UNITED NATIONS



# **Economic and Social Council**

Distr. GENERAL

TRANS/WP.15/AC.1/2003/56/Add.7 23 June 2003

**ENGLISH** 

**Original: ENGLISH and FRENCH** 

# **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

**Working Party on the Transport of Dangerous Goods** 

<u>Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods</u> (Geneva, 1-10 September 2003)

# HARMONIZATION WITH THE UN RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Report of the Ad hoc Working Group on the Harmonization of RID/ADR/ADN with the

UN Recommendations on the Transport of Dangerous Goods \*/

#### Addendum 7

Proposal of amendments to Part 7, 8 and 8 of RID/ADR/ADN

Amend Chapter 7.3 to read as follows:

# **"CHAPTER 7.3**

# PROVISIONS CONCERNING CARRIAGE IN BULK

- 7.3.1 General provisions
- 7.3.1.1 Goods may not be carried in bulk in vehicles/wagons or containers unless:

<sup>\*/</sup> Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2003/56/Add.7.

- (a) either a special provision, identified by the code BK, explicitly authorizing this mode of carriage is indicated in column (10) of Table A of Chapter 3.2 in addition to those of this section 7.3.1 and the special provisions of 7.3.2 are satisfied; or
- (b) a special provision, identified by the code VW/VV, explicitly authorizing this mode of carriage is indicated in column (17) of Table A of Chapter 3.2 and the conditions of this special provision, as laid down in 7.3.3 are satisfied in addition to those of this section 7.3.1.

Nevertheless, empty packagings, uncleaned, may be carried in bulk if this mode of carriage is not explicitly prohibited by other provisions of RID/ADR.

**NOTE:** For carriage in tanks, see Chapters 4.2 and 4.3.

- 7.3.1.2 Substances which may become liquid at temperatures likely to be encountered during carriage, are not permitted for carriage in bulk.
- 7.3.1.3 Containers or bodies of wagons/vehicles shall be siftproof and shall be so closed that none of the contents can escape under normal conditions of carriage including the effect of vibration, or by changes of temperature, humidity or pressure.
- 7.3.1.4 Bulk solids shall be loaded and evenly distributed in a manner that minimises movement that could result in damage to the container or wagon/vehicle or leakage of the dangerous goods.
- 7.3.1.5 Where venting devices are fitted they shall be kept clear and operable.
- 7.3.1.6 Bulk solids shall not react dangerously with the material of the container, wagon/vehicle, gaskets, equipment including lids and tarpaulins and with protective coatings which are in contact with the contents or significantly weaken them. Containers or wagons/vehicles shall be so constructed or adapted that the goods cannot penetrate between wooden floor coverings or come into contact with those parts of the container or wagon/vehicle that may be affected by the materials or residues thereof.
- 7.3.1.7 Before being filled and offered for carriage each container or wagon/vehicle shall be inspected and cleaned to ensure that it does not contain any residue on the interior or exterior of the container or wagon/vehicle that could
  - cause a dangerous reaction with the substance intended for carriage;
  - detrimentally affect the structural integrity of the container or wagon/vehicle; or
  - affect the dangerous goods retention capabilities of the container or wagon/vehicle.
- 7.3.1.8 During carriage, no dangerous residues shall adhere to the outer surfaces of containers or of the bodies of wagons/vehicles.
- 7.3.1.9 If several closure systems are fitted in series, the system which is located nearest to the substance to be carried shall be closed first before filling.

- 7.3.1.10 Empty containers or wagons/vehicles which have carried a dangerous solid substance in bulk shall be treated in the same manner as is required by RID/ADR for a filled container or wagon/vehicle, unless adequate measures have been taken to nullify any hazard.
- 7.3.1.11 If containers or wagons/vehicles are used for the carriage in bulk of goods liable to cause a dust explosion, or evolve flammable vapours (e. g. for certain wastes) measures shall be taken to exclude sources of ignition and prevent dangerous electrostatic discharge during carriage filling or discharge of the substance.
- 7.3.1.12 Substances, for example wastes, which may react dangerously with one another and substances of different classes and goods not subject to RID/ADR, which are liable to react dangerously with one another shall not be mixed together in the same container or wagon/vehicle. Dangerous reactions are:
  - (a) combustion and/or evolution of considerable heat;
  - (c) emission of flammable and/or toxic gases;
  - (c) formation of corrosive liquids; or
  - (d) formation of unstable substances.
- 7.3.1.13 Before a container or wagon/vehicle is filled it shall be visually examined to ensure it is structurally serviceable, its interior walls, ceiling and floors are free from protrusions or damage and that any inner liners or substance retaining equipment are free from rips, tears or any damage that would compromise its cargo retention capabilities. Structurally serviceable means the container or wagon/vehicle does not have major defects in its structural components, such as top and bottom side rails, top and bottom end rails, door sill and header, floor cross members, corner posts, and corner fittings in a container. Major defects include:
  - (a) bends, cracks or breaks in the structural or supporting members that affect the integrity of the container or of the body of the wagon/vehicle;
  - (b) more than one splice or an improper splice (such as a lapped splice) in top or bottom end rails or door headers;
  - (c) more than two splices in any one top or bottom side rail;
  - (d) any splice in a door sill or corner post;
  - (e) door hinges and hardware that are seized, twisted, broken, missing, or otherwise inoperative;
  - (f) gaskets and seals that do not seal;
  - (g) any distortion of the overall configuration of a container great enough to prevent proper alignment of handling equipment, mounting and securing chassis or vehicle, or insertion into ships' cells;
  - (h) any damage to lifting attachments or handling equipment interface features; or

(i) any damage to service or operational equipment.

# 7.3.2 Additional provisions for the carriage in bulk of goods of classes 4.2, 4.3, 5.1, 6.2, 7 and 8 when the provisions of 7.3.1.1 (a) are applied

7.3.2.1 The codes BK1 and BK2 in column (10) of Table A of Chapter 3.2 have the following meanings:

BK1: Carriage in bulk in sheeted containers or wagons/vehicles is permitted;

BK2: Carriage in bulk in closed containers or wagons/vehicles is permitted.

7.3.2.2 The container used or the body of the wagon/vehicle shall conform to the requirements of Chapter 6.11.

# 7.3.2.3 *Goods of Class 4.2*

The total mass carried in a container or wagon/vehicle shall be such that its spontaneous ignition temperature is greater than 55 °C.

#### 7.3.2.4 *Goods of Class 4.3*

These goods shall be carried in containers or wagons/vehicles which are watertight.

# 7.3.2.5 *Goods of Class 5.1*

Containers or wagons/vehicles shall be so constructed or adapted that the goods cannot come into contact with wood or any other incompatible material.

# 7.3.2.6 Wastes of Class 6.2 (UN No. 2900)

- (a) For wastes of UN No. 2900, sheeted containers or wagons/vehicles BK1 are permitted provided that they are not filled to maximum capacity to avoid substances coming into contact with the sheeting. Closed containers or wagons/vehicles BK2 are also permitted;
- (b) Closed and sheeted containers or wagons/vehicles, and their openings, shall be leak-proof by design or by the fitting of a suitable liner;
- (c) Wastes of UN No. 2900 shall be thoroughly treated with an appropriate disinfectant before loading prior to carriage;
- (d) Wastes of UN No. 2900 in a sheeted container or wagon/vehicle shall be covered by an additional top liner weighted down by absorbent material treated with an appropriate disinfectant;
- (e) Closed or sheeted containers or wagons/vehicles used for the carriage of wastes of UN No. 2900 shall not be re-used until after they have been thoroughly cleaned and disinfected.

#### 7.3.2.7 *Material of Class 7*

For the carriage of unpackaged radioactive material, see 4.1.9.2.3.

#### 7.3.2.8 *Goods of Class 8*

These goods shall be carried in containers or wagons/vehicles which are watertight.

7.3.3 Special provisions for the carriage in bulk when the provisions of 7.3.1.1 (b) are applied

(Existing text of 7.3.3)".

#### 7.1.4.15.3 (ADN only) Add a new paragraph as follows:

"A transport unit or hold space which has been used to carry infectious substances shall be inspected for release of the substance before re-use. If the infectious substances were released during carriage, the transport unit or hold space shall be decontaminated before it is re-used. Decontamination may be achieved by any means which effectively inactivates the released infectious substance."

# (RID/ADR) 7.5.11 CW/CV33 (1.1) (a) (ii)

(ADN) 7.1.4.14.7.1.1 (a) (ii) Add at the end: "..., taking account of the exposures expected to be delivered by all other relevant sources and practices under control; and.".

#### (RID/ADR) 7.5.11 CW/CV33 (3.3) (c)

(ADN) 7.1.4.14.7.3.3 (c) Amend the end to read: "...of the wagon/vehicle/conveyance, except for consignments carried under exclusive use, for which the radiation limits around the wagon/vehicle/conveyance are set forth in [RID/ADR (3.5)] [ADN 7.1.4.14.7.3.5 (b) and (c)]".

# (RID/ADR) 7.5.11 CW/CV33 (4.1)

(ADN) 7.1.4.14.7.4.1 Amend to read as follows:

"7.5.11 CW/CV33 (4.1) / 7.1.4.14.7.4.1 Any group of packages, overpacks, and containers containing fissile material stored in transit in any one storage area shall be so limited that the total sum of the criticality safety indexes in the group does not exceed 50. Each group shall be stored so as to maintain a spacing of at least 6 m from other such groups."

#### (RID/ADR) 7.5.11 CW/CV33 (5.5)

(ADN) 7.1.4.14.7.5.5 Amend the beginning to read as follows: "A container, tank, intermediate bulk container or wagon/vehicle/conveyance dedicated to the carriage of unpackaged radioactive material under exclusive use...".

#### 7.5.11 (RID/ADR) Add the following new special provisions:

"CW/CV34 Prior to carriage [of pressure receptacles] it shall be ensured that the pressure has not risen due to potential hydrogen generation.". [New special provision LO in 7.1.6.13 of ADN?] [Apply to Un No.1052.]

"CW/CV35 If bags are used single packagings, they shall be adequately separated to allow for the dissipation of heat.". [Apply to Un Nos 1748, 2208 et 2880.]

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#### Part 8

- 8.3.1 (ADR) Amend to read:
- "8.3.1 Persons authorized on board
- 8.3.1.1 Each crew member of vehicles carrying dangerous goods shall carry with them means of identification, which includes their photograph, during carriage.".
- 8.3.1.2 [Existing text of 8.3.1]
- 8.3.1.3 (RID/ADN) Insert a new 8.3.1.3 to read:
- (ADN) "8.3.1.3 When dangerous goods are carried on board the vessel, each person authorized to be on board shall carry with them means of identification, which includes their photograph [, during carriage].".
- (RID) "8.3.1.3 Each crew member of trains carrying dangerous goods shall carry with them means of identification, which includes their photograph, during carriage.".
- 8.4 (ADN) Amend the heading of Chapter to read "REQUIREMENTS CONCERNING THE SUPERVISION OF VESSELS" and add "8.4.1 (Reserved)" and 8.4.2 to read as follows:

To be determined (RID) Add a new paragraph to read as follows:

- 8.4 (ADR) Existing text becomes 8.4.1. Add a new 8.4.2 to read as follows:
- 8.4.2 (ADN) Add a new 8.4.2 to read as follows:
  - "8.4.2 When appropriate and already fitted, the use of transport telemetry or other tracking methods or devices shall be used to monitor the movement of high consequence dangerous goods [(see Table 1.4.1 in Chapter 1.4.)]".

Add new paragraphs 8.4.3 and 8.4.4 (ADR/ADN)/to be determined for RID to read as follows:

- "8.4.3 The carrier shall ensure the application to vehicles/wagons/vessels carrying high consequence dangerous goods [(see Table 1.4.1 in Chapter 1.4)] of devices, equipment or arrangements to prevent the theft of the vehicle/wagon/vessel or its cargo and shall ensure that these are operational and effective at all times.
- [8.4.4 Safety inspections in wagons/vehicles/ hold spaces shall cover appropriate security measures.] [covered by 1.8.1.1?]".
- Part 9 (ADR only)
- 9.5.3 Amend to read as follows:
- "9.5.3 The bodies of vehicles intended for the carriage of dangerous solids in bulk shall meet the requirements of Chapters 6.11 and 7.3, as appropriate, including those of 7.3.2 or 7.3.3 which may be applicable in accordance with the indications in columns (10) or (17) respectively of Table A of Chapter 3.2 for a given substance."