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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-third session

Geneva, 24–28 June 2013 Item 6 (h) of the provisional agenda Miscellaneous proposals for 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 Spain¹

Proposal

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

"6.7.2.2.18 The shell of portable tanks can be equipped with surge plates in order to increase its strength and to limit the dynamic effects of the transported liquids.

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

- (a) Surge plates shall be constructed with metallic materials suitable for forming and that may be adequately welded.
- (b) Surge plates shall be with a depth of dish of not less than 10 mm, 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 into which the surge plate is fitted.
- (c) They should have different openings in order to allow the following effects:

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

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movement of the liquid mass in the interior of the shell during the transport, and the portable tanks unloading when it is required.".

Justification

- 2. In fact, 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 Transport of Dangerous Goods by Road, (ADR) and the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID).
- 3. Normally, the "surge plates" are basically considered as strengthening structural members of the shell, in the same way as other members of it, for example: the partitions and the external rings of the shell.
- 4. In 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 litres).
- 5. The expert from Spain thinks it necessary to incorporate these elements within the Model Regulations, because they are already used by portable tank manufacturers worldwide in many cases.

Transitional measures

6. Should this proposal be accepted, it would also be necessary to provide some transitional measures, for the correct application of the new above mentioned paragraph. It is therefore proposed to:

Add a new paragraph to section 4.2.6 of the Model Regulations, to read:

"Portable tanks manufactured before 1 January 2017 do not need to comply with the requirements of 6.7.2.2.18 concerning the characteristics of the surge plates.".

2