.2.2 of the Manual of Tests and Criteria, as follows (new text is underlined):

“NOTE: The type of change that might be considered to differ from a tested type, such that it might lead to failure of any of the test results, may include, but is not limited to:

...  

(g) A design change resulting from repurposing, remanufacturing or repairing of a battery. Note: A repair operation, according to a process authorized by the original battery manufacturer, in the sense of restoring a battery equivalent to the tested type by replacement of defective parts with original spare parts or parts of equal specification and quality, shall not be considered to differ from a tested type.

...”