ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE **INF.6**

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
(Geneva, 1-10 September 2003)

Harmonization with the UN Recommendations on the Transport of Dangerous Goods Bulk containers

Transmitted by the Government of the United Kingdom

1. Introduction

   New provisions for bulk containers from the UN Model Regulations are being proposed for inclusion in RID/ADR based on text prepared by the UN Secretariat and as discussed at the ad hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods that met from 26-28 May 2003.

   The results of the discussions on this subject are recorded in paragraphs 39 to 46 of the report of the ad hoc Working Group TRANS/WP.15/AC.1/2003/56 and the proposed text for inclusion in RID/ADR in the relevant parts of Addendum 1 to 7 of 2003/56, in particular a new chapter 6.11 and a modified chapter 7.3.

2. Proposal and Justification

   A new chapter 6.11, reflecting UN chapter 6.8, is contained in 2003/56 Add 6 dealing with the requirements for the design, construction, inspection and testing of bulk containers and new UN chapter 4.3 dealing with the use of bulk containers has been integrated into a modified chapter 7.3 contained in 2003/56 Add 7.

   Now that there are comprehensive provisions for bulk containers developed at UN level, the UK believes as reflected in paragraph 43 of 2003/56, that these should now apply to carriage in bulk in RID/ADR rather than have two separate systems based on the provisions for bulk containers in UN and the existing provisions in RID/ADR.

It is proposed that the current list of substances which may be carried in bulk in RID/ADR remains unchanged but in general substances are allocated the bulk container codes BK1 and BK2 instead of the VW/VV codes. (Annex 1 lists all the VW/VV codes and the substances allocated to them together with the BK1 and BK2 codes allocated in UN.)

Proposal:-
In Table A of chapter 3.2 replace VW/VV 1 – 10 inclusive whenever they appear in column (17) with "BK1, BK2" in column (10).
Replace the text of VW/VV 1 – 10 inclusive with "reserved".

One approach would be to retain modified VW/VV codes to deal with any specific conditions they currently contain as special provisions to be read in conjunction with the BK codes, but the UK believes this is unnecessary for the following reasons:

- The UN text now deals comprehensively with the design, construction and use of bulk containers including vehicles and wagons including containment and compatibility issues (e.g. 7.3.1.3 and 7.3.1.6) and Class specific provisions in 7.3.2.

- This is the approach being adopted in the IMDG Code

- There are sometimes differences between the text of a VW provision and the corresponding VV provision (including for intermodal containers) to be used for the same substance. Use of the UN based provisions will ensure consistency of approach.

It is proposed that VW/VV 11 – 14 inclusive are retained, at least for the present.

VW/VV11 deals with the carriage of clinical waste UN3291 of Class 6.2.
Text dealing with bulk wastes of UN3291 have been provisionally adopted in the UN Model Regulations and the finalized text can be taken into account in the UN harmonization exercise for the 2007 Editions of RID/ADR.

VW/VV 12 and 13 deal with carriage in bulk in special wagons and containers for UN3257 Elevated temperature liquid and UN3258 Elevated temperature solid respectively reflecting part of UN Special provision 232.

VW 14 deals with carriage in bulk of used batteries (articles of Class 8) which are not dealt with by the UN provisions.

ANNEX 1
PROVISIONS CONCERNING CARRIAGE IN BULK
VW and VV codes with applicable substances allocated these codes

Codes VW1 and VV1

UN No.	Substance name	Class	PG	*Proposed UN Code*
1309	Al powder coated	4.1	III	
1312	Borneol	4.1	III	
1313	Calcium Resinate	4.1	III	
1314	Calcium Resinate (fused)	4.1	III	
1318	Cobalt Resinate (precipitated)	4.1	III	
1325	Flammable Solid	4.1	III	
1328	Hexamethylenetetramine	4.1	III	
1330	Manganese Resinate	4.1	III	
1332	Metaldehyde	4.1	III	
1338	Phosphorus, amorphous	4.1	III	
1346	Silicon powder amorphous	4.1	III	
1350	Sulphur	4.1	III	*BK 1&2*
1408	Ferrosilicon	4.3	III	*BK 2*
1869	Magnesium Granules	4.1	III	
2001	Cobalt Naphthenates powder	4.1	III	
2213	Paraformaldehyde	4.1	III	*BK 1&2*
2538	Nitronaphthalene	4.1	III	
2687	Dicyclohexylammonium Nitrite	4.1	III	
2714	Zinc Resinate	4.1	III	
2715	Aluminium Resinate	4.1	III	
2717	Camphor	4.1	III	
2858	Zirconium	4.1	III	
2878	Titanium Sponge	4.1	III	
2989	Lead Phosphite	4.1	III	
3089	Metal powder (flammable)	4.1	III	
3178	Flammable Solid	4.1	III	
3181	Metal Salts (flammable)	4.1	III	
3182	Metal Hydrides (flammable)	4.1	III	

Codes VW1 & VW5 and VV1 & VV7

UN No.	Substance name	Class	PG	*Proposed UN Code*
3170	Aluminium smelting by-products	4.3	III	*BK 1&2*

Codes VW2 and VV2

UN No.	Substance name	Class	PG	*Proposed UN Code*
1334	Naphthalene	4.1	III	*BK 1&2*

Codes VW3 and VV3

UN No.	Substance name	Class	PG	*Proposed UN Code*
2211	Polymeric beads	9	III	
3175	Solid containing flammable liquid	4.1	II	*BK 1&2*
3314	Plastics Moulding compound	9	III	

Codes VW4 and VV4

UN No.	Substance name	Class	PG	*Proposed UN Code*
1361	Carbon	4.2	III	
1362	Carbon activated	4.2	III	
1363	Copra	4.2	III	
1364	Cotton waste, oily	4.2	III	
1365	Cotton, wet	4.2	III	
1373	Fibres, fabrics with oil	4.2	III	
1376	Iron Oxide spent	4.2	III	***BK 2***
1379	Paper, oil treated	4.2	III	
1386	Seed Cake	4.2	III	
1932	Zirconium, scrap	4.2	III	
2008	Zirconium powder	4.2	III	
2009	Zirconium, sheets, strips etc	4.2	III	
2210	Maneb	4.2	III	
2217	Seed Cake	4.2	III	
2545	Hafnium powder	4.2	III	
2546	Titanium powder	4.2	III	
2793	Ferrous Metal borings	4.2	III	
2881	Metal Catalyst	4.2	III	
3189	Metal powder (self heating)	4.2	III	
3190	Self heating Solid	4.2	III	

Codes VW5 and VV5

UN No.	Substance name	Class	PG	*Proposed UN Code*
1394	Aluminium Carbide	4.3	II	
1396	Aluminium powder	4.3	III	
1398	Aluminium Silicon powder	4.3	III	
1402	Calcium Carbide	4.3	II	
1418	Magnesium powder	4.3	III	
1435	Zinc ashes	4.3	III	
1436	Zinc powder	4.3	III	
2813	Water Reactive Solid	4.3	III	
2950	Magnesium Granules, coated	4.3	III	*BK 2*
2968	Maneb stabilised	4.3	III	
3208	Metal, water reactive	4.3	III	
3209	Metal, water reactive & self heating	4.3	III	

Codes VW5 & VW7 and VV5 & VV7

UN No.	Substance name	Class	PG	*Proposed UN Code*
1405	Calcium Silicide	4.3	III	
2844	Calcium Manganese Silicon	4.3	III	

Codes VW6 and VV3

UN No.	Substance name	Class	PG	*Proposed UN Code*
3170	Aluminium smelting by-products	4.3	II	*BK 1&2*

Codes VW7 and VV7

UN No.	Substance name	Class	PG	*Proposed UN Code*
1405	Calcium Silicide	4.3	II	

Codes VW8 and VV8

UN No.	Substance name	Class	PG	*Proposed UN Code*
1438	Aluminium Nitrate	5.1	III	*BK 1&2*
1442	Ammonium Perchlorate	5.1	II	
1444	Ammonium Persulphate	5.1	III	
1450	Bromates NOS	5.1	II	
1451	Caesium Nitrate	5.1	III	
1452	Calcium Chlorate	5.1	II	
1454	Calcium Nitrate	5.1	III	*BK 1&2*
1455	Calcium Perchlorate	5.1	II	
1458	Chlorate & Borate mixture	5.1	II	
1458	Chlorate & Borate mixture	5.1	III	
1459	Chlorate & Magnesium Chloride	5.1	II	
1459	Chlorate & Magnesium Chloride	5.1	III	
1461	Chlorates NOS	5.1	II	
1465	Didium Nitrate	5.1	III	
1466	Ferric Nitrate	5.1	III	
1467	Guanidine Nitrate	5.1	III	
1473	Magnesium Bromate	5.1	II	
1474	Magnesium Nitrate	5.1	III	*BK 1&2*
1475	Magnesium Perchlorate	5.1	II	
1477	Nitrates NOS	5.1	III	
1481	Perchlorates NOS	5.1	II	
1481	Perchlorates NOS	5.1	III	
1484	Potassium Bromate	5.1	II	
1485	Potassium Chlorate	5.1	II	
1486	Potassium Nitrate	5.1	III	*BK 1&2*
1487	Potassium Nitrate and Sodium Nitrite	5.1	II	
1488	Potassium Nitrite	5.1	Ii	

Codes VW8 and VV8 (cont.)

UN No.	Substance name	Class	PG	*Proposed UN Code*
1489	Potassium Perchlorate	5.1	II	
1492	Potassium Persulphate	5.1	III	
1493	Silver Nitrate	5.1	II	
1494	Sodium Bromate	5.1	II	
1495	Sodium Chlorate	5.1	II	*BK 1&2*
1498	Sodium Nitrate	5.1	III	*BK 1&2*
1499	Potassium and Sodium Nitrate mixture	5.1	III	*BK 1&2*
1502	Sodium Perchlorate	5.1	II	
1505	Sodium Persulphate	5.1	III	
1506	Strontium Chlorate	5.1	II	
1507	Strontium Nitrate	5.1	III	
1508	Strontium Perchlorate	5.1	II	
1513	Zinc Chlorate	5.1	II	
1942	Ammonium Nitrate	5.1	III	*BK 1&2*
2067	Ammonium Nitrate Fertilizers	5.1	III	*BK 1&2*
2469	Zinc Bromate	5.1	III	
2720	Chromium Nitrate	5.1	III	
2721	Copper Chlorate	5.1	II	
2722	Lithium Nitrate	5.1	III	
2723	Magnesium Chlorate	5.1	II	
2724	Manganese Nitrate	5.1	III	
2725	Nickel Nitrate	5.1	III	
2726	Nickel Nitrite	5.1	III	
2728	Zirconium Nitrate	5.1	III	
3215	Persulphates NOS	5.1	III	

Codes VW9 and VV9a

UN No.	Substance name	Class	PG	*Proposed UN Code*
1564	Barium compounds	6.1	III	
1566	Beryllium compounds	6.1	III	
1794	Lead Sulphate	8	II	
1884	Barium Oxide	6.1	III	
2506	Ammonium Hydrogen Sulphate	8	II	
2506	Potassium Hydrogen Sulphate	8	II	

Codes VW9 and VV9b

UN No.	Substance name	Class	PG	*Proposed UN Code*
1544	Alkaloids Solids	6.1	III	
1548	Aniline Hydrochloride	6.1	III	
1549	Antimony compounds	6.1	III	
1550	Antimony Lactate	6.1	III	
1551	Antimony Potassium Tartrate	6.1	III	

Codes VW9 and VV9b (cont)

UN No.	Substance name	Class	PG	*Proposed UN Code*
1557	Arsenic compounds	6.1	III	
1579	4-Chloro-o-Toluidine Hydrochloride	6.1	III	
1588	Cyanides solid NOS	6.1	III	
1601	Disinfectant solid	6.1	III	
1616	Lead Acetate	6.1	III	
1655	Nicotine NOS	6.1	III	
1663	Nitrophenals	6.1	III	
1673	Phenyldiamines	6.1	III	
1690	Sodium Fluoride	6.1	III	
1709	Toluenediamines	6.1	III	
1740	Hydrogendifluorides NOS	8	III	
1759	Corrosive Solid NOS	8	III	
1773	Ferric Chloride Anhydrous	8	III	
1805	Phosphoric Acid (solid)	8	III	
1812	Potassium Fluoride	6.1	III	
1907	Soda Lime	8	III	
2020	Chlorophenols	6.1	III	
2025	Mercury compounds	6.1	III	
2026	Phenylmercury compounds	6.1	III	
2074	Acrylamide	6.1	III	
2077	Naphthalamine	6.1	III	
2214	Phthalic Anhydride	8	III	
2215	Maleic Anhydride	8	III	
2233	Chloroanisides	6.1	III	
2235	Chlorobenzyl Chlorides	6.1	III	
2237	Chloroanilines	6.1	III	
2239	Chlorotoluidines solid	6.1	III	
2280	Hexamethylenediamine	8	III	
2291	Lead compounds soluble	6.1	III	
2331	Zinc Chloride Anhydrous	8	III	
2430	Alkylphenols	8	III	
2432	Chloronitrotoluenes solid	6.1	III	
2440	Stannic Chloride Pentahydrate	8	III	
2446	Nitrocresols Solid	6.1	III	
2473	Sodium Arsanilate	6.1	III	
2475	Vanadium Trichloride	8	III	
2503	Zirconium Tetrachloride	8	III	
2505	Ammonium Fluoride	6.1	III	
2507	Chloroplatinic Acid solid	8	III	
2508	Molybdeum Pentachloride	8	III	
2511	Chloropropionic Acid solid	8	III	
2512	Aminophenols	6.1	III	
2516	Carbon Tetrabromide	6.1	III	
2570	Cadmium compounds	6.1	III	
2578	Phosphorous Trioxide	8	III	
2579	Piprazine	8	III	

Codes VW9 and VV9b (cont)

UN No.	Substance name	Class	PG	*Proposed UN Code*
2585	Alkylsulphonic acids	8	III	
2588	Pesticide Solid Toxic	6.1	III	
2651	Diaminodiphenylmethane	6.1	III	
2655	Potassium Fluorosilicate	6.1	III	
2659	Sodium chloroacetate	6.1	III	
2660	Nitrotoluidines (mono)	6.1	III	
2662	Hydroquinine	6.1	III	
2674	Sodium Fluorosilicate	6.1	III	
2698	Tetrahydrophthalic Anhydrides	8	III	
2713	Acridine	6.1	III	
2716	1,4,Butynediol	6.1	III	
2729	Hexachlorobenzene	6.1	III	
2730	Nitroanisoles solid	6.1	III	
2732	Nitrobromobenzenes solid	6.1	III	
2753	N-Ethylbenzyltoluidines solid	6.1	III	
2757	Pesticide solid	6.1	III	
2759	Pesticide solid	6.1	III	
2761	Pesticide solid	6.1	III	
2763	Pesticide solid	6.1	III	
2771	Pesticide solid	6.1	III	
2775	Pesticide solid	6.1	III	
2777	Pesticide solid	6.1	III	
2779	Pesticide solid	6.1	III	
2781	Pesticide solid	6.1	III	
2783	Pesticide solid	6.1	III	
2786	Pesticide solid	6.1	III	
2802	Copper Chloride	8	III	
2803	Gallium	8	III	
2811	Toxic Solid	6.1	III	
2823	Crotonic Acid	8	III	
2834	Phosphorous Acid	8	III	
2853	Magnesium Fluorosilicate	6.1	III	
2854	Ammonium Fluorosilicate	6.1	III	
2855	Zinc Fluorosilicate	6.1	III	
2856	Fluorosilicates NOS	6.1	III	
2862	Vanadium Pentoxide	6.1	III	
2865	Hydroxylamine Sulphate	8	III	
2869	Titanium Trichloride mixture	8	III	
2871	Antimony powder	6.1	III	
2875	Hexachlorophene	6.1	III	
2876	Resorcinol	6.1	III	
2905	Chlorophenolates solid	8	III	
2923	Corrosive solid toxic	8	III	
2967	Sulphamic Acid	8	III	
3027	Pesticide solid	6.1	III	
3143	Dye toxic solid	6.1	III	

Codes VW9 and VV9b (cont)

UN No.	Substance name	Class	PG	*Proposed UN Code*
3146	Organotin compound	6.1	III	
3147	Dye solid corrosive	8	III	
3172	Toxins solid	6.1	III	
3249	Medicine solid toxic	6.1	III	
3253	Disodium Trioxosilicate	8	III	
3259	Amines solid corrosive	8	III	
3260	Corrosive Solid acidic inorganic	8	III	
3261	Corrosive Solid acidic organic	8	III	
3262	Corrosive Solid basic inorganic	8	III	
3263	Corrosive Solid basic organic	8	III	
3278	Organophosphorus	6.1	III	
3280	Organoarsenic	6.1	III	
3281	Metal Carbonyls	6.1	III	
3282	Organometals	6.1	III	
3283	Selenium compounds	6.1	III	
3284	Tellerium compounds	6.1	III	
3285	Vanadium compounds	6.1	III	
3288	Toxic Solid	6.1	III	
3345	Pesticide Solid	6.1	III	
3349	Pesticide Solid	6.1	III	

Codes VW10 and VV10

UN No.	Substance name	Class	PG	*Proposed UN Code*
3243	Solid containing toxic liquid	6.1	II	*BK 1&2*
3244	Solid containing corrosive liquid	8	II	*BK 1&2*

Codes VW11 and VV11

UN No.	Substance name	Class	PG	*Proposed UN Code*
3291	Clinical Waste	6.2	II	

Codes VW12 and VV12

UN No.	Substance name	Class	PG	*Proposed UN Code*
3257	Elevated temperature liquid	9	III	

Codes VW13 and VV13

UN No.	Substance name	Class	PG	*Proposed UN Code*
3258	Elevated temperature solid	9	III	

Codes VW14 and VV14

UN No.	**Substance name**	**Class**	**PG**	***Proposed UN Code***
2794	Batteries Acid	8		
2795	Batteries Alkali	8		
2800	Batteries non-spillage	8		
3028	Batteries containing potassium hydroxide	8		