UNITED NATIONS **E**

Economic and Social Council

Distr.
GENERAL

TRANS/WP.15/AC.1/2001/37
19 March 2001

ENGLISH
Original: FRENCH

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, 28 May - 1 June 2001)

CHAPTER 4.3: (+) SUBSTANCES/ALTERNATIVE USE OF TANKS/ HIERARCHY OF TANKS (4.3.4.1.3)

Transmitted by the International Union of Private Wagons (UIP)

The secretariat has received from the Central Office for International Carriage by Rail (OCTI) the proposal reproduced below.*

Executive summary: UIP requests that the provisions of paragraph 4.3.4.1.3 should be made more flexible in this regard, that the hierarchy of tanks should apply to substances marked (+) and that the final user should be free to make alternative use of the tanks.

* Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2001/37.

Introduction

Paragraph 4.3.4.1.3 states that in the case of substances where (+) appears in column (12) of table A in Chapter 3.2, the alternative use of tanks for other substances and groups of substances is not permitted and the hierarchy of tanks of paragraph 4.3.4.1.2 is not applicable.

What does this transposition mean in practical terms?

First example: hydrogen peroxide

Hydrogen peroxide, a substance of Class 5.1 which appears in table 3.2 with three different UN numbers - UN 2984, UN 2014 and UN 2015 (depending on the concentration) - should be carried in three different shells.

UN 2984 hydrogen peroxide 8-20%	LGBV
UN 2014 hydrogen peroxide 20-60%	L4BV (+)
UN 2015 hydrogen peroxide 60-70%	L4BV (+)

In practice, however, all three substances are carried alternately in the same tanks while meeting the highest quality requirements.

Second example: sulphur, molten, UN 2448

Sulphur is also a substance marked (+). According to table 3.2, only a type LGBV tank must be used. Noticeably more sophisticated tanks are also used, e.g. L4DH. If it were not possible to apply the hierarchy of tanks, a tank of this type could not be used to carry sulphur.

Third example: hydrogen fluoride, anhydrous/hydrofluoric acid

The type L21DH (+) tanks required in this case would not be able to carry alternatively the two substances referred to above, as is the usual practice. There is no apparent reason why a tank of this type - once it has been cleaned completely - cannot be used to carry other chemicals in accordance with the hierarchy of tanks.

Purpose of the request

The purpose of the request is to be able to clarify the above problems through the amendments to the text of the new RID/ADR and to permit the use of an approval and transport practice long tried and tested in accordance with the old RID/ADR.

Proposed solution

Paragraph 4.3.4.1.3, which states that in the case of substances where (+) appears in column (12) of table A in Chapter 3.2, the alternative use of tanks for other substances and groups of substances is not permitted and the hierarchy of tanks of 4.3.4.1.2 is not applicable, should be deleted and not replaced.

The special equipment of tanks intended for such substances is clearly defined in the special provisions specified in table 3.2. It is not the tank code but essentially these special provisions which determine the distinctive feature of the shell. The special provisions are largely independent of the code and can be applied with different tank codes. Since more sophisticated codes are frequently used to facilitate tank use, the hierarchy of the tanks should also be valid for these (+) substances.

The "alternative use" without interim cleaning may also involve considerable risks even with other goods and is not a problem limited to these substances only. The examples of alternative use given above are practicable and should remain so.

If the term "alternative use" is included in the RID/ADR text, it will require to be defined in Part 1. Taking old regulations for gases as a reference, UIP's understanding is that alternative use consists in the successive use of a single tank for different substances without interim cleaning.

Safety

The use of more sophisticated tanks in accordance with the hierarchy of tanks does not give rise to any instance of non-compliance with the safety rules since the special requirements are not defined by the coding but by the special provisions. It must always be the user who decides whether substances may be carried successively without interim cleaning since he is familiar with the quality requirements of his products.

Economic aspects

The use of the hierarchy of tanks for these substances is inevitable if the flexibility to propose the construction of more sophisticated tanks (e.g. a systematic pressure of 10 bar) is to be maintained. Keeping to the present rules would lead to prohibiting the use of existing tanks and to imposing the construction of special tanks in smaller quantities, which would not be justified financially.

The rule forbidding "alternative use" needs no criticism if it clearly specifies "carriage with interim cleaning" for cases which are considered necessary for the safety rules. The above examples, however, show that in the restructured RID/ADR the requirement is formulated too broadly. Transposing it will lead to considerably higher costs and risks of pollution as a result of more cleaning.
