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
Bern, 15–19 March 2021
Item 2 of the provisional agenda

Tanks

Extra-large tank-containers: Manholes and dome covers

Transmitted by the Government of Belgium*, **, ***

Summary

Background: In the discussion on safety issues in connection with the carriage of extra-large tank-containers, the RID Committee of Experts’ standing working group and the working group on tank and vehicle technology noted that the requirements of 6.8.2.2.4 which only concern the construction of tank-wagons should also be included for RID/ADR extra-large tank-containers.

Action to be taken: Amend subsection 6.8.2.2.4.

Related documents: ECE/TRANS/WP.15/AC.1/2020/6 + informal document INF.45 (September 2020 Joint Meeting)
OTIF/RID/CE/GTT/2020-A (paras. 25–30) + informal documents INF.2 and INF.4 (RID Committee of Experts’ technical working group on tank and vehicle technology)
Informal document INF.12 (RID standing working group)

* A/75/6 (sect. 20), paragraph 20.51.
** Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2021/8.
*** This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter’s control.
Introduction

1. In the context of the discussions on extra-large tank-containers at its eleventh session, the RID Committee of Experts’ standing working group was of the view that the discussions on the question of the pressure resistance of closing devices were considered to be concluded. It therefore requested the secretariat to submit to the Joint Meeting corresponding proposals to adapt the provisions applicable to tank-containers (see report OTIF/RID/CE/GTP/2019-A, para. 53).

2. The OTIF secretariat submitted document ECE/TRANS/WP.15/AC.1/2020/6, which was discussed at the Joint Meeting in September 2020.

3. The proposal was to extend the requirement in the left-hand column of RID 6.8.2.2.4 to tank-containers.

4. The current 6.8.2.2.4 reads as follows:

   “6.8.2.2.4 The shell or each of its compartments shall be provided with an opening large enough to permit inspection.

   (RID only:) These openings shall be provided with closures designed for a test pressure of at least 0.4 MPa (4 bar). Hinged dome covers for tanks with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.”

5. The Working Group on Tanks was unable to reach a consensus. The standing working group of the RID Committee of Experts was asked to reconsider this question (see para. 4 of document ECE/TRANS/WP.15/AC.1/158/Add.1).

6. Following a discussion in the technical working group on tank and vehicle technology in October 2020, and on the basis of informal document INF.45, submitted by the International Tank Container Organization (ITCO) to the Joint Meeting in September 2020, the standing working group of the RID Committee of Experts wishes once again to submit the following proposal to the Joint Meeting.

Proposal

7. It is proposed to amend 6.8.2.2.4, as follows:

   (RID:

   6.8.2.2.4 The shell or each of its compartments shall be provided with an opening large enough to permit inspection.

   These openings shall be provided with closures designed for a test pressure of at least 0.4 MPa (4 bar). Hinged dome covers for tanks with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.”

   For tank-containers of more than 40,000 litres intended for the carriage of [substances in the liquid state]/[liquids] which are not divided by partitions or surge plates into sections of not more than 7,500 litres capacity: – these openings shall be fitted with closures which are designed for a test pressure of not less than 0.4 MPa (4 bar); – hinged dome covers for tanks with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.”
6.8.2.2.4 The shell or each of its compartments shall be provided with an opening large enough to permit inspection.

For tank-containers of more than 40,000 litres intended for the carriage of [substances in the liquid state]/[liquids] which are not divided by partitions or surge plates into sections of not more than 7,500 litres capacity: – these openings shall be fitted with closures which are designed for a test pressure of not less than 0.4 MPa (4 bar); – hinged dome covers for tanks with a test pressure of more than 0.6 MPa (6 bar) shall not be permitted.”

Add a new paragraph 1.6.4.x., to read:

(RID and ADR):

1.6.4.X Tank-containers constructed before 1 July 2023 in conformity with the requirements applicable until 31 December 2022, but which do not comply with the second paragraph of the requirements of 6.8.2.2.4 applicable as from 1 January 2023 may still be used.

Justification

8. These requirements for the pressure resistance of closure devices were introduced for tank wagons in order to prevent leaks resulting from cargo slosh.

9. Since some large tank-containers have the same capacity as tank-wagons, this requirement should be extended to such tank-containers in order to guarantee an equivalent level of safety (the risk being due to the cargo slosh).

10. The extra-large containers produced by BASF already meet this requirement, but in view of the limit of 40,000 litres which was arbitrarily set on the basis of the traditional capacities of the most commonly used tank-containers, it cannot be ruled out that other tank-containers of more than 40,000 litres may also be on the market. For this reason, a transitional measure has been proposed.