

**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

16 November 2017

Fifty-second session

Geneva, 27 November-6 December 2017

Item 6 (c) of the provisional agenda

Miscellaneous proposals for amendments to the Model

**Regulations on the Transport of Dangerous Goods:
portable tanks**

**Minimum shell thickness for portable tanks used for the
carriage of non-refrigerated liquefied gases**

Transmitted by the expert from Belgium

Introduction

1. Paragraph 6.7.3.4.1, applicable for portable tanks intended for the transport of non-refrigerated liquefied gases mentions that:

The minimum shell thickness shall be the greater thickness based on:

- (a) The minimum thickness determined in accordance with the requirements mentioned in 6.7.3.4; and
- (b) The minimum thickness determined in accordance with the recognized pressure vessel code including the requirements in 6.7.3.3.

2. Quite similarly, paragraph 6.7.2.4.1, applicable for portable tanks intended for the transport of substances of classes 1 and 3 to 9 mentions that:

The minimum shell thickness shall be the greater thickness based on:

- (a) The minimum thickness determined in accordance with the requirements of 6.7.2.4.2 to 6.7.2.4.10
- (b) The minimum thickness determined in accordance with the recognized pressure vessel code including the requirements in 6.7.2.3
- (c) The minimum thickness specified in the applicable portable tank instruction indicated in column (10) of table A of chapter 3.2 and described in 4.2.5.2.6 or by a portable tank special provision indicated in column (11) of table A of chapter 3.2 and described in 4.2.5.3.

3. Additionally, in the last sentence of paragraph 4.2.2.2 it is mentioned that portable tanks used for the carriage of non-refrigerated liquefied gasses should comply with any special provision that is assigned to specific non-refrigerated liquefied gasses in column (11) of the Dangerous Goods List and described in 4.2.5.3.

4. Since T50 is the only portable tank instruction that applies to non-refrigerated liquified gases and since T50 does not specify any shell thickness, it does not seem necessary to have a point 6.7.3.4.1 c) similar to 6.7.2.4.1 c). However, given that several portable tank special provisions, putting requirements on the shell thickness, indeed apply

to non-refrigerated liquefied gasses (TP19 and TP21), there seems to be an inconsistency between paragraph 4.2.2.2, the portable tank special provisions given in column (11) of the Dangerous Goods List and the requirements put forward in paragraph 6.7.3.4.1.

Proposal

5. Change the text in 6.7.3.4.1 so that it now also refers the users of chapter 6 to the special provisions that must be applied to specific non-refrigerated liquified gases (new text underlined):

The minimum shell thickness shall be the greater thickness based on:

- (a) The minimum thickness determined in accordance with the requirements mentioned in 6.7.3.4 and taking into account any portable tank special provision, indicated in column (11) of table A of chapter 3.2 and described in 4.2.5.3. and;
 - (b) The minimum thickness determined in accordance with the recognized pressure vessel code including the requirements in 6.7.3.3 and taking into account any portable tank special provision, indicated in column (11) of table A of chapter 3.2 and described in 4.2.5.3.
-