Modification of the definitions of "FRP tank" and "FRP shell" in 6.9.2.1 of the Model Regulations

Transmitted by the expert from Poland

Introduction

1. During the translation of the English version of the Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR 2023) into Polish, it was found that the definition of fibre-reinforced plastics tank "FRP tank" adopted in chapter 6.9 of ADR 2023 deviates from the general rule on the definition of a “tank” given in 1.2.1 and the definition of a “portable tank” given in 6.7.2.1 of ADR 2023.

2. In 6.9.2.1 of ADR/RID 2023, the current definitions read:
   
   (a) FRP tank reads as follows:
   
   “FRP tank means a portable tank constructed with an FRP shell and ends (heads), service equipment, safety relief devices and other installed equipment.”

   (b) FRP shell reads as follows:
   
   “FRP shell means a closed part of cylindrical shape with an interior volume intended for carriage of chemical substances.”

3. The regulations given in chapter 6.9 of ADR 2023 have been adopted from the Model Regulations, twenty-second edition, contained in chapter 6.9 entitled "Requirements for the design, construction, inspection and testing of portable tanks with shells made of Fibre-Reinforced Plastics (FRP) materials”.

4. The definition of “FRP tank” given in 6.9.2.1 of the Model Regulations also deviates from the definition of “portable tank” given in 1.2.1 and 6.7.2.1 of the Model Regulations.

* A/77/6 (Sect. 20), table 20.6
5. During the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods (WP.15/AC.1) (Joint Meeting) in Bern in March 2023, Poland had proposed to modify the definitions of "FRP tank" and "FRP shell".

6. The Joint Meeting considered that this topic could be discussed in the Tank Working Group set up by the Joint Meeting, but the amendments to 6.9 needed be approved by the Sub-Committee of Experts on the Transport of Dangerous Goods.

7. There was general agreement in the Tank Working Group that the definitions of “FRP shell” and “FRP tank” require amendment to align them with the general understanding and existing definitions of “shell” and “tank” in 1.2.1 and 6.7.2.1 of the Model Regulations and in 1.2.1, 6.7 and 6.8 of the ADR provisions.

8. A “shell” is the part of a tank that contains the substance carried, consisting of a cylindrical part, ends (closing the cylinder), openings and closures (e.g. manhole covers). However, it was noted that the definition of “FRP shell” might have been written in such a way to allow also for an FRP cylinder with metallic ends. In addition, it was felt that the sequence of wording was such that it allowed only openings and closures of FRP material.

Proposal 1

9. It is proposed to insert the following definition of "FRP shell" in 6.9.2.1 of the Model Regulations (new text is underlined):

“FRP shell means the part of the portable tank which retains the substance intended for carriage, consisting of a cylindrical section made of FRP material with FRP or metallic ends, including openings and closures, but does not include service equipment and external structural equipment;”

Proposal 2

10. It is proposed to amend the definition of "FRP tank" in 6.9.2.1 of the Model Regulations to read as follows (new text is underlined):

“FRP tank means a portable tank constructed with an FRP shell fitted with service equipment and structural equipment;”

11. The Sub-Committee is invited to consider the proposed amendments and approve the proposals.