

**Committee of Experts on the Transport of Dangerous Goods
and on the Globally Harmonized System of Classification
and Labelling of Chemicals**

23 June 2021

Sub-Committee of Experts on the Transport of Dangerous Goods

Fifty-eighth session

Geneva, 28 June-2 July 2021

Item 6 (c) of the provisional agenda

**Miscellaneous proposals for amendments to the Model Regulations
on the Transport of Dangerous Goods: portable tanks**

**Comments from the FRP Portable Tank Informal Working
Group on document ST/SG/AC.10/C.3/2021/11**

**Transmitted by Chair of the informal working group on FRP Portable
Tanks**

1. The informal working group on Fibre-Reinforced Plastics (FRP) portable tanks met virtually on June 6, 2021. The group primarily discussed the issues raised in the annex of document ST/SG/AC.10/C.3/2021/11 submitted by the United Kingdom.
2. The group noted that both the RID/ADR/ADN Joint meeting and IMO Sub-Committee on Carriage of Cargoes and Containers are in the process of considering the amendments concerning FRP portable tanks for inclusion in their respective standards during their spring and fall sessions. It is vital that the modal instruments have the most correct text to incorporate into their standards if deemed appropriate.
3. There are proposed amendments provided in ST/SG/AC.10/C.3/2021/11 that the informal working group believe should be adopted in a corrigendum to the twenty-second edition of the UN Model Regulations to provide an opportunity for modal, regional, and national standards to consider for adoption. The group considers these amendments editorial or clarifying in nature.

Action Requested

4. The Sub-Committee is invited to consider the following proposals, and if deemed appropriate, to issue the amendments as a corrigendum to the 22nd revised edition of the Model Regulations. Changes are shown in underline (addition) and strikethrough (deletion).

Proposal 1

5. In 6.9.2.1 the definition of “FRP shell” amend to read as follows:
“*FRP shell* means a closed part of cylindrical shape with an interior volume intended for ~~storage and~~ transport of chemical substances;”

Justification

6. Removing the phrase “storage” is consistent with the definition for shell in 6.7.2.1 for metallic portable tanks and provides consistent definitions for the two shells.

Proposal 2

7. In 6.9.2.1 the definition of “FRP tank” is amended to read as follows:
- “*FRP tank* means a portable tank constructed with an FRP-shell, and heads, ~~with~~ service equipment, safety relief devices and other installed equipment;”

Justification

8. The current text can be read to infer that the additional elements (e.g., service equipment and safety relief devices) must be made of FRP materials as well. This is not the case.

Proposal 3

9. In 6.9.2.2.3.4 and 6.9.2.2.3.5 the following amendments are proposed:
- 6.9.2.2.3.4 – The introductory sentence is amended as follows:
- “Shells shall consist of the following ~~functions~~ elements.”
- The note is revised to read as follows:
- “*NOTE: The ~~layers~~ elements may be combined if all applicable functional criteria are met.*”
- 6.9.2.2.3.5 is revised to read as follows:
- “The ~~internal~~ liner is the inner element of the shell designed as the primary barrier to provide for the long-term chemical resistance in relation to the substances to be carried, to prevent any dangerous reaction with the contents or the formation of dangerous compounds and any substantial weakening of the structural layer owing to the diffusion of products through the internal liner. Chemical compatibility shall be verified in accordance with 6.9.2.7.1.3.
- The ~~internal~~ liner may be an FRP liner or a thermoplastic liner.”

Justification

10. The term “elements” more correctly describes the three components being discussed in this section. Additionally, the term liner, not inner liner is consistent with usage in the rest of the chapter.

Proposal 4

11. 6.9.2.2.3.7 is revised to read as follows:
- “If the liner consists of thermoplastic sheets, they shall be welded together in the required shape, using a qualified welding procedure and personnel. ~~Furthermore,~~ Wwelded liners shall have a layer of electrically conductive media placed against the non-liquid contact surface of the welds to facilitate spark testing. Durable bonding between liners and the structural layer shall be achieved by the use of an appropriate method.”

Justification

12. The word “furthermore” is not necessary and may unnecessarily complicate translation.

Proposal 5

13. In 1.2.1 the definition for “portable tank” the last paragraph is revised to read as follows:

“The portable tank shall be capable of being loaded and discharged without the need of removal of its structural equipment. It shall possess stabilizing members external to the shell, and shall be capable of being lifted when full. It shall be designed primarily to be loaded on to a vehicle or vessel and is equipped with skids, mountings or accessories to facilitate mechanical handling. Road tank-vehicles, rail tank-wagons, non-metallic tanks (except FRP portable tanks *see* Chapter 6.9), gas cylinders, large receptacles, and intermediate bulk containers (IBCs) are not considered to fall within this definition;”

Justification

14. The current definition for portable tank excludes non-metallic tanks. With the inclusion of FRP portable tanks into the Model Regulations an amendment to this definition is required to ensure that when the term “portable tank” is referenced it includes FRP portable tanks.
