



Commonwealth Department of
Infrastructure, Transport, Cities and
Regional Development

Comments on Summary Papers for the upcoming TDG Sub-Committee

To whom it may concern,

Thank you for the opportunity to review the Summary Papers for the upcoming TDG Sub-Committee. The Australian Battery Recycling Initiative (ABRI) is the peak body representing the battery industry in Australia. It is a not-for-profit association established in 2008 to promote responsible environmental management of batteries at end of life. Our members represent the entire supply chain including battery import, distribution, retail, used battery collection and recycling.

ABRI is a strong advocate for harmonisation of requirements nationally and internationally and as such we support efforts to streamline and improve clarity regarding requirements for safe packing and transport of all batteries. The proposed changes identified in the Summary of Papers to be discussed at the UN TDG Sub-Committee 29 June-8 July 2020 add clarity to the requirements regarding lithium batteries and as a result are supported by ABRI.

ABRI requests future consideration of two additional topics by the committee to improve clarity, understanding, and address the need for specific requirements for mixed batteries.

Packing instruction for mixed loads of batteries of all chemistry types

Currently in the real-world waste batteries are collected by local government and other aggregators and transported or provided for transport to recyclers.

In Australia, recyclers are receiving mixed loads of spent batteries of all chemistry types (e.g. alkaline, lithium, and lead acid).

Most battery consumers are only concerned with disposing of their batteries and many are unaware of the importance of separating batteries for transport and of the safety issues that may arise from such a practice.



Example of aggregated batteries at a local government collection point

For recyclers collecting such loads it is impossible to be definitive about the contents of these containers until they are taken to a facility for sorting and repacking or processing. A recent audit of a significant local government collection found that the mixture of batteries included a range of chemistries including:

Alkaline	68%
NiMH	2%
NiCd	8%
Li-ion	9%
ULAB	10%
Waste	3%

Results of recent audit of local government collection



ABRI is currently finalising its mixed battery guidelines and have concluded that such loads are required to:

- be classified as UN 3480 (highest risk)
- assuming that there could be 100Wh lithium batteries included in the mix
- comply with general requirements as well as applicable special provisions and the specific requirements in Packing Instruction P909 (Attachment 1).

However, we believe there would be benefit in clarifying this in the regulations to confirm our approach is appropriate and add the potential UN numbers. There is a perception in industry that such loads are non-compliant if they contain used dry lead acid batteries, yet in reality even mixed loads such as that shown above contain a range of chemistries including dry lead acid batteries, yet this is not reflected in the packing instruction scope.

Review of document structure

Cognition of requirements in dangerous goods regulations is greatly hampered by the complex structure and circular referencing within the documentation. Currently the circular referencing between labelling requirements, packing instructions, special provisions and general requirements is overly complex. In practice this means that requirements are misunderstood, incorrectly applied, and are subject to a varied array of interpretation. ABRI releases guidelines to improve understanding and compliance, however there is significant room for improvement with the regulations themselves.

ABRI requests a project be initiated to review the structure of the regulation such that it is written for greater comprehension, ease of interpretation, and thus improved compliance. For example, the document could be split into a regulation on classification, general requirements that apply to all classes, then sections for each class that includes all relevant requirements in a logical order.

Yours sincerely,



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Attachment 1

Table 3.2.3: Dangerous Goods List

UN No.	Name and Description	Class or Division	Subsidiary Hazard	Packing Group	Special Provisions	Limited Quantities	Excepted Quantities	Packagings & IBCs		Portable Tanks & Bulk Containers	
								Packing Instruction	Special Packing Provisions	Instructions	Special Provisions [DK4]
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
Ref	3.1.2	2.0	2.0	2.0.1.3	3.3	3.4	3.5	4.1.4	4.1.4	4.2.5 4.3.2	4.2.5
3478	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing liquefied flammable gas	2.1			328 338	120 ml	E0	P004			
3479	FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT, containing hydrogen in metal hydride	2.1			328 339	120 ml	E0	P004			
3480	LITHIUM ION BATTERIES (including lithium ion polymer batteries)	9			188 230 310 348 376 377 384 387 390	0	E0	P903 P908 P909 P910 P911 LP903 LP904 LP905 LP906 DK24			