UNITED NATIONS **E**

Economic and Social Council

Distr.
GENERAL

ECE/TRANS/WP.15/AC.1/2006/4
30 December 2005

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods
(Bern, 20-24 March 2006)

TANKS

Paragraph 6.10.3.7 a)

Transmitted by the Government of Switzerland */

SUMMARY	
Executive Summary:	Discussion about an alternative design of the suction boom on vacuum-operated waste tanks: Possibility to fit a rotation crown wheel between the shell and the external stop valve
Action to be taken:	Discussion about modifications of subsection 6.10.3.7. a)
Related documents:	Multilateral agreement M134.

Introduction

The provisions concerning vacuum-operated waste tanks were introduced in the Appendix B.1e to ADR in 1999. It appears, however, that some construction features of the already existing tanks were not taken into consideration in this first set of rules. In order to take

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2006/4.

account of this alternative construction, a multilateral agreement M 134 was proposed. With this multilateral agreement, alternative arrangements for the construction of suction booms are possible. The multilateral agreement was signed by the following countries: Switzerland, Germany, Austria, Luxembourg and Liechtenstein.

This alternative design (see the draft in the annex) is used in vacuum-operated waste tanks for national use in the Contracting Parties. The international use of this type of suction boom has been accorded between the Contracting Parties of the multilateral agreement M134 from 2 July 2003 until 1 May 2008.

The following conditions must be fulfilled for the referred type of suction-boom:

- The rotation crown wheel and the stop valve have to be located in the protected area according to 6.10.1.1.1.

- The equipment of the suction boom has to be protected against the risk of being wrenched off or damaged during carriage or handling. This requirement can be fulfilled by locating the items of the equipment in the protected area (covered by 6.10.1.1.1).

- The stop-valve control devices must be protected by a housing (cover).

- The boom has to be locked against rotation during carriage (covered by 6.10.3.7 c).

- The system (suction boom with a rotation crown wheel and the external valve) is designed to prevent leakage by accidental impact on the boom (as requested in 6.10.3.7 c).

Switzerland kindly asks the Joint Meeting to transmit this document to the members of the tank working group to verify the proposed modification, as described under section "Modified text 6.10.3.7 a)" in the following.

Proposal

Current text 6.10.3.7 a):

a) The boom is fitted with an internal or external stop-valve fixed directly to the shell, or directly to a bend that is welded to the shell;

Modified text 6.10.3.7 a) :

a) The boom is fitted with an internal or external stop-valve fixed directly to the shell, or directly to a bend that is welded to the shell; A rotation crown wheel can be fitted between the shell or the bend and the external stop valve, if this rotation crown wheel is located in the protected area and the stop-valve control device is protected with a housing/cover against the danger of being wrenched off by external stresses.

Justification

- The proposed modification of the text in 6.10.3.7 a) is an alternative design of a suction boom as used for many years in Switzerland and in other countries.

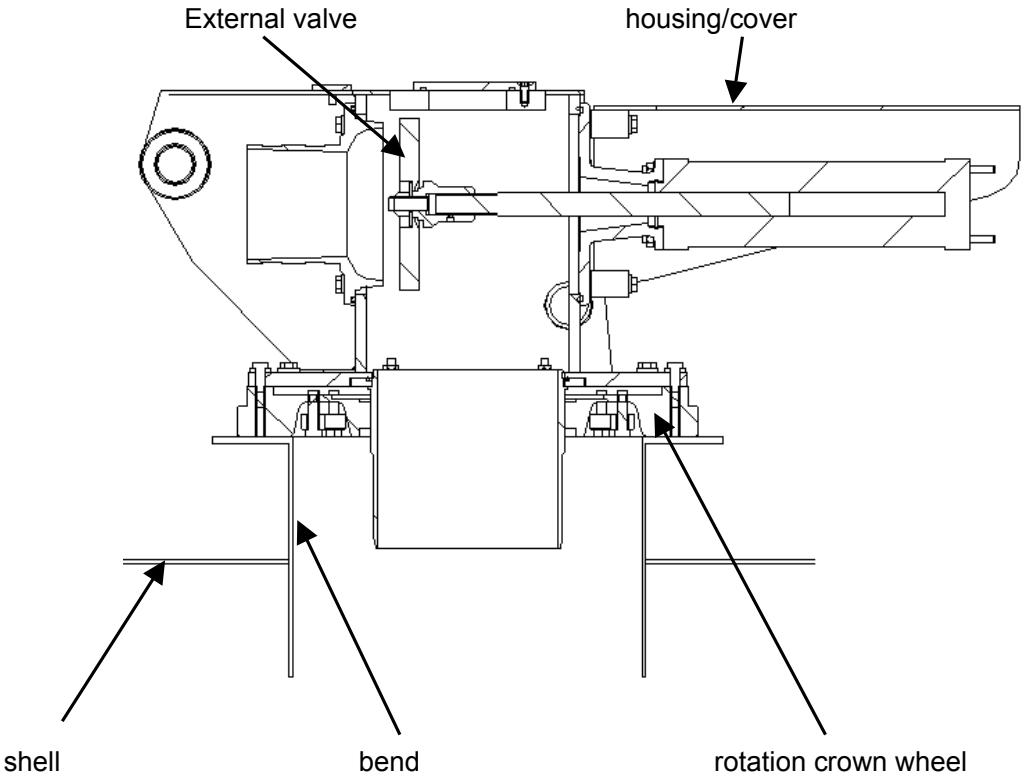
- The life cycle of the external valve is more than 3 years and much higher than the one of a standard slide valve.

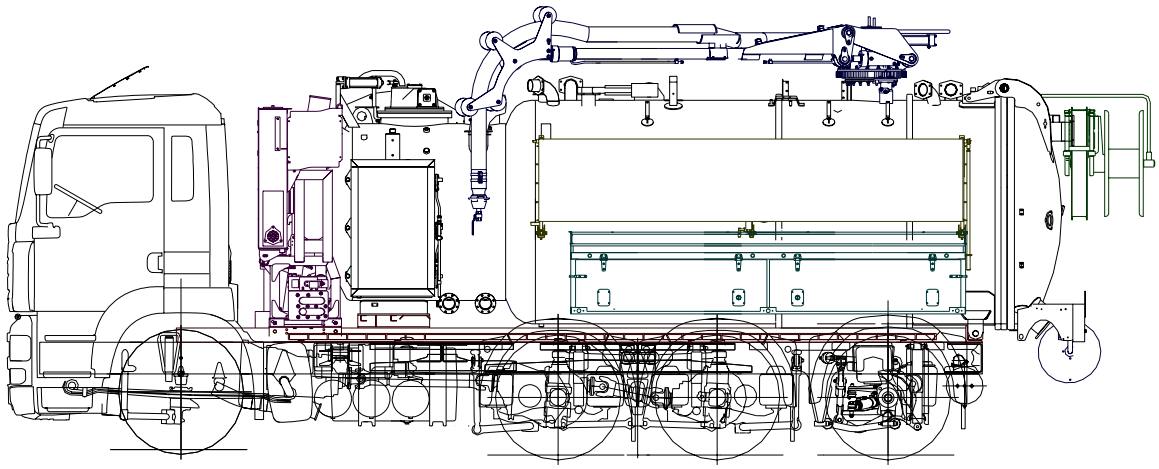
Impact on safety

There is no impact on safety, if:

- The suction boom with the rotation crown wheel and the external valve is placed in the protected area,
- The stop-valve control device is protected with a housing/cover against damage,
- The boom is locked against rotation during carriage.

Annex


External valve
housing/cover
shell
bend
rotation crown wheel



- - - - - -