#### ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods (Eighty-third session, Geneva, 5-9 November 2007)
Agenda item 4

#### WORK OF THE RID/ADR/ADN JOINT MEETING

## Tanks – Consequences of the new UN Recommendations on RID/ADR tanks

# **Transmitted by the Government of the United Kingdom**

#### Introduction

- 1. At the recent Joint Meeting held in Geneva between 11-21 September 2007, the tank working group considered INF.33 prepared by the Secretariat.
- 2. In paragraph 23 of ECE/TRANS/WP.15/AC.1/2007/30, the Ad Hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods proposed that the tank working group should check the consequences of the new portable tank provisions in the UN Recommendations on RID/ADR tanks. In the resulting INF.33, the Secretariat listed six points, a) to f) which should be particularly checked by the tank working group.
- 3. As reflected in item 14 of their report INF.52, the tank working group was not in a position to make a final decision on the issues raised in the six points but was of the opinion that these questions should be dealt with for the 2009 editions of RID/ADR. The working group agreed with the suggestion of the UK delegation to submit proposals to the forthcoming meetings of WP.15 and the RID Committee of Experts based on the preliminary discussions within the working group. As the RID CoE meeting is being held two weeks after WP.15, account could be taken of decisions reached by WP.15. The Joint Meeting accepted this approach (paragraph 46 of the draft report).
- 4. The UK puts forward the following proposals based on the preliminary discussions held within the working group. In principle if a substance is permitted to be transported in UN portable tanks then it should also be permitted to be carried in RID/ADR tanks. For ease of reference, each of the points listed in INF.33 is reproduced below before the resulting proposal.
- 5. The United Kingdom has submitted a similar proposal to the next RID Committee of Experts meeting.

## **Proposals and Justification**

a) For UN Nos. 1162, 1196, 1298, 1724, 1728, 1747, 1753, 1762, 1763, 1766, 1767, 1769, 1771, 1781, 1784, 1799, 1800, 1801, 1804, 1816, 1818, 2434, 2435 and

2437, it is proposed to replace "T7" with "T10" in column (10). In RID/ADR, these entries are assigned either L4BN or L4BH. The Tank Working Group should check whether these codes remain appropriate.

## Justification and Proposal

Although changes have been made for portable tanks, the requirements for RID/ADR tanks use a very different system giving a tank code based on the rationalized approach in Chapter 4.3. This takes into account the Class, the classification code (which includes the main and subsidiary hazards)and packing group (i.e. the degree of danger).

Apart from UN 1818 Silicon tetrachloride (8, C1, II, L4BN), the other substances are liquid chlorosilanes classified and permitted to be carried in RID/ADR tanks as follows: -

UN Nos	Class	Classification Code	Packing Group	Tank Code
1162, 1196, 1298	3	FC	II	L4BH
1724, 1747, 1767, 1816	8	CF1	II	L4BN
1728, 1753, 1762, 1763, 1766, 1769, 1771, 1781, 1784, 1799, 1800, 1801, 1804, 2434, 2435, 2437	8	C3	II	L4BN

This is the appropriate tank code allocation according to the coding of tanks detailed in 4.3.4.1.1 and the rationalized approach detailed in 4.3.4.1.2. Also the hierarchy of tanks detailed in 4.3.4.1.2 after the tables, already allows the use of tanks with higher ranking tank codes (any element of parts 1 to 4 of these tank codes corresponding to a level of safety at least equivalent to the corresponding element of the tank code indicated in table A of Chapter 3.2 for the particular substance entry).

It is therefore considered that there should be no changes for the tank codes for these substances.

b) For UN Nos. 1185, 1994 and 2480, packing group I, it is proposed to add "T22" in column (10) and "TP2" in column (11) respectively. In RID/ADR, UN Nos. 1185 and 1994 are assigned L15CH. No tank code is assigned to UN 2480. The Tank Working Group may wish to check whether a RID/ADR tank code should be assigned to UN 2480.

#### **Justification**

According to the rationalized approach, UN 2480 Methyl isocyanate (6.1, TF1, I) should be allocated either tank code L10CH or L15CH. Although other isocyanates classified as 6.1, TF1, I are allocated tank code L10CH, it is proposed to allocate tank code L15CH by analogy with UN 1185 Ethyleneimine, stabilized and UN 1994 Iron carbonyl. UN 2480 Methyl isocyanate together with UN 1185 and UN 1994 are allocated packing instruction P601 compared with P001 for these other isocyanates (and similarly were subject to special packing provisions compared with these other isocyanates in the unrestructured RID/ADR).

Again by analogy with UN 1185, it is proposed to allocate the same RID/ADR tank special provisions to UN 2480.

Similarly UN 2481 Ethyl isocyanate is currently permitted in UN portable tanks but not in RID/ADR tanks. According to the rationalized approach, UN 2481 (3, FT1, I) should be allocated either tank code L10CH or L15CH. Although other isocyanates classified as 3, FT1, I, are allocated tank code L10CH, it is proposed to allocate tank code L15CH by analogy with UN 1921 Propyleneimine, stabilized. UN 2481 Ethyl isocyanate is allocated packing instruction P601 compared with P001 for these other isocyanates (and UN 1921 and UN 2481 were subject to special packing provisions compared with these other isocyanates in the unrestructured RID/ADR). Again by analogy with UN 1921, it is proposed to allocate the same RID/ADR tank special provisions to UN 2481.

#### **Proposal**

In Chapter 3.2, Table A, for UN 2480 and UN 2481 in column (12) add "L15CH" and in column (13) add "TU14", "TU15", "TE19" and "TE21".

c) For UN Nos. 1250 and 1305, it is proposed to replace "I" with "II" in column (5) and, as a consequence, to replace "T11" with "T10" in column (10). The Tank Working Group should check whether the RID/ADR tank code should be changed for exemple in L4BH and whether the special provisions for tanks remain appropriate.

#### Justification

With the change in packing group from "I" to "II", the chlorosilanes UN 1250 and UN 1305 (3, FC, II) should now be allocated the tank code L4BH according to the rationalized approach in 4.3.4.1.2 and the special provisions amended accordingly.

#### **Proposal**

In Chapter 3.2, Table A, for UN 1250 and UN 1305, in column (12), replace "L10CH" with "L4BH" and in column (13), delete all the special provisions.

d) For UN Nos. 2813 and 3131, packing group I, it is proposed to add "T9" in column (10) and "TP7 TP33" in column (11) respectively. The tank working group may wish to check whether a RID/ADR tank code should be assigned to UN Nos. 2813 and 3131.

#### Justification

The rationalized approach in RID/ADR makes no provision for Class 4.3 packing group I, classification codes W2 or WC2. However by analogy with UN 3395 Organometallic substance, solid, water-reactive (4.3, W2, I) and UN 3396 Organometallic substance, solid, water-reactive, flammable (4.3, WF2, I), it is proposed that UN 2813 Water-reactive solid, n.o.s. (4.3, W2, I) and UN 3131 Water-reactive solid, corrosive, n.o.s. (4.3, WC2, I) should be allocated tank codes L10DH and S10AN and the same special provisions as for UN 3395 and UN 3396.

## **Proposal**

In Chapter 3.2, Table A, for UN 2813 and UN 3131, in column (12) add "L10DH" and "S10AN" and in column (13) add "TU4", "TU14", "TU22", "TE21" and "TM2"

e) For UN Nos. 2985, 2986, 3361 and 3362, it is proposed to replace "T11" with "T14" in column (10). These entries are assigned either L4BN or L4BH in RID/ADR. The Tank Working Group should check whether these codes remain appropriate.

#### Justification and Proposal

See general comments under a) above. The chlorosilanes UN 2985 (3, FC, II), UN 2986 (8, CF1, II), UN 3361 (6.1, TC1, II) and UN 3362 (6.1, TFC, II) are all allocated tank code L4BH, except UN 2986 which is allocated tank code L4BN, which are the appropriate tank codes according to the rationalized approach detailed in 4.3.4.1.2.

It is therefore considered that there should be no change for the tank codes for these substances.

f) For UN 1569, it is proposed to replace respectively "T3" with "T20" and "TP33" with "TP2". In RID/ADR, L4BH is assigned to this entry. The Tank Working Group may wish to check whether the RID/ADR tank code should be changed.

#### Justification and Proposal

Although the portable tank instruction has been changed to T20 presumably mainly because UN 1569 Bromoacetone (6.1, TF1, II) is a strong lachrymator, it is still classified in packing group II. In accordance with the rationalized approach in 4.3.4.1.2, tank code L4BH is appropriate as currently assigned and consequently no change is proposed.