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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****Forty-first session**

Geneva, 25 June – 4 July 2012

Item 5 (b) of the provisional agenda

**Miscellaneous proposals of amendments to the Model Regulations  
on the transport of Dangerous Goods: portable tanks****Proposal to amend Chapter 6.7 of the Model Regulations****Transmitted by the expert from Spain<sup>1</sup>****Proposal**

1. The expert from Spain proposes to add a new paragraph to Chapter 6.7, section 6.7.2.2, as follows:

“6.7.2.2.18: The shell of a portable tank can be equipped internally with surge plates, with the intention to increase its strength and to limit the dynamic effects of the liquids transported.

These surge-plates shall be designed taking account of the following requirements:

(a) Surge plates shall be constructed with the same steel as the shell and their thickness shall in no case be less than the thickness of the cylindrical portion of the shell.

Surge plates shall be dished with a depth of dish of not less than 10 cm, or shall be corrugated, profiled or otherwise reinforced to give equivalent strength. The area of the surge plate shall be at least 70% of the cross-sectional area of the tank in which the surge plate is fitted.

(b) They would have different openings with the object of allowing the following effects:

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2011-2012 approved by the Committee at its fifth session (refer to ST/SG/AC.10/C.3/76, para. 116 and ST/SG/AC.10/38, para. 16).

The transfer of vapour in the interior upper part of the shell, the passage of a man from one side of the surge plate to the other one if necessary, the control of the movement of the liquid mass during the transport in the interior of the shell and its unloading when it is required.”.

## **Justification**

2. In reality these “surge plates”, that are proposed, are a normal practice in the design of the tank container construction and are mentioned in inland transport regulations such as the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and the Regulations concerning the International Transport of Dangerous Goods by Rail (RID).
  3. Normally the “surge plates” are considered essentially as strengthening members, in the same way as other members, for example: the partitions and the external or internal rings of the shell.
  4. In the ADR the “surge plates” are also used as valid elements to reduce the thickness of the shell, if they meet some conditions. (For example, when the volume contained between two surge plates is not more than 7500 l).
  5. The expert from Spain considers it necessary to incorporate these elements into the Model Regulations because they are already used by portable tank manufacturers worldwide in many cases.
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