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

6 December 2012

Forty-second session

Geneva, 3 – 11 December 2012 Item 2 (d) of the provisional agenda Recommendations made by the Sub-Committee on its thirty-ninth, fortieth and forty-first sessions and pending issues: miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods

Proposed Intercessional Working Group on UN Testing Requirements for Large Lithium Batteries

Transmitted by PRBA – The Rechargeable Battery Association, the International Association for the Promotion and Management of Portable Rechargeable Batteries (RECHARGE) and Council on Safe Transportation of Hazardous Articles (COSTHA)

Background

- 1. Over the course of the biennium, the Sub-Committee has discussed issues related to the testing requirements in the UN Manual of Tests and Criteria, Section 38.3 applicable to large lithium batteries. PRBA and COSTHA explained in their working paper ST/SG/AC.10/C.3/2012/94 that lithium battery and automobile manufacturers have recognized that the vehicle-related design and engineering requirements for lithium batteries and battery assemblies in vehicles are, in some cases, wholly incompatible with certain tests in the UN Manual.
- 2. PRBA and COSTHA also noted in their working paper that there are numerous industry and governmental lithium battery testing standards applicable to large lithium batteries, including but not limited to, IEC, UL, SAE and UNECE Regulation No. 100. Due to the complexity and high costs associated with testing large lithium batteries, there is interest in exploring whether the UN Manual could be more harmonized with other testing standards without compromising safety.
- 3. The current UN lithium battery tests were last reviewed in detail in 2009 and 2010 during three intercessional working group meetings held in Washington, DC, Paris and Kyoto. The primary focus of these meetings was on small lithium batteries.
- 4. Because lithium batteries are rapidly being introduced into hybrid-electrical and electric vehicles and other large format applications (*e.g.*, power generation, satellite) there is general agreement that a close review of the testing requirements in the UN Manual applicable to large lithium batteries is in order and an intercessional working group is an appropriate forum for such a review.



Proposal

5. To address these matters, PRBA, RECHARGE and COSTHA are proposing that a three-day intercessional working group meeting be held to review and contrast relevant testing requirements applicable to large lithium batteries, identify testing provisions that could be harmonized, and develop recommendations that could be presented to the Sub-Committee for changes to Section 38.3 of the UN Manual or UN Model Regulations, as appropriate.