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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

Thirty-fourth session Geneva, 1-9 December 2008 Item 4 of the provisional agenda

LISTING, CLASSIFICATION AND PACKING

Special provision 32x and UN 3166

<u>Transmitted by the US Fuel Cell Council (USFCC)</u>¹

Background

1. At its $33^{\rm rd}$ session held in July 2008, the Sub-Committee of Experts on the Transport of Dangerous Goods tentatively agreed to:

(a) In section 3.2.2 (dangerous goods list), amend the proper shipping name for UN 3166 as follows (revised text is underlined):

3166	ENGINE, INTERNAL	9		106	0	E0	NONE		
5100	COMBUSTION or VEHICLE,			312		20	1,01,2		
	FLAMMABLE GAS POWERED or								
	VEHICLE, FLAMMABLE LIQUID								
	POWERED or FUEL CELL								
	ENGINE, or VEHICLE, FUEL								
	CELL POWERED WITH								
	FLAMMABLE GAS or VEHICLE,								
	FUEL CELL POWERED WITH								
	FLAMMABLE LIQUID								

¹ In accordance with the programme of work of the Sub-Committee for 2007-2008 approved by the Committee at its third session (refer to ST/SG/AC.10/C.3/60, para. 100 and ST/SG/AC.10/34, para. 14). GE.08-25576

- 2. The above entry covers, amongst others, vehicles powered with flammable gas such as natural gas, LPG or hydrogen. These gases can all be stored in compressed gas cylinders, but only hydrogen can be stored as a solid compound in a specially formulated metal hydride storage system. Hydrogen stored in metal hydride is covered under UN 3468, HYDROGEN IN METAL HYDRIDE STORAGE SYSTEM.
- 3. In a separate paper (ST/SG/AC.10/C.3/2008/74 "Amendment to UN 3468, Hydrogen in metal hydride storage system"), the USFCC proposed the adoption of a new special provision 32x for UN 3468 as follows:
 - "32x A metal hydride storage system is a single complete hydrogen storage system, including shell (receptacle), metal hydride, pressure relief device, shut-off valve, other appurtenances and internal components. Metal hydride storage systems intended to be used as fixed fuel storage onboard hydrogen fuelled vehicles must be approved by the competent authority for these goods, before acceptance for transport. A copy of the competent authority approval shall accompany each consignment or the transport document shall include an indication that the package was approved by the competent authority."
- 4. It is suggested that SP 32x should also apply to UN 3166.

Proposal

5. In the Dangerous Goods List of Chapter 3.2:

In column (6) for UN 3166, add special provision 32x

6. Insert in section 3.3.1 the following new special provision:

"32x A metal hydride storage system is a single complete hydrogen storage system, including shell (receptacle), metal hydride, pressure relief device, shut-off valve, other appurtenances and internal components. Metal hydride storage systems intended to be used as fixed fuel storage onboard hydrogen fuelled vehicles must be approved by the competent authority for these goods, before acceptance for transport. A copy of the competent authority approval shall accompany each consignment or the transport document shall include an indication that the package was approved by the competent authority."

Note: The proposal in paragraph 6 is not necessary if SP 32x has been agreed under the paper entitled "Amendment to UN 3468, Hydrogen in a metal hydride storage system" (ST/SG/AC.10/C.3/2008/74) submitted by the USFCC.