

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

##### 111th session

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Item 4 of the provisional agenda

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##### Work of the RID/ADR/ADN Joint Meeting

### Correction of text adopted by the Joint Meeting: Note in the new clause 6.8.3.2.9.1

#### Transmitted by Liquid Gas Europe

#### Introduction

1. Liquid Gas Europe believes there is an error in the « **note** » that was added to the new clause 6.8.3.2.9.1.

6.8.3.2.9.1 Safety valves shall be capable of opening automatically under a pressure between 0.9 and 1.0 times the test pressure of the tank to which they are fitted. They shall be of such a type as to resist dynamic stresses, including liquid surge. The use of dead weight or counterweight valves is prohibited. The required capacity of the safety valves shall be calculated in accordance with the formula contained in 6.7.3.8.1 and the safety valve shall conform at least to the requirement of 6.7.3.9.

**NOTE:** *For the application of this paragraph, the value "120 % of the MAWP" given in 6.7.3.8.1 shall be replaced by 0.9 times the test pressure of the tank.*

Safety valves shall be designed to prevent or be protected from the entry of water or other foreign matter which may impair their correct functioning. Any protection shall not impair their performance.

The requirements of 6.7.3.8.1 are

6.7.3.8.1 The combined delivery capacity of the relief devices shall be sufficient that, in the event of total fire engulfment, the pressure (including accumulation) inside the shell does not exceed 120 % of the MAWP. Spring-loaded relief devices shall be used to achieve the full relief capacity prescribed. In the case of multi-purpose tanks, the combined delivery capacity of the pressure-relief devices shall be taken for the gas which requires the highest delivery capacity of the gases allowed to be carried in portable tanks.

2. With the changes required by the wording of the current **note** in 6.8.3.2.9.1 the first sentence of 6.7.3.8.1 will read

***"The combined delivery capacity of the relief devices shall be sufficient that, in the event of total fire engulfment, the pressure (including accumulation) inside the shell does not exceed 0.9 times the test pressure of the tank"***

3. That means that the safety valve shall open at 0.9 times the test pressure of the tank, however the first requirement of 6.8.3.2.9.1 is that the safety valve shall open between 0.9 and 1.0 times the test pressure of the tank!

No pressure rise is permitted above the opening pressure, so the safety valve shall be fully open at its set pressure, that is not possible with a spring-loaded safety valve, which is required by 6.7.3.8.1!

4. Liquid Gas Europe believes that the intention was to replace « **the MAWP** » by « **0.9 times the test pressure of the tank** ».

5. With this wording the first sentence of 6.7.3.8.1 would read –

*“The combined delivery capacity of the relief devices shall be sufficient that, in the event of total fire engulfment, the pressure (including accumulation) inside the shell does not exceed 120% of **0.9 times the test pressure of the tank**”*

## **Proposal**

6. Liquid Gas Europe suggests that the note in 6.8.3.2.9.1 should be changed to read:

**“NOTE:** *For the application of this paragraph, the MAWP given in 6.7.3.8.1 shall be replaced by “0.9 times the test pressure of the tank”.*”

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