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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, 17-21 March 2014

Item 2 of the provisional agenda

Tanks**Chapter 6.10 Vacuum-operated waste tanks - Explosion-
pressure proof design of vacuum-operated tanks as an
alternative to flame traps****Transmitted by the Government of Germany^{1,2}***Summary*

Executive summary:	The aim of this proposal is to ensure that the provisions concerning the protection of vacuum-operated waste tanks against fire or the risk of explosion when being bottom filled or discharged using vacuum pumps/exhausters are clearly worded.
Action to be taken:	Include an operating provision in RID/ADR Chapter 4.5.
Related documents:	ECE/TRANS/WP.15/AC.1/2013/12; ECE/TRANS/WP.15/AC.1/2013/36; Report of the working group on tanks ECE/TRANS/WP.15/AC.1/132/Add.1 paragraphs 3 and 4 and informal document INF.60 of the Joint Meeting (September 2013)

¹ In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94, ECE/TRANS/2012/12, programme activity 02.7 (A1c)).

² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2014/6.

Introduction

1. At the last RID/ADR/ADN Joint Meeting (Geneva, 17 to 27 September 2013), the working group on tanks discussed France's proposal ECE/TRANS/WP.15/AC.1/2013/36. France was concerned that when operating vacuum pumps/exhausters with the possible generation of sparks (without flame arresters), people might be put at risk from an explosion.
2. The biggest risk of explosion propagation occurs mainly when filling starts and when discharging finishes, if the tank and discharge pipe are not filled with liquid.
3. On the basis of his presentation (informal document INF.60), the representative of Germany agreed to draft an operating provision for the use of explosion pressure proof tanks for flammable liquids to reduce the risk of explosion propagation.

Proposal

4. Include a new operating provision in RID/ADR Chapter 4.5.
"4.5.2.6 When suction filling or emptying flammable liquids from or into a non explosion pressure shock resistant tank, it shall be ensured that if vacuum pumps/exhausters that might create sparks are used (without flame arresters), these shall only be in operation when the connecting pipe is completely filled with liquid or the vacuum-operated tank is inerted."
 5. As a consequence, the end of 4.5.2.1 should be amended to read:
"...by the requirements of 4.5.2.2 to 4.5.2.6 below."
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