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INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods
(Bern, 7-11 March 2005)

TRANSPORT OF USED PORTABLE BATTERIES

Transmitted by the European Battery Recycling Association (EBRA)

Introduction

This document refers to Decision 44 of the Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods (Geneva 13 – 17 September 2004), agenda Item 5, decision 44 (TRANS/WP.15/AC.1/2004/25).

EBRA is requested (per Decision 44) to present:

- further descriptions of the problems regarding the transport of "Used Portable Batteries";

- present proposals for further Provisions under the ADR to solve the problems.

The document "Transport of used portable batteries" (TRANS/WP.15/AC.1/2005/24) presents a further description of the problems regarding the transport of Used Portable Batteries.

This document presents:

- A proposal for a Provision so as to solve the problems regarding the carriage of Used Portable Batteries between the collection point and the intermediate facility;

- The definition of portable batteries such as under consideration;
- The context of regarding the carriage of Used Portable Batteries.

Further, attention is drawn to confusion existing about the Special Provision 304, and the relation thereto with the classification UN 3028. (The UN 3028 classification, according to at least the IATA definition, not being related to portable batteries as specified in paragraph 3).

Proposal for a new provision

To include in ADR the special provision:

XXX Used portable batteries and accumulators of different electrochemical systems, collected and presented for carriage for recycling between the consumer collection point and the intermediate processing facility are not subject to the provisions of the ADR if precautions are taken to ensure that overpressure (caused by gases in the battery packages) does not exceed 10 kpa.

Definition Portable Batteries

"Portable Battery or accumulator" means any battery or accumulator that is sealed, and can be hand-carried, and is neither an industrial battery or accumulator nor an automotive battery or accumulator.

This includes single cell batteries, such as, for example AAA, AA, C, D, 9V-block of different electrochemical systems, such as Zinc Manganese Dioxide, Nickel Cadmium, Nickel Metalhydride, and Zinc Air, and Lithium consumer batteries. Further, portable batteries include batteries and accumulators used in mobile telephones, portable computers, cordless power tools, toys and household appliances such as electric toothbrushes, razors, and hand held vacuum cleaners and any battery that consumers may use for normal household applications.

Also included are button cell batteries, which means any small round portable battery or accumulator whose diameter is greater than its height and which is used for special purposes such as hearing aids, watches, small portable equipment and back-up power.

Note: Reference Council of the European Union, Document 15995/01 ADD1 (14 December 2004)

Context of the problem

The carriage of many industrial and automotive types of used batteries is subject to ADR, under class 8 (corrosive substances may be set free under adverse conditions).

The carriage of used Lithium Batteries is subject to UN-3090, class 9 provisions.

(a) Special provision 636a

The (new) Special Provision 636a, specifies Used Lithium batteries **"together with other types of batteries".**

No limit is indicated for the quantity of non-lithium batteries in the Provision 636a.

As described in the preceding EBRA documents, this causes confusion regarding the carriage of used portable batteries: Some authorities now consider used portable batteries, containing a small quantity of Consumer Lithium Batteries, as subject to Provision 636a, and thus the class 9 provisions.

Note: In this way the most harmless Used Penlight Alkaline Battery taken from a flashlight would becomes a class 9 hazardous product.

All European used battery collection systems have problems to comply with the lithium battery provisions under class 9 for the non-lithium batteries also. (Only lithium batteries are carried as per Class 9).

No evidence is known to EBRA, that the presence of a small quantity (in practice 1 to 2 %) of lithium consumer batteries in the used portable batteries collected for recycling, does have any influence on the safety characteristics during carriage of the collected used portable batteries. (which now is considered as not subject to ADR)

The paragraph 2 above therefore presents a proposal for a special provision for used portable batteries.

By including the special provision as proposed in paragraph 2, EBRA and all member countries that have implemented, or are in the process of implementing the mandatory collection systems for used portable batteries, will be able to proceed with their actions and activities.

(b) Further confusion

Much confusion is caused by the nomenclature and terminology used in ADR for the different types of batteries.

This especially refers to the status of Special Provision 304 (which according to some industry parties and some authorities, refer to portable batteries as specified in paragraph 3), and the reference to the provision 304 under UN-3028.

The paragraph 5 presents a description of this confusion caused by the seemingly contradictory nomenclature and terminology used in classifications and provisions, which might be or might not be related to used portable batteries.

Special Provision 304 and UN 3028

The special provision 304, according to some industry parties and authorities, refers to portable batteries as specified in paragraph 3. Other authorities deny this opinion, and consider that the SP 304 only refers to specific, large industrial types of batteries, but certainly not to portable batteries as per paragraph 3.

Further, the provisions for batteries classified under UN-3028 refer to special provision 304. This is the reason for some authorities to consider portable batteries (as per paragraph 3) to be classified as UN-3028.

However, the IATA definition of UN-3028 reads:

> "Batteries, dry, containing solid potassium hydroxide are accumulators which are filled with potassium hydroxide, and are dispatched by the manufacturer in the original dry state, filled with dry alkali. Before being used for the first time, they are filled with water".

There does not seem any relation between this UN-3028 definition according to IATA, and SP 304).

WP.15 is requested to provide further guidance in this matter, so as to prevent any further confusion in these highly sensitive matters.

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