

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, 22–26 March 2010

Item 2 of the provisional agenda

Tanks

Flame traps or flame arresters

Chapter 1.6 – Transitional measures

Transmitted by the Government of Sweden

Summary

Executive summary: The transitional measures concerning flame traps or flame arresters proposed by the Joint-Meeting in September 2009 need to be amended.

Decision to be taken: Amend the proposed transitional measures for sub-sections 1.6.3.39 and 1.6.4.37 adopted by the Joint meeting in September 2009.

Related documents: INF 13 to the 87th session of WP 15 INF 16 to the 47th session of the RID Committee of Experts

ECE/TRANS/WP.15/AC.1/116/Add.1 – Report of the Joint Meeting September 2009 - (Draft amendments to RID/ADR/ADN for entry into force on 1 January 2011)

ECE/TRANS/WP.15/AC.1/116/Add.2 – Report of the Joint Meeting September 2009 - Report of the working group on tanks

ECE/TRANS/WP.15/AC.1/112/Add.1 – Report of the Joint Meeting September 2008 - Report of the working group on tanks

ECE/TRANS/WP.15/AC.1/2009/10 – (Germany) Flame arrester requirements

ECE/TRANS/WP.15/AC.1/2008/20 – (Sweden) Flame arrester requirements

Transitional measures

1. The Joint Meeting in September 2009 took a decision to amend 6.8.2.2.3 in such a way that not only vacuum valves but also venting systems (RID: self-operating ventilation valves) shall prevent the immediate passage of flames into the tank by means of a suitable device to prevent the propagation of a flame. Transitional measures were also adopted concerning the position of flame traps or flame arresters.

2. Sweden has in INF 13 to the 87th session of WP.15 and in INF 16 to the 47th session of RID-FA commented the decision taken by the tank working group and the Joint meeting.
3. Some amendments in the Swedish proposal were adopted by WP.15 and RID-FA. However Sweden foresees even more problems with the text proposed at the Joint meeting in September 2009.
4. Sweden does not support the proposal from the Working Group on Tanks, to introduce new transitional measures for the positioning of vacuum valves and venting systems for sub-section 6.8.2.2.3 in RID/ADR. Sweden is of the opinion that the new text does not include any new requirement of significant meaning for vacuum valves. This is also confirmed by paragraph 16 in ECE/TRANS/WP.15/AC.1/112/Add1, Report from the tank working Group, Sept. 2008:
5. Regarding the positioning of the flame arresters, it was noted that only alternative (b), cited in paragraph 11 of document ECE/TRANS/WP.15/AC.1/2008/20, met the requirements of RID/ADR.
6. The text to be included in RID/ADR in paragraph three of 6.8.2.2.3 is only a clarification and a help to interpret how to fulfil the requirements already included in sub-section 6.8.2.2.3 about how to protect a tank from getting flames inside. Flame traps or flame arresters on venting systems will always be close to the tank shell. Therefore there is no need for transitional measures for the positioning of either vacuum valves or venting systems.
7. However, from 2011 new text will be introduced for venting systems, in 6.8.2.2.3., requires that venting systems shall be fitted with flame traps or flame arresters. We are aware of that a corresponding requirement already exists in Part 4 in RID/ADR. However, the existing requirement in Part 4 is for the *use* of tanks, while the new text in 6.8.2.2.3 is for the *construction* of tanks. As a consequence, all tanks constructed before 1 July 2011 without their venting systems being protected by flame traps or flame arresters, must be retrofitted with flame traps/arresters on their venting systems at latest 1 July 2011 For this reason, Sweden believes that new transitional measures should be introduced.
8. The period as in Proposal 1 below, “until the next periodic inspection”, is harmonized with the period for the vacuum valves according to existing transitional measures 1.6.3.15 and 1.6.4.17.

Technical or operational requirements

9. The RID/ADR does not specify any technical or operational requirements on flame traps or flame arresters. This situation leads to the application of different technical requirements in different contracting parties and to different approval processes, where tanks are approved in one country but not in another. Such technical or operational requirements should therefore be harmonized and expressed within the scope and the provisions of RID/ADR.
10. The tank working group also pointed out (ECE/TRANS/WP.15/AC.1/116/Add.2 paragraph 16) the need to have a closer look at flame arresters or flame traps. The Government of Sweden supports that initiative.

Proposals

11. With respect of the need for a transitional measure for venting systems and the fact that the new requirement of the positioning of flame traps or flame arresters in third paragraph of 6.8.2.2.3 should be considered as an interpretation, Sweden proposes the following:

Proposal 1

12. Amend the decision of the Joint Meeting, stated in ECE/TRANS/WP.15/AC.1/116/Add.1, to be applicable only to venting systems, (RID: self-operating ventilation valves), as follows:

- 1.6.3.39 Tank-wagons / Fixed tanks (tank-vehicles) and demountable tanks constructed before 1 July 2011 in accordance with the requirements of 6.8.2.2.3 in force up to 31 December 2010 but which do not, however, conform to the requirements of 6.8.2.2.3, third paragraph, concerning the position of flame trap or flame arrester prevention of immediate passage of flame through the self-operating ventilation valves (RID) / venting systems (ADR) may be used until the next periodic inspection.
- 1.6.4.40 Tank-containers constructed before 1 July 2011 in accordance with the requirements of 6.8.2.2.3 in force up to 31 December 2010 but which do not, however, conform to the requirements of 6.8.2.2.3, third paragraph, concerning the position of flame trap or flame arrester prevention of immediate passage of flame through the self-operating ventilation valves (RID) / venting systems (ADR) may be used until the next periodic inspection.

Proposal 2

13. The Government of Sweden also proposes to set up a standardisation Working Group to define the type and the location of the flame arresters or flame traps.

Justification

14. New provisions for venting systems and the position of flame traps or flame arresters for these systems will be introduced in ADR 2011. Therefore, transitional measures for venting systems are necessary.

Safety implications

Feasibility

15. This proposal does not result in any problems concerning implementation.
