

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

1 December 2011

**Sub-Committee of Experts on the
Transport of Dangerous Goods**

Fortieth session

Geneva, 28 November – 7 December 2011

Item 3 (d) of the provisional agenda

Electric storage systems: packagings for large batteries

Large packagings for lithium batteries

Revised text for proposed LP9XX in document ST/SG/AC.10/C.3/2011/41

Transmitted by the Portable Rechargeable Battery Association (PRBA) and the International Association for the Promotion and Management of Portable Rechargeable Batteries RECHARGE

1. In response to comments on ST/SG/AC.10/C.3/2011/41, PRBA and RECHARGE have amended the proposed LP903 as indicated on page 2. The edits take into consideration the request to limit LP903 to a single battery per package. In addition, a provision was added to address large lithium batteries over 12 kg with impact resistant outer casings in order to eliminate any confusion over the applicability of this provision, which also is contained in P903.

LP903	PACKING INSTRUCTION	LP903
This instruction applies to UN Nos. 3090, 3091, 3480 and 3481		
<p>The following large packagings are authorized <u>for a single battery with a net mass of more than 400 kg, including a battery packed with or contained in equipment</u>, provided that the general provisions of 4.1.1 and 4.1.3 are met:</p> <p>(1) For cells and batteryies:</p> <ul style="list-style-type: none"> steel (50A) aluminium (50B) metal other than steel or aluminium (50N) rigid plastics (50H) natural wood (50C) plywood (50D) reconstituted wood (50F) rigid fibreboard (50G) <p>Cells or The batteryies shall be packed in packagings so that the cells or batteryies are-is protected against damage that may be caused by the movement or placement of the cells or batteryies within the packaging.</p> <p>Packagings shall conform to the packing group II performance level</p> <p>(2) For cells or batteryies packed with equipment:</p> <p>Packagings conforming to the requirements in paragraph (1) of this packing instruction, then placed with the equipment in an outer packaging; or</p> <p>Packagings that completely enclose the cells or batteryies, then placed with equipment in a packaging conforming to the requirements in paragraph (1) of this packing instruction.</p> <p>The equipment shall be secured against movement within the outer packaging.</p> <p>For the purpose of this packing instruction, "equipment" means apparatus requiring the lithium metal or lithium ion cells or batteryies with which it is packed for its operation.</p> <p>(3) For cells or batteryies contained in equipment:</p> <p>Strong outer packagings constructed of suitable material of adequate strength and design, in relation to the packaging capacity and its intended use. They shall be constructed in such a manner as to prevent accidental operation during transport. Packagings need not meet the requirements of 4.1.1.3.</p> <p>Large equipment can be offered for transport unpackaged or on pallets when the cells or batteryies are-is afforded equivalent protection by the equipment in which they are contained.</p> <p>(4) <u>In addition, for a battery with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, and assemblies of such batteries:</u></p> <ul style="list-style-type: none"> (a) <u>Strong outer packagings, in protective enclosures (e.g., in fully enclosed or wooden slatted crates);</u> <u>or</u> (b) <u>Pallets or other handling devices.</u> 		
<p>Additional requirement:</p> <p>Cells or bBatteryies shall be protected against short circuit.</p>		