Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods
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Tanks

3 September 2018

Filling of shells having sections of more than 7'500 litres capacity

Transmitted by the Government of Switzerland

1. The requirement of 4.3.2.2.4 for tank-vehicles, demountable tanks for carriage by road, tank-containers and tank swap bodies is as follows:

"4.3.2.2.4 Shells intended for the carriage of substances in the liquid state or liquefied gases or refrigerated liquefied gases, which are not divided by partitions or surge plates into sections of not more than 7 500 litres capacity, shall be filled to not less than 80% or not more than 20% of their capacity.

This provision is not applicable to:

- liquids with a kinematic viscosity at 20 °C of at least 2 680 mm^2/s;

- molten substances with a kinematic viscosity at the temperature of filling of at least 2 680 mm^2/s;

- UN 1963 HELIUM, REFRIGERATED, LIQUID and UN 1966 HYDROGEN, REFRIGERATED, LIQUID.".

2. The same requirement is provided for portable tanks in 4.2.1.9.6 (a). In certain cases, shells having sections of more than 7'500 litres capacity have to be filled to at least 80% or to a maximum of 20% of their capacity. However, it is not very clear who is responsible for the respect of this requirement.

3. In 1.4.3.3, the obligations of the filler are defined as follows:

"1.4.3.3 Filler

In the context of 1.4.1, the filler has the following obligations in particular:

(a) He shall ascertain prior to the filling of tanks that both they and their equipment are technically in a satisfactory condition;

(b) He shall ascertain that the date of the next test for tank-wagons/vehicles, battery- wagons/vehicles, wagons with demountable tanks/demountable tanks, portable tanks, tank-containers and MEGCs has not expired;

(c) He shall only fill tanks with the dangerous goods authorized for carriage in those tanks;

(d) He shall, in filling the tank, comply with the requirements concerning dangerous goods in adjoining compartments;

(e) He shall, during the filling of the tank, observe the maximum permissible degree of filling or the maximum permissible mass of contents per litre of capacity for the substance being filled;

(f) He shall, after filling the tank, ensure that all closures are in a closed position and that there is no leakage;

(g) He shall ensure that no dangerous residue of the filling substance adheres to the outside of the tanks filled by him;

(h) He shall, in preparing the dangerous goods for carriage, ensure that the placards, marks, orange-coloured plates and labels are affixed on the tanks, on the wagons/vehicles and on the containers for carriage in bulk in accordance with Chapter 5.3;

(i) he shall, before and after filling tank-wagons with a liquefied gas, observe the applicable special checking requirements / (Reserved);

(j) He shall, when filling wagons/vehicles or containers with dangerous goods in bulk, ascertain that the relevant provisions of Chapter 7.3 are complied with.".

4. According to 1.4.3.3 (e) the filler has the obligation to observe the maximum permissible degree of filling or mass of contents. This requirement could lead to the understanding that only the maximum degree or mass lays in the responsibility of the filler, but not the minimum as required in 4.3.2.2.4 and 4.2.1.9.6 (a).

5. Switzerland invites the Joint Meeting to clarify whether 1.4.3.3 includes the requirements of 4.3.2.2.4 and 4.2.1.9.6 (a) or not.

6. In the later case, Switzerland proposes that the working group on tanks establishes a better wording for 1.4.3.3. A better wording could be:

"1.4.3.3 Filler

In the context of 1.4.1, the filler has the following obligations in particular:

(…)

(e) He shall, during the filling of the tank, observe the ~~maximum~~ permissible degree of filling or the ~~maximum~~ permissible mass of contents per litre of capacity for the substance being filled;".