

Original: ENGLISH only

**ECONOMIC COMMISSION FOR EUROPE**

**INLAND TRANSPORT COMMITTEE**

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the  
Working Party on the Transport of Dangerous Goods

Ad hoc Working Group on the Harmonization of RID/ADR/ADN  
with the UN Recommendations on the Transport of Dangerous Goods

Geneva, 18-20 May 2009

**HARMONIZATION WITH THE UNITED NATIONS  
MODEL REGULATIONS ON THE TRANSPORT OF DANGEROUS GOODS**

**Draft proposal of amendments to RID/ADR/ADN – Chapter 3.4 to the end**

**Note by the UNECE secretariat**

The UNECE secretariat has prepared a draft proposal of amendments to RID/ADR/ADN on the basis of the decisions taken by the UN Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals at its December 2008 session. This document includes the draft proposal of amendments for Chapter 3.4 to the end, and takes into account comments already made by the OTIF secretariat.

The United Nations documents of reference are ST/SG/AC.10/36, -/Add.1 and -/Add.2. Corrections to the list of amendments to the UN Model Regulations, which will be submitted as ST/SG/AC.10/36/Add.1/Corr.1, are also taken into account.

Striken out text means that the amendment does not seem relevant for RID/ADR/ADN. Text underlined means alternative wording proposed by the secretariat. Text in square brackets means that the Working Group of the Joint Meeting should discuss the relevance of the text for RID/ADR/ADN. Additional information, such as references and comments, is also provided in square brackets.

For Chapter 3.4, the secretariat notes that the quantities allowed by RID/ADR differ significantly from those allowed by the UN Model Regulations. Therefore the use of the new UN mark for limited quantities could be misleading in multimodal transport. The secretariat intends to propose a separate proposal for Chapter 3.4 which would facilitate the identification of packages containing dangerous goods packed in limited quantities but in quantities above those allowed by the UN Model Regulations.

---

\*/ *Informal document. Not issued as an official United Nations document. Circulated only to delegations participating in the work of the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods.*

## Chapter 3.4

*[For Chapter 3.4, the secretariat may present an alternative proposal.]*

~~3.4.2~~3.4.3, 3.4.4 (a) and 3.4.5 (a) At the end, add a new ~~second~~ sentence to read as follows:  
"Intermediate packagings may be used."

~~3.4.3~~3.4.5 (a), second indent ~~Replace the end of the first sentence after "with this Chapter" with the following new sentence:-~~ Delete the words "metal or plastics" before "inner packagings". At the end of this indent, add: "Inner packagings that are liable to break or be easily punctured, such as those made of glass, porcelain, stoneware or certain plastics, shall be placed in suitable intermediate packagings meeting the provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8, and be so designed that they meet the construction requirements of 6.1.4."

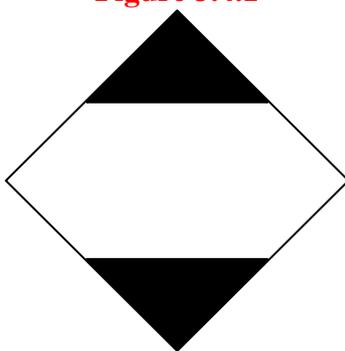
~~3.4.6~~ ~~Delete the first sentence and amend the second sentence to read as follows: "Any segregation provisions for dangerous goods packed in limited quantities need not apply within a vehicle or freight container."~~

~~3.4.7 to 3.4.9~~ ~~Replace with the following new sub-sections 3.4.7 to 3.4.11:~~

3.4.4 (c) Amend to read as follows:

~~"3.4.7(c)~~ Each package bears the mark below: ~~Except for air transport, packages containing dangerous goods in limited quantities need not be labelled nor marked with the proper shipping name or UN number of the contents, but shall bear the marking shown in Figure 3.4.1 below.~~

**Figure 3.4.1**



~~Marking for packages containing limited quantities~~

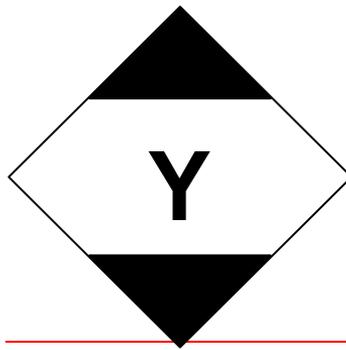
The top and bottom portions and the surrounding line shall be black, centre area white or suitable contrasting background. The minimum dimensions:— shall be 100 mm x 100 mm, and the ~~Minimum~~ width of line forming the diamond:— shall be [at least] 2 mm.

If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm x 50 mm provided the marking remains clearly visible.

The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness.

~~3.4.8~~ ~~When the~~ packages containing dangerous goods ~~are~~ consigned for air transport in conformity with the provisions of Part 3, Chapter 4 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air ~~the mark may bear the letter "Y" in its center.~~ ~~shall bear the marking shown in Figure 3.4.2 below.~~ ~~The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness.~~

**Figure 3.4.2**



~~Marking for packages containing limited quantities conforming to Part 3, Chapter 4 of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air~~

~~Top and bottom portions and line shall be black, centre area white or suitable contrasting background.~~

~~Minimum dimensions: 100 mm x 100 mm.~~

~~Minimum width of line forming diamond: 2 mm.~~

~~The symbol "Y" shall be placed in the centre of the mark and shall be clearly visible.~~

~~If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm x 50 mm provided the marking remains clearly visible.~~

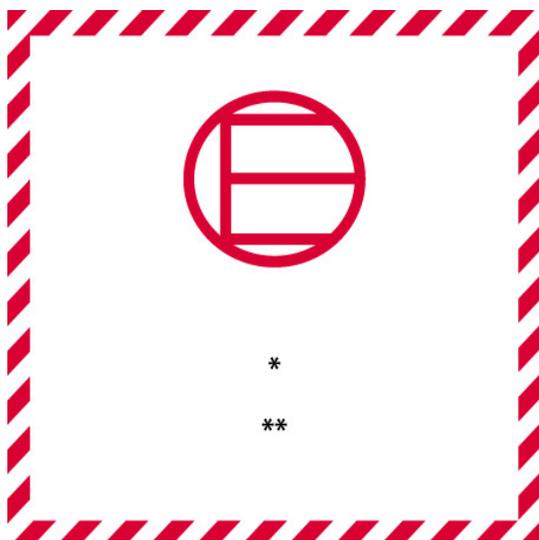
~~3.4.9~~ ~~Packages containing dangerous goods bearing the marking shown in Figure 3.4.2 shall be deemed to meet the provisions of sections 3.4.1 to 3.4.5 of this Chapter and need not bear the marking shown in Figure 3.4.1.~~

~~3.4.10~~ ~~Except for air and sea transport the documentation provisions of 5.4.1 need not apply to dangerous goods packed in limited quantities. When transported by air or sea the words "limited quantity" or "LTD QTY" shall be included after the description of the dangerous goods packed in limited quantities (see 5.4.1.5.2).~~

~~3.4.11~~ ~~When packages containing dangerous goods in limited quantities are placed in an overpack, the overpack shall be marked with the word "OVERPACK" and the marking required by this Chapter in this sub-paragraph unless the markings representative of all dangerous goods in the overpack are visible."~~

## Chapter 3.5

~~Figure 3.5.1~~3.5.4.2 Amend the figure to read as follows:



Excepted quantities mark

Hatching and symbol of the same colour, black or red,  
on white or suitable contrasting background

\* ~~The Class or, when assigned, the Division number(s)~~first or only label number indicated in column (5) of Table A of Chapter 3.2 shall be shown in this location.

\*\* *The name of the consignor or of the consignee shall be shown in this location if not shown elsewhere on the package.*

## PART 4

### Chapter 4.1

4.1.1.1 At the end, replace "or reused" with ", reused or remanufactured".

4.1.1.2 Add a new sub-paragraph (c) to read as follows:

"(c) Shall not allow permeation of the dangerous goods that could constitute a danger under normal conditions of ~~transport~~carriage".

~~4.1.1.3~~1.6.1.14 Amend ~~the second sentence~~ to read as follows: "~~However,~~ IBCs manufactured before 1 January 2011 and conforming to a design type which has not passed the vibration test of 6.5.6.13 or which was not required to meet the criteria of 6.5.6.9.5 (d) at the time it was subjected to the drop test, may still be used."

4.1.4.1 **P114** (b) Amend special packing provision PP48 to read as follows:

**"PP48** For UN Nos. 0508 and 0509, metal packagings shall not be used."

**P200** (410) In special packing provision "k", amend the first sentence to read as follows: "Valve outlets shall be fitted with pressure retaining gas-tight plugs or caps having threads that match those of the valve outlets. [and made of material not liable to attack by the contents of the pressure receptacle] [This additional text is contained in RID/ADR but not in UN]". Amend the seventh paragraph ("Each valve shall have a taper threaded connection...") to read as follows: "Each valve shall be capable of withstanding the test pressure of the pressure receptacle and be connected directly to the pressure receptacle by either a taper thread or other means which meets the requirements of ISO 10692-2:2001."

In special packing provision "q", in the first sentence, at the beginning, replace "The valves" with "Valve outlets". In the second sentence, at the end, replace "manifold outlet valve" with "outlet of the manifold valve" and add "pressure retaining" before "gas-tight plug". Add a new third sentence to read as follows: "Gas-tight plugs or caps shall have threads that match those of the valve outlets."

~~Add the following new~~ In special packing provision "ra": amend the introductory phrase to read as follows:

~~"ra:~~—This gas may also be packed in capsules under the following conditions:

- ~~(a) — The mass of gas shall not exceed 150 g per capsule;~~
- ~~(b) — The capsules shall be free from faults liable to impair the strength;~~
- ~~(c) — The leakproofness of the closure shall be ensured by an additional device (cap, crown, seal, binding, etc.) capable of preventing any leakage of the closure during transport carriage;~~
- ~~(d) — The capsules shall be placed in an outer packaging of sufficient strength. A package shall not weigh more than 75 kg."~~

~~**P200** — In Table 2, against UN 1037, add "ra" in column "Special packing provisions".~~

**P203** Amend to read as follows:

P203	PACKING INSTRUCTION	P203
This instruction applies to Class 2 refrigerated liquefied gases.		
<b>Requirements for closed cryogenic receptacles:</b>		
(1) The <a href="#">special packing provisions</a> <del>general requirements</del> of 4.1.6-1 shall be met.		
(2) The requirements of Chapter 6.2 shall be met.		
(3) The closed cryogenic receptacles shall be so insulated that they do not become coated with frost.		
(4) <a href="#">[Existing (5) unchanged]</a> Test pressure Refrigerated liquids shall be filled in closed cryogenic receptacles with the following minimum test pressures:		
(a) For closed cryogenic receptacles with vacuum insulation, the test pressure shall not be less than 1.3 times the sum of the maximum internal pressure of the filled receptacle, including during filling and discharge, plus 100 kPa (1 bar);		
(b) For other closed cryogenic receptacles, the test pressure shall be not less than 1.3 times the maximum internal pressure of the filled receptacle, taking into account the pressure developed during filling and discharge.		
(5) <a href="#">[Existing (6) unchanged]</a> Degree of filling For non-flammable, non-toxic refrigerated liquefied gases ( <a href="#">classification codes 3A and 3O</a> ) the volume of liquid phase at the filling temperature and at a pressure of 100 kPa (1 bar) shall not exceed 98% of the water capacity of the pressure receptacle. For flammable refrigerated liquefied gases ( <a href="#">classification code 3F</a> ) the degree of filling shall remain below the level at which, if the contents were raised to the temperature at which the vapour pressure equalled the opening pressure of the relief valve, the volume of the liquid phase would reach 98% of the water capacity at that temperature.		
(6) <a href="#">[Existing (7) unchanged]</a> Pressure-relief devices Closed cryogenic receptacles shall be fitted with at least one pressure-relief device.		
(7) Compatibility Materials used to ensure the leakproofness of the joints or for the maintenance of the closures shall be compatible with the contents. In the case of receptacles intended for the <del>transport-carriage</del> of oxidizing gases ( <del>i.e. with a subsidiary risk of 5.1</del> <a href="#">classification code 3O</a> ), these materials shall not react with these gases in a dangerous manner.		
<b>Requirements for open cryogenic receptacles:</b>		
Only the following non oxidizing refrigerated liquefied gases <a href="#">of classification code 3A of Division 2.2</a> may be <del>transported-carried</del> in open cryogenic receptacles: UN Nos. 1913, 1951, 1963, 1970, 1977, 2591, 3136 and 3158.		
Open cryogenic receptacles shall be constructed to meet the following requirements:		
(1) The receptacles shall be designed, manufactured, tested and equipped in such a way as to withstand all conditions, including fatigue, to which they will be subjected during their normal use and during normal conditions of <del>transport</del> <a href="#">carriage</a> .		
(2) The capacity shall be not more than 450 litres.		
(3) The receptacle shall have a double wall construction with the space between the inner and outer wall being evacuated (vacuum insulation). The insulation shall prevent the formation of hoar frost on the exterior of the receptacle.		
(4) The materials of construction shall have suitable mechanical properties at the service temperature.		

P203	PACKING INSTRUCTION	P203
(5)	Materials which are in direct contact with the dangerous goods shall not be affected or weakened by the dangerous goods intended to be <del>transported</del> <u>carried</u> and shall not cause a dangerous effect, e.g. catalysing a reaction or reacting with the dangerous goods.	
(6)	Receptacles of glass double wall construction shall have an outer packaging with suitable cushioning or absorbent materials which withstand the pressures and impacts liable to occur under normal conditions of <del>transport</del> <u>carriage</u> .	
(7)	The receptacle shall be designed to remain in an upright position during <del>transport</del> <u>carriage</u> , e.g. have a base whose smaller horizontal dimension is greater than the height of the centre of gravity when filled to capacity or be mounted on gimbals.	
(8)	The openings of the receptacles shall be fitted with devices allowing gases to escape, preventing any splashing out of liquid, and so configured that they remain in place during <del>transport</del> <u>carriage</u> .	
(9)	Open cryogenic receptacles shall bear the following marks permanently affixed e.g. by stamping, engraving or etching: <ul style="list-style-type: none"> <li>- The manufacturer's name and address;</li> <li>- The model number or name;</li> <li>- The serial or batch number;</li> <li>- The UN number and proper shipping name of gases for which the receptacle is intended;</li> <li>- The capacity of the receptacle in litres.</li> </ul>	

**P601 (1) and P602 (1)** In the first indent, replace "capacity of 1 litre" with "net quantity of 1 litre"

**P620** Add the following new additional requirement:

"4. Other dangerous goods shall not be packed in the same packaging as ~~Division~~Class 6.2 infectious substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 ml or less of dangerous goods included in Classes 3, 8 or 9 may be packed in each primary receptacle containing infectious substances. These small quantities of dangerous goods of Classes 3, 8 or 9 are not subject to any additional requirements of ~~these Regulations~~RID/ADR when packed in accordance with this packing instruction."

Renumber existing additional requirement 4. as 5.

**P621** In the second sentence, insert ", except 4.1.1.15," after "4.1.1".

~~**P804 (1)** Replace "metal receptacles" with "metal or rigid plastics receptacle".~~

**P901** Replace "Maximum quantity of dangerous goods per outer packaging: 10 kg." with "The quantity of dangerous goods per outer packaging shall not exceed 10 kg, excluding the mass of any carbon dioxide, solid, (dry ice) used as a refrigerant."

At the end of the additional requirement, add the following new text:

"Dry ice

When carbon dioxide, solid, (dry ice) is used as a refrigerant, the packaging shall be designed and constructed to permit the release of the gaseous carbon dioxide to prevent the build up of pressure that could rupture the packaging."

**P904** Amend to read as follows:

<b>P904</b>	<b>PACKING INSTRUCTION</b>	<b>P904</b>
This instruction applies to UN No. 3245.		
The following packagings are authorized:		
<p>(1) Packagings meeting the provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4, 4.1.1.8 and 4.1.3 and so designed that they meet the construction requirements of 6.1.4. Outer packagings constructed of suitable material of adequate strength and designed in relation to the packaging capacity and its intended use shall be used. Where this packing instruction is used for the <del>transport</del>-carriage of inner packagings of combination packagings the packaging shall be designed and constructed to prevent inadvertent discharge during normal conditions of <del>transport</del>carriage.</p> <p>(2) Packagings, which need not conform to the packaging test requirements of Part 6, but conforming to the following:</p> <p>(a) An inner packaging comprising:</p> <p>(i) primary receptacle(s) and a secondary packaging, the primary receptacle(s) or the secondary packaging shall be leakproof for liquids or siftproof for solids;</p> <p>(ii) for liquids, absorbent material placed between the primary receptacle(s) and the secondary packaging. The absorbent material shall be in a quantity sufficient to absorb the entire contents of the primary receptacle(s) so that any release of the liquid substance will not compromise the integrity of the cushioning material or of the outer packaging;</p> <p>(iii) if multiple fragile primary receptacles are placed in a single secondary packaging they shall be individually wrapped or separated to prevent contact between them;</p> <p>(b) An outer packaging shall be strong enough for its capacity, mass and intended use, and with a smallest external dimension of at least 100 mm.</p>		
<p>For <del>transport</del>carriage, the mark illustrated below shall be displayed on the external surface of the outer packaging on a background of a contrasting colour and shall be clearly visible and legible. The mark shall be in the form of a square set at an angle of 45° (diamond-shaped) with each side having a length of at least 50 mm; the width of the line shall be at least 2 mm and the letters and numbers shall be at least 6 mm high.</p>		
		
<b>Additional requirement:</b>		
<u>Ice, dry ice and liquid nitrogen</u>		

P904	PACKING INSTRUCTION	P904
<p>When dry ice or liquid nitrogen is used, all applicable requirements of <del>these Regulations</del><a href="#">RID/ADR</a> shall be met. When used, ice or dry ice shall be placed outside the secondary packagings or in the outer packaging or an overpack. Interior supports shall be provided to secure the secondary packagings in the original position after the ice or dry ice has dissipated. If ice is used, the outside packaging or overpack shall be leakproof. If carbon dioxide, solid (dry ice) is used, the packaging shall be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that could rupture the packagings and the package (the outer packaging or the overpack) shall be marked "Carbon dioxide, solid" or "Dry ice".</p> <p><i><u>NOTE:</u> <a href="#">If dry ice is used, there are no [other] requirements to be met (see 2.2.9.1.14). If liquid nitrogen is used, it is sufficient to comply [, in addition,] with Chapter 3.3, special provision 593. [same Note as in P650]</a></i></p> <p>The primary receptacle and the secondary packaging shall maintain their integrity at the temperature of the refrigerant used as well as the temperatures and the pressures which could result if refrigeration were lost.</p>		

4.1.4.1 Add the following new packing instruction:

P205	PACKING INSTRUCTION	P205
<p>This instruction applies to UN No. 3468.</p>		
<p>(1) For metal hydride storage systems, the <del>special</del><a href="#">general</a> packing <del>requirements</del><a href="#">provisions</a> of 4.1.6.1 shall be met.</p> <p>(2) Only pressure receptacles not exceeding 150 litres in water capacity and having a maximum developed pressure not exceeding 25 MPa are covered by this packing instruction.</p> <p>(3) Metal hydride storage systems meeting the applicable requirements for the construction and testing of pressure receptacles containing gas of Chapter 6.2 are authorised for the <del>transport</del><a href="#">carriage</a> of hydrogen only.</p> <p>(4) When steel pressure receptacles or composite pressure receptacles with steel liners are used, only those bearing the "H" mark, in accordance with 6.2.2.9.2 (j) shall be used.</p> <p>(5) Metal hydride storage systems shall meet the service conditions, design criteria, rated capacity, type tests, batch tests, routine tests, test pressure, rated charging pressure and provisions for pressure relief devices for transportable metal hydride storage systems specified in ISO 16111:2008 (<a href="#">Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride</a>) and their conformity and approval shall be assessed in accordance with 6.2.2.5.</p> <p>(6) Metal hydride storage systems shall be filled with hydrogen at a pressure not exceeding the rated charging pressure shown in the permanent markings on the system as specified by ISO 16111:2008.</p> <p>(7) The periodic test requirements for a metal hydride storage system shall be in accordance with ISO 16111:2008 and carried out in accordance with 6.2.2.6, and the interval between periodic inspections shall not exceed five years.</p>		

4.1.4.2 **IBC04** Replace ", 21N, 31A, 31B and 31N" with "and 21N".

**IBC05** In (1), replace ", 21N, 31A, 31B and 31N" with "and 21N".  
In (2), replace ", 21H2, 31H1 and 31H2" with "and 21H2".  
In (3), replace ", 21HZ1 and 31HZ1" with "and 21HZ1".

**IBC06, IBC07 and IBC08**

In (1), replace ", 21N, 31A, 31B and 31N" with "and 21N".

In (2), replace ", 21H2, 31H1 and 31H2" with "and 21H2".

In (3), replace ", 21HZ2, 31HZ1 and 31HZ2" with "and 21HZ2".

**IBC06** Amend the additional requirement to read as follows:

**"Additional requirement:**

Where the solid may become liquid during ~~transport~~ [carriage](#) see 4.1.3.4."

**IBC07** Amend the additional requirement to read as follows:

**"Additional requirements:**

1. Where the solid may become liquid during ~~transport~~ [carriage](#) see 4.1.3.4.
2. Liners of wooden IBCs shall be siftproof."

**IBC08** Add the following new additional requirement:

**"Additional requirement:**

Where the solid may become liquid during ~~transport~~ [carriage](#) see 4.1.3.4."

**IBC520** For UN No. 3109, in the entry for Peroxyacetic acid, stabilized, not more than 17% (last entry), add "31H2" in column "Type of IBC" and add "1500" in column "Maximum quantity (litres/kg)" against this code.

**IBC620** In the second sentence, insert ", except 4.1.1.15" after "4.1.1".

4.1.5.5 Amend to read as follows:

"4.1.5.5 Unless otherwise specified in ~~these Regulations~~ [RID/ADR](#), packagings, including IBCs and large packagings, shall conform to the requirements of chapters 6.1, 6.5 or 6.6, as appropriate, and shall meet their test requirements for packing group II."

~~4.1.6.1.8 — In the last paragraph, replace "the requirements of annex B of ISO 10297:1999" with "the requirements of annex A of ISO 10297:2006". At the end, add the following new paragraph:~~

~~[ "For metal hydride storage systems, the valve protection requirements specified in ISO 16111:2008 shall be met." ]~~ [\[This sentence may be added in 4.1.6.14.\]](#)

4.1.6.1-10 In the first sentence, ~~insert~~ [replace "or P203" with ", P203](#) or P205, as applicable" after "P200".

4.1.7.1 Amend the heading to read "Use of packagings (except IBCs)".

4.1.7.1.1 Amend to read as follows:

"4.1.7.1.1 Packagings for organic peroxides and self-reactive substances shall conform to the requirements of Chapter 6.1 and shall meet its test requirements for packing group II."

4.1.7.2.1 At the end, add the following new sentence: "IBCs shall conform to the requirements of Chapter 6.5 and shall meet its test requirements for packing group II."

~~4.1.9.1.3 In the first sentence, after "package", insert ", other than an excepted package,".~~

4.1.9.1.5 Amend to read as follows:

"4.1.9.1.5 For radioactive material having other dangerous properties the package design shall take into account those properties. Radioactive material with a subsidiary risk, packaged in packages that do not require competent authority approval, shall be ~~transported~~carried in packagings, IBCs, tanks or bulk containers fully complying with the requirements of the relevant chapters of Part 6 as appropriate, as well as applicable requirements of chapters 4.1, 4.2 or 4.3 for that subsidiary risk."

~~4.1.9.2.3 (b) Replace "2.7.2.3.2" with "2.7.1.2".~~

4.1.9.3 (a) Insert "(or mass of each fissile nuclide for mixtures when appropriate)" after "a mass of fissile material".

## Chapter 4.2

4.2.5.2.6 In the table for portable tank instructions T1-T22, add a reference to a new footnote b after "Bottom opening requirements" in the heading of the last column. The footnote shall read as follows:

*"<sup>b</sup> When this column indicates "~~not~~Not allowed", bottom openings are not permitted when the substance to be ~~transported~~carried is a liquid (see 6.7.2.6.1). When the substance to be ~~transported~~carried is a solid at all temperatures encountered under normal conditions of ~~transport~~carriage, bottom openings conforming to the requirements of 6.7.2.6.2 are authorized."*

4.2.5.3 At the end, add the following new special provisions:

"TP36 Fusible elements in the vapour space may be used on portable tanks.

TP37 The portable tank instructions prescribed in RID/ADR applicable up to 31 December 2010~~the Model Regulations annexed to the 15th revised edition of the Recommendations on the Transport of Dangerous Goods~~ may continue to be applied until 31 December 2016."

Consequential amendment:

1.6.4 Add the following new transitional measure:

"1.6.4.36 For substances where TP 37 is assigned in column (11) of Table A of Chapter 3.2, the portable tank instruction prescribed in RID/ADR applicable up to 31 December 2010 may continue to be applied until 31 December 2016."

~~4.2.6~~ Add a new section 4.2.6 to read as follows:

1.6.4 Add the following new transitional measures:

~~"4.2.6~~ **Transitional measures**

"1.6.4.37 Portable tanks and MEGCs manufactured before 1 January 2012, that conform to the marking requirements of 6.7.2.20.1, 6.7.3.16.1, 6.7.4.15.1 or 6.7.5.13.1 ~~of the Model Regulations on the Transport of Dangerous Goods annexed to the 15th revised edition of the Recommendations on the Transport of Dangerous Goods~~ applicable up to 31 December 2010, as relevant, may continue to be used if they comply with all other relevant requirements of RID/ADR applicable as from 1 January 2011 ~~the current edition of the Model Regulations~~ including, when applicable, the requirement of 6.7.2.20.1 (g) for marking the symbol "S" on the plate when the shell or the compartment is divided by surge plates into sections of not more than 7 500 litres capacity. When the shell, or the compartment, was already divided by surge plates into sections of not more than 7 500 litres capacity before 1 January 2012, the capacity of the shell, or respectively of the compartment, need not be supplemented with the symbol "S" until the next periodic inspection or test according to 6.7.2.19.5 is performed.

1.6.4.38 Portable tanks manufactured before 1 January 2014 need not be marked with the portable tank instruction as required in 6.7.2.20.2, 6.7.3.16.2 and 6.7.4.15.2 until the next periodic inspection and test."

## PART 5

### Chapter 5.1

5.1.5.1.4 (a) Insert "the competent authority of the country of origin of the shipment and to" after "have been submitted to".

5.1.5.1.4 (b) At the end, insert "the competent authority of the country of origin of the shipment and" after "shall notify".

5.1.5.1.4 (d) In sub-paragraph (v), insert "(or of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

5.1.5.3.4 (d) and (e) Replace "when otherwise specified in the competent authority approval certificate of the country of origin of design (see 2.2.7.2.4.6)" with "under the provisions of 5.1.5.3.5".

5.1.5.3.5 Add a new paragraph 5.1.5.3.5 to read as follows:

"5.1.5.3.5 In all cases of international ~~transport~~-carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the categorization shall be in accordance with the certificate of the country of origin of design".

5.1.5.4 Add a new sub-section 5.1.5.4 to read as follows, and renumber existing 5.1.5.4 as 5.1.5.5:

**"5.1.5.4 *Specific provisions for excepted packages***

5.1.5.4.1 Excepted packages shall be legibly and durably marked on the outside of the packaging with:

- (a) The UN number preceded by the letters "UN";
- (b) An identification of either the consignor or consignee, or both; and
- (c) The permissible gross mass if this exceeds 50 kg.

5.1.5.4.2 The documentation requirements of Chapter 5.4 do not apply to excepted packages of radioactive material, except that the UN number preceded by the letters "UN" shall be shown on ~~a~~-the transport document ~~such as a bill of lading, air waybill or other similar document~~".

**Chapter 5.2**

5.2.1.~~57~~.2 Amend the second sentence to read "The marking of excepted packages shall be as required by 5.1.5.4.1".

5.2.1.~~57~~.8 Amend to read as follows:

"5.2.1.~~57~~.8 In all cases of international ~~transport~~-carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, marking shall be in accordance with the certificate of the country of origin of the design."

5.2.1.~~68~~.1 Amend to read as follows:

"5.2.1.~~68~~.1 Packages containing environmentally hazardous substances meeting the criteria of ~~2.9.3 (UN Nos. 3077 and 3082)~~2.2.9.1.10 shall be durably marked with the environmentally hazardous substance mark shown in 5.2.1.8.3 with the exception of single packagings and combination packagings where such single packagings or inner packagings of such combination packagings have:

- a net quantity of 5 l or less for liquids; or

- a net mass of 5 kg or less for solids."

5.2.1.79.1 Replace "ISO 780:1985" with "ISO 780:1997".

5.2.1.79.2 (d) Delete "or" at the end.

5.2.1.79.2 (e) Add "or" at the end.

5.2.1.79.2 Add a new sub-paragraph (f) to read as follows:

"(f) Combination packagings containing hermetically sealed inner packagings each containing not more than 500 ml."

5.2.2.1.4211.2 (b) In the second sentence, insert "(or mass of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

5.2.2.1.4211.5 Amend to read as follows:

"5.2.2.1.4211.5 In all cases of international ~~transport~~ carriage of packages requiring competent authority design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, labelling shall be in accordance with the certificate of the country of origin of design."

5.2.2.2 Amend the heading for specimen label No. 9 to read as follows:

"CLASS 9:  
Miscellaneous dangerous substances and articles, including environmentally hazardous substances".

## Chapter 5.3

~~5.3.1.1.1~~ ~~Delete the text and add the mention "Deleted".~~ [Definition of transport unit]

~~5.3.2.1.1 (e)~~ ~~Amend to read as follows:~~

~~"(e) Packaged radioactive material with a single UN number in or on a vehicle, or in a freight container, when required to be transported carried under exclusive use."~~

5.3.2.1.4 In the first sentence, replace "under exclusive use" with "required to be carried under exclusive use". In the second sentence, insert "when required to be" before "carried under exclusive use".

## Chapter 5.4

~~Amend the introductory note to read as follows:~~ (RID:) In the Note / (ADR/ADN:) In Note 2, add the following sentence at the end:

~~"NOTE: — These Regulations do not preclude the use of electronic data processing (EDP) and electronic data interchange (EDI) transmission techniques as an alternative to paper documentation. All references to "[dangerous goods] transport document" in this Chapter also include provision of the required information by use of EDP and EDI transmission techniques."~~

~~5.4.1 and 5.4.1.1 Amend to read as follows:~~

## ~~"5.4.1 — Dangerous goods transport information~~

### ~~5.4.1.1 — General~~

In 1.4.2.1.1 (b) Replace "transport documents and accompanying documents" with "documents".  
At the end, add:

~~5.4.1.1.1 — Except as otherwise provided, the consignor who offers dangerous goods for transport carriage shall give to the carrier the information applicable to those dangerous goods, including any additional information and documentation as specified in these Regulations. This information may be provided on a dangerous goods transport document or, with the agreement of the carrier, by EDP or EDI techniques.~~

~~5.4.1.1.2 — When a paper document is used, the consignor shall give the initial carrier a copy of the dangerous goods transport document, completed and signed as required in this Chapter.~~

Add a new 5.4.1.4.3 to read as follows:

~~5.4.1.4.3~~5.4.1.1.3 When the dangerous goods transport information is given to the carrier by EDP or EDI techniques, the consignor shall be able to produce the information without delay as a paper document, with the information in the sequence required by this Chapter."

~~5.4.1.4.3 (b)~~5.4.1.1.6.1 At the end, replace "proper shipping name required in 5.4.1.1.1 (b)" with "dangerous goods description specified in ~~5.4.1.4.1~~5.4.1.1.1 (a) to ~~(e)~~(c)".

~~5.4.1.5.1~~5.4.1.1.1 (e) At the end, add the following new note:

*"NOTE: The number, type and capacity of each inner packaging within the outer packaging of a combination packaging is not required to be indicated."*

~~5.4.1.5.7.1~~5.4.1.2.5.1 (c) In the second sentence, insert "(or mass of each fissile nuclide for mixtures when appropriate)" after "the mass of fissile material".

~~5.4.1.2.5.1~~5.4.1.5.7.1 (j) At the end, add: "For radioactive material for which the A<sub>2</sub> value is unlimited, the multiple of A<sub>2</sub> shall be zero."

~~5.4.1.5.7.3~~5.4.1.2.5.3 Amend to read as follows:

~~5.4.1.2.5.3~~5.4.1.5.7.3 In all cases of international transport carriage of packages requiring competent authorities design or shipment approval, for which different approval types apply in the different countries concerned by the shipment, the UN number and proper shipping name

required in ~~5.4.1.4.1~~5.4.1.1.1 shall be in accordance with the certificate of the country of origin of design."

~~5.4.1.6.2~~ — Amend to read as follows:

~~"5.4.1.6.2 — If the dangerous goods documentation is presented to the carrier by means of EDP or EDI transmission techniques, the signature(s) may be electronic signature(s) or may be replaced by the name(s) (in capitals) of the person authorized to sign."~~

~~5.4.1.6.3~~ — Add a new paragraph 5.4.1.6.3 to read as follows:

~~"5.4.1.6.3 — When the dangerous goods transport information is given to a carrier by EDP or EDI techniques and subsequently the dangerous goods are transferred to a carrier that requires a paper dangerous goods transport document, the carrier shall ensure that the paper document indicates "Original received electronically" and the name of the signatory shall be shown in capital letters."~~

[Footnote 4 to 5.4.2 to be checked after consideration of draft amendments to section 5.4.2 of the IMDG code by IMO.]

[5.4.2.3 Amend to read as follows:

"5.4.2.3 If the dangerous goods documentation is presented to the carrier by means of EDP or EDI transmission techniques, the signature(s) may be electronic signature(s) or may be replaced by the name(s) (in capitals) of the person authorized to sign."

5.4.2.4 Add a new paragraph 5.4.2.4 to read as follows:

"5.4.2.4 When the dangerous goods transport information is given to a carrier by EDP or EDI techniques and subsequently the dangerous goods are transferred to a carrier that requires a paper dangerous goods transport document, the carrier shall ensure that the paper document indicates "Original received electronically" and the name of the signatory shall be shown in capital letters.".]

5.4.4 ~~Add~~ Insert a new section 5.4.4 to read as follows:

**5.4.4 Retention of dangerous goods transport information**

5.4.4.1 The consignor and the carrier shall retain a copy of the dangerous goods transport document and additional information and documentation as specified in ~~these Regulations~~RID/ADR/ADN, for a minimum period of three months.

5.4.4.2 When the documents are kept electronically or in a computer system, the consignor and the carrier shall be able to reproduce them in a printed form."

Renumber 5.4.4 as 5.4.6.

## Chapter 5.5

Amend to read as follows:

## "CHAPTER 5.5

### SPECIAL PROVISIONS

**5.5.1** *(Deleted)*-

**5.5.2** **Special provisions applicable to fumigated cargo transport units (UN 3359)**

**5.5.2.1** *General*

5.5.2.1.1 Fumigated cargo transport units (UN 3359) containing no other dangerous goods are not subject to any provisions of ~~these Regulations~~ [RID/ADR/ADN](#) other than those of this section.

5.5.2.1.2 When the fumigated cargo transport unit is loaded with dangerous goods in addition to the fumigant, any provision of [RID/ADR/ADN](#) ~~these Regulations~~ relevant to these goods (including placarding, marking and documentation) applies in addition to the provisions of this section.

5.5.2.1.3 Only cargo transport units that can be closed in such a way that the escape of gas is reduced to a minimum shall be used for the ~~transport~~ [carriage](#) of cargo under fumigation.

**5.5.2.2** *Training*

Persons engaged in the handling of fumigated cargo transport units shall be trained commensurate with their responsibilities.

**5.5.2.3** *Marking and placarding*

5.5.2.3.1 A fumigated cargo transport unit shall be marked with a warning mark, as specified in 5.5.2.3.2, affixed at each access point in a location where it will be easily seen by persons opening or entering the cargo transport unit. This mark shall remain on the cargo transport unit until the following provisions are met:

- (a) The fumigated cargo transport unit has been ventilated to remove harmful concentrations of fumigant gas; and
- (b) The fumigated goods or materials have been unloaded.

5.5.2.3.2 The fumigation warning mark shall be rectangular and shall not be less than 300 mm wide and 250 mm high. The markings shall be in black print on a white background with lettering not less than 25 mm high. An illustration of this mark is given in ~~Figure 5.5.1~~ [the figure below](#).

**Figure 5.5.1: Fumigation warning mark**

(Existing ~~mark~~ fumigation warning sign unchanged)

5.5.2.3.3 If the fumigated cargo transport unit has been completely ventilated either by opening the doors of the unit or by mechanical ventilation after fumigation, the date of ventilation shall be marked on the fumigation warning mark.

5.5.2.3.4 When the fumigated cargo transport unit has been ventilated and unloaded, the fumigation warning mark shall be removed.

5.5.2.3.5 ~~Class 9 placards~~ Placards conforming to (Model-model No. 9; (see 5.2.2.2.2) shall not be affixed to a fumigated cargo transport unit except as required for other Class 9 substances or articles packed therein.

**5.5.2.4 Documentation**

5.5.2.4.1 Documents associated with the ~~transport-carriage~~ of cargo transport units that have been fumigated and have not been completely ventilated before ~~transport-carriage~~ shall include the following information:

- "UN 3359, fumigated cargo transport unit, 9" [, or UN 3359, fumigated cargo transport unit, class 9][this second possibility does not exist for RID/ADR but exists in the IMDG code];
- The date and time of fumigation; and
- The type and amount of the fumigant used.

[These particulars shall be drafted in an official language of the forwarding country and also, if the language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise.]

5.5.2.4.2 The transport document may be in any form, provided it contains the information required in 5.5.2.4.1. This information shall be easy to identify, legible and durable.

5.5.2.4.3 Instructions for disposal of any residual fumigant including fumigation devices (if used) shall be provided.

5.5.2.4.4 A document is not required when the fumigated cargo transport unit has been completely ventilated and the date of ventilation has been marked on the warning mark (see 5.5.2.3.3 and 5.5.2.3.4).".

**PART 6**

**Chapter 6.1**

6.1.3.1 (a) (i) Amend the second sentence to read as follows: "This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.".

6.1.4.0 Add a new sub-section 6.1.4.0 to read as follows:

**"6.1.4.0      *General requirements***

Any permeation of the substance contained in the packaging shall not constitute a danger under normal conditions of ~~transport~~carriage."

6.1.5.3.6.3 Amend to read as follows:

"6.1.5.3.6.3 The packaging or outer packaging of a composite or combination packaging shall not exhibit any damage liable to affect safety during ~~transport~~carriage. Inner receptacles, inner packagings, or articles shall remain completely within the outer packaging and there shall be no leakage of the filling substance from the inner receptacle(s) or inner packaging(s)."

**Chapter 6.2**

~~After the heading of the Chapter, add the following new note:~~

~~"NOTE: — Aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas are not subject to the requirements of 6.2.1 to 6.2.3."~~

6.2.1 ~~Delete the~~Transfer the note after the heading after the Chapter heading.

6.2.1.1.5 At the end, add the following new sentence: "The test pressure of a metal hydride storage system shall be in accordance with packing instruction P205 of 4.1.4.1."

6.2.1.3.4 Insert ~~","~~"or P205" after "P200 (~~±~~)".

6.2.1.5.1 Insert "and metal hydride storage systems" after "cryogenic receptacles".

6.2.1.5.3 Add a new paragraph 6.2.1.5.3 to read as follows:

"6.2.1.5.3 For metal hydride storage systems, it shall be verified that the inspections and tests specified in 6.2.1.5.1 (a), (b), (c), (d), (e) if applicable, (f), (g), (h) and (i) have been performed on an adequate sample of the receptacles used in the metal hydride storage system. In addition, on an adequate sample of metal hydride storage systems, the inspections and tests specified in 6.2.1.5.1 (c) and (f) shall be performed, as well as 6.2.1.5.1 (e), if applicable, and inspection of the external conditions of the metal hydride storage system.

Additionally, all metal hydride storage systems shall undergo the initial inspections and tests specified in 6.2.1.5.1 (h) and (i), as well as a leakproofness test and a test of the satisfactory operation of the service equipment."

6.2.1.6.1 ~~At the end, add the following new note:~~

~~"NOTE: For the periodic inspection and test frequencies, see packing instruction P200 of 4.1.4.1."~~

6.2.1.6.1 ~~(d)~~ In Note 2, delete ", ultrasonic examination". Add the following new sentence at the end: "ISO 16148:2006 may be used as a guide for acoustic emission testing procedures."

~~Add~~ Insert a new Note 3 to read as follows:

*"NOTE 3: The hydraulic pressure test may be replaced by ultrasonic examination carried out in accordance with ISO 10461:2005+A1:2006 for seamless aluminium alloy gas cylinders and in accordance with ISO 6406:2005 for seamless steel gas cylinders."*

Renumber Note 3 as Note 4.

6.2.2.1.1 In the table, add the following three new entries:

ISO 4706:2008	Gas cylinders – Refillable welded steel cylinders – Test pressure 60 bar and below
ISO 20703:2006	Gas cylinders – Refillable welded aluminium-alloy cylinders – Design, construction and testing
ISO 18172-1:2007	Gas cylinders – Refillable welded stainless steel cylinders – Part 1: Test pressure 6 MPa and below

[In the table, insert the new entries after ISO 7866:1999 standard.

Insert them in the following order: ISO 4706:2008, ISO 18172-1:2007, ISO 20703:2006.]

6.2.2.1.5 Add a new paragraph 6.2.2.1.5 to read as follows:

"6.2.2.1.5 The following standards ~~s~~ applies for the design, construction, and initial inspection and test of UN metal hydride storage systems, except that inspection requirements related to the conformity assessment system and approval shall be in accordance with 6.2.2.5:

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride
----------------	---

".

6.2.2.2 At the beginning, in the text between brackets, insert "or P205" after "P200".

6.2.2.3 ~~Replace "ISO 10297:1999" with "ISO 10297:2006".~~

~~At the end, add the following new paragraph:~~

"For UN metal hydride storage systems, the requirements specified in the following standard apply to closures and their protection:

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride
----------------	---

".

6.2.2.4 At the beginning, insert "and UN metal hydride storage systems" after "UN cylinders" and in the table, add the following new entry at the end:

ISO 16111:2008	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride
----------------	---

6.2.2.7 After the heading, add the following new note:

**"NOTE:** *Marking requirements for UN metal hydride storage systems are given in 6.2.2.9.*".

Assign paragraph number 6.2.2.7.1 to the first unnumbered paragraph under 6.2.2.7. Renumber subsequent paragraphs and cross-references accordingly. Add a new paragraph 6.2.2.7.9 to read as follows:

"6.2.2.7.9 For bundles of cylinders, pressure receptacle marking requirements shall only apply to the individual cylinders of a bundle and not to any assembly structure."

6.2.2.7.2 (a) (existing 6.2.2.7.1 (a)) Amend the second sentence to read as follows: "This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;"

6.2.2.8 Assign paragraph number 6.2.2.8.1 to the first unnumbered paragraph under 6.2.2.8. Renumber the following paragraphs accordingly.

Renumber existing 6.2.2.9 as 6.2.2.10. As a consequence, amend the reference to 6.2.2.9 in 1.6.2.7, 1.8.7 (Note), 1.8.7.1.1 and 1.8.7.1.4.

6.2.2.9 Add a new sub-section 6.2.2.9 to read as follows:

**"6.2.2.9 Marking of UN metal hydride storage systems**

6.2.2.9.1 UN metal hydride storage systems shall be marked clearly and legibly with the marks listed below. These marks shall be permanently affixed (e.g. stamped, engraved, or etched) on the metal hydride storage system. The marks shall be on the shoulder, top end or neck of the metal hydride storage system or on a permanently affixed component of the metal hydride storage system. Except for the ~~United Nations~~UN packaging symbol, the minimum size of the marks shall be 5 mm for metal hydride storage systems with a smallest overall dimension greater than or equal to 140 mm and 2.5 mm for metal hydride storage systems with a smallest overall dimension less than 140 mm. The minimum size of the ~~United Nations~~UN packaging symbol shall be 10 mm for metal hydride storage systems with a smallest overall dimension greater than or equal to 140 mm and 5 mm for metal hydride storage systems with a smallest overall dimension less than 140 mm.

6.2.2.9.2 The following marks shall be applied:

- (a) The United Nations packaging symbol  ;

This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

- (b) "ISO 16111" (the technical standard used for design, manufacture and testing);
- (c) The character(s) identifying the country of approval as indicated by the distinguishing signs of motor vehicles in international traffic<sup>2</sup>;

*[See if the same Note as in 6.2.2.7.1 should be added]*

*[NOTE: The country of approval shall be understood to be the country that approved the body which inspected the individual receptacle at the time of manufacture.]*

- (d) The identity mark or stamp of the inspection body that is registered with the competent authority of the country authorizing the marking;
- (e) The date of the initial inspection, the year (four digits) followed by the month (two digits) separated by a slash (i.e. "/");

<sup>2</sup> *Distinguishing signs for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).*

- (f) The test pressure of the receptacle in bar, preceded by the letters "PH" and followed by the letters "BAR";
- (g) The rated charging pressure of the metal hydride storage system in bar, preceded by the letters "RCP" and followed by the letters "BAR";
- (h) The manufacturer's mark registered by the competent authority. When the country of manufacture is not the same as the country of approval, then the manufacturer's mark shall be preceded by the character(s) identifying the country of manufacture as indicated by the distinguishing signs of motor vehicles in international traffic<sup>2</sup>. The country mark and the manufacturer's mark shall be separated by a space or slash;
- (i) The serial number assigned by the manufacturer;
- (j) In the case of steel receptacles and composite receptacles with steel liner, the letter "H" showing compatibility of the steel (see ISO 11114-1:1997); and,
- (k) In the case of metal hydride storage systems having limited life, the date of expiry, denoted by the letters "FINAL" followed by the year (four digits) followed by the month (two digits) separated by a slash (i.e. "/").

The certification marks specified in (a) to (e) above shall appear consecutively in the sequence given. The test pressure (f) shall be immediately preceded by the rated charging pressure (g). The manufacturing marks specified in (h) to (k) above shall appear consecutively in the sequence given.

6.2.2.9.3 Other marks are allowed in areas other than the side wall, provided they are made in low stress areas and are not of a size and depth that will create harmful stress concentrations. Such marks shall not conflict with required marks.

---

<sup>2</sup> *Distinguishing signs for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).*

6.2.2.9.4 In addition to the preceding marks, each metal hydride storage system that meets the periodic and test requirements of 6.2.2.4 shall be marked indicating:

- (a) The character(s) identifying the country authorizing the body performing the periodic inspection and test, as indicated by the distinguishing sign of motor vehicles in international traffic<sup>2</sup>. This marking is not required if this body is approved by the competent authority of the country approving manufacture;
- (b) The registered mark of the body authorised by the competent authority for performing periodic inspection and test;
- (c) The date of the periodic inspection and test, the year (two digits) followed by the month (two digits) separated by a slash (i.e. "/" ). Four digits may be used to indicate the year.

The above marks shall appear consecutively in the sequence given."

~~6.2.4.3~~6.2.6.3.3 Amend to read as follows:

"~~6.2.4.3~~6.2.6.3.3 With the approval of the competent authority, aerosols and receptacles, small, are not subject to ~~6.2.4.1~~6.2.6.3.1 and ~~6.2.4.2~~6.2.6.3.2, if they are required to be sterile but may be adversely affected by water bath testing, provided:

- (a) They contain a non-flammable gas and either
  - (i) contain other substances that are constituent parts of pharmaceutical products for medical, veterinary or similar purposes;
  - (ii) contain other substances used in the production process for pharmaceutical products; or
  - (iii) are used in medical, veterinary or similar applications;
- (b) An equivalent level of safety is achieved by the manufacturer's use of alternative methods for leak detection and pressure resistance, such as helium detection and water bathing a statistical sample of at least 1 in 2000 from each production batch; and
- (c) For pharmaceutical products according to (a) (i) and (iii) above, they are manufactured under the authority of a national health administration. If required by the competent authority, the principles of Good Manufacturing Practice (GMP) established by the World Health Organization (WHO)<sup>2</sup> shall be followed."

---

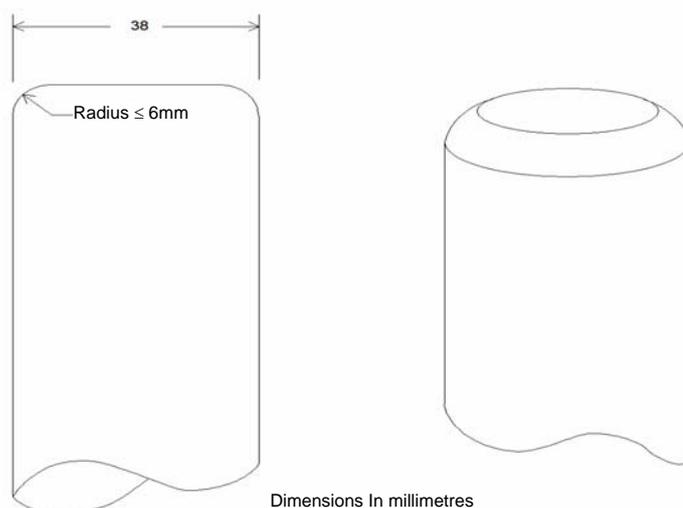
<sup>2</sup> *Distinguishing signs for motor vehicles in international traffic prescribed in the Vienna Convention on Road Traffic (1968).*

<sup>2</sup> *WHO Publication: "Quality assurance of pharmaceuticals. A compendium of guidelines and related materials. Volume 2: Good manufacturing practices and inspection".*

## Chapter 6.3

- 6.3.4.2 (a) Amend the second sentence to read as follows: "This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;".
- 6.3.5.4.1 In the second sentence, insert "(see Figure ~~6.3.1~~6.3.5.4.2)" after "not exceeding 6 mm".
- 6.3.5.4.2 In the third sentence, insert "(see Figure 6.3.5.4.2~~6.3.1~~)" after "not exceeding 6 mm". At the end, insert the following new figure:

Figure 6.3.5.4.2~~6.3.1~~



## Chapter 6.4

- 6.4.2.9 Delete "otherwise".
- ~~6.4.5.4.2~~6.4.5.4.3 (c) Replace "an increase of more than 20%" with "more than a 20% increase".
- 6.4.5.4.4 Replace "of a permanent enclosed character" with "with the characteristics of a permanent enclosure". In sub-paragraph (c), insert "and subsequent amendments 1:1993, 2:1998, 3:2005, 4:2006 and 5:2006," after "Part 1: General Cargo Containers".
- ~~6.4.5.4.4 (c) (ii) and 6.4.5.4.5 (b) (ii)~~ Replace "~~any increase of more than 20%~~" with "~~more than a 20% increase~~".

- 6.4.6.1 Replace "ISO 7195:1993 "Packaging of uranium hexafluoride (UF<sub>6</sub>) for transport"" with "ISO 7195:2005 "Nuclear Energy – Packaging of uranium hexafluoride (UF<sub>6</sub>) for transport"".
- 6.4.6.2 (a) Replace "ISO 7195:1993" with "ISO 7195:2005".
- 6.4.6.4 (a) Replace "ISO 7195:1993" with "ISO 7195:2005".
- 6.4.7.16 (b) (ii) Replace "designed to ensure retention of the liquid contents" by "designed to enclose the liquid contents completely and ensure their retention".
- 6.4.11.5 Amend to read as follows:
- "6.4.11.5 The package, after being subjected to the tests specified in 6.4.15, shall:
- (a) Preserve the minimum overall outside dimensions of the package to at least 10 cm; and
- (b) Prevent the entry of a 10 cm cube."
- 6.4.11.7 (a) Replace "each of which" by "not less than two of which". The second amendment does not apply to the English text. [\[Remplacer "dont chacune conserverait son" par "dont deux au moins conserveraient leur". Remplacer "la maintenance" par "l'entretien" et "contrôler la fermeture" par "démontrer la fermeture".\]](#)
- 6.4.13 (c) Replace "6.4.11.12" with "6.4.11.13".
- 6.4.15.5 The first amendment does not apply to the English version. [\[Dans le texte avant les alinéas, supprimer "au moins".\]](#) Amend sub-paragraph (a) to read as follows:
- "(a) A total weight equal to 5 times the maximum weight of the package; and".
- 6.4.23.11 (h), 6.4.23.12 (j), 6.4.23.13 (j) and 6.4.23.14 (l) The amendment does not apply to the English text. [\[Dans la première phrase, remplacer "description" par "spécification".\]](#)
- 6.4.23.12 (h) The amendment does not apply to the English text. [Remplacer "complémentaires" par "supplémentaires".](#)
- 6.4.23.12 (j), 6.4.23.13 (j), 6.4.23.14 (l) In the second sentence, replace "(for fissile material)" with "(for fissile material or for each fissile nuclide when appropriate)".
- 6.4.23.14 (g) The amendment does not apply to the English text. [Remplacer "Les renvois" par "Des renvois".](#)
- 6.4.23.14 (j) In the second sentence, replace "should" with "shall".

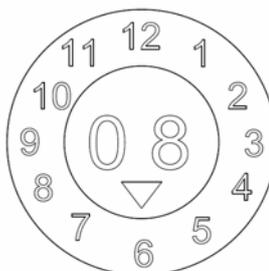
## Chapter 6.5

6.5.2.1.1 (a) Amend the second sentence to read as follows: "This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7."

6.5.2.2.4 Amend to read as follows:

"6.5.2.2.4 The inner receptacle of composite IBCs manufactured after 1 January 2011 shall bear the markings indicated in 6.5.2.1.1 (b), (c), (d) where this date is that of the manufacture of the plastics inner receptacle, (e) and (f). The UN packaging symbol shall not be applied. The marking shall be applied in the sequence shown in 6.5.2.1.1. It shall be durable, legible and placed in a location so as to be readily visible when the inner receptacle is placed in the outer casing.

The date of the manufacture of the plastics inner receptacle may alternatively be marked on the inner receptacle adjacent to the remainder of the marking. An example of an appropriate marking method is:



".

6.5.2.4 Add a new paragraph 6.5.2.4 to read as follows:

### "6.5.2.4 *Marking of remanufactured composite IBCs (31HZ1)*

The marking specified in 6.5.2.1.1 and 6.5.2.2 shall be removed from the original IBC or made permanently illegible and new markings shall be applied to an IBC remanufactured in accordance with ~~these Regulations~~ [RID/ADR](#)."

6.5.4.1 At the beginning, insert ", remanufactured, repaired" after "manufactured". At the end, insert ", remanufactured or repaired" after "manufactured".

6.5.6.9.5 (d) At the end, add the following new note:

*"NOTE: The criteria in (d) apply to design types for IBCs manufactured as from 1 January 2011."*

**Chapter 6.6**

6.6.1.2 Replace "and tested" with ", tested and remanufactured" and, at the end, insert "or remanufactured large" after "each manufactured".

6.6.3.1 (a) Amend the second sentence to read as follows: "This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7.".

6.6.5.2.2 Amend to read as follows:

"6.6.5.2.2 In the drop tests for liquids, when another substance is used, it shall be of similar relative density and viscosity to those of the substance being ~~transported~~carried. Water may also be used for the liquid drop test under the conditions in 6.6.5.3.4.4.".

6.6.5.3.4.4 Amend to read as follows:

"6.6.5.3.4.4 Drop height

**NOTE:** *Large packagings for substances and articles of Class 1 shall be tested at the packing group II performance level.*

6.6.5.3.4.4.1 For inner packagings containing solid or liquid substances or articles, if the test is performed with the solid, liquid or articles to be ~~transported~~carried, or with another substance or article having essentially the same characteristics:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

6.6.5.3.4.4.2 For inner packagings containing liquids if the test is performed with water:

(a) Where the substances to be ~~transported~~carried have a relative density not exceeding 1.2:

Packing group I	Packing group II	Packing group III
1.8 m	1.2 m	0.8 m

(b) Where the substances to be ~~transported~~carried have a relative density exceeding 1.2, the drop height shall be calculated on the basis of the relative density (d) of the substance to be carried, rounded up to the first decimal, as follows:

Packing group I	Packing group II	Packing group III
$d \times 1.5$ (m)	$d \times 1.0$ (m)	$d \times 0.67$ (m)

".

## Chapter 6.7

6.7.2.6.2 (a) Amend to read as follows:

"(a) An external stop-valve, fitted as close to the shell as reasonably practicable, and so designed as to prevent any unintended opening through impact or other inadvertent act; and".

6.7.2.8.4 At the end, add the following sentence: "In addition, fusible elements conforming to 6.7.2.10.1 may also be used."

6.7.2.10.1 In the first sentence, replace "110 °C" with "100 °C". In the second sentence, replace "in no case shall they" with "when used for transport safety purposes, they shall not". In the third sentence, replace "utilized" with "used" and at the end of the sentence, add "unless specified by special provision TP36 in Column (11) of ~~the Dangerous Goods List~~ [Table A](#) of Chapter 3.2."

6.7.2.20.1 Amend to read as follows:

"6.7.2.20.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

- (a) Owner information
  - (i) Owner's registration number;
- (b) Manufacturing information
  - (i) Country of manufacture;
  - (ii) Year of manufacture;
  - (iii) Manufacturer's name or mark;
  - (iv) Manufacturer's serial number;
- (c) Approval information

(i) The United Nations packaging symbol



This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;

- (ii) Approval country;
- (iii) Authorized body for the design approval;
- (iv) Design approval number;
- (v) Letters 'AA', if the design was approved under alternative arrangements (see 6.7.1.2);
- (vi) Pressure vessel code to which the shell is designed;

- (d) Pressures
  - (i) MAWP (in bar gauge or kPa gauge)<sup>2</sup>;
  - (ii) Test pressure (in bar gauge or kPa gauge)<sup>2</sup>;
  - (iii) Initial pressure test date (month and year);
  - (iv) Identification mark of the initial pressure test witness;
  - (v) External design pressure<sup>3</sup> (in bar gauge or kPa gauge)<sup>2</sup>;
  - (vi) MAWP for heating/cooling system (in bar gauge or kPa gauge)<sup>2</sup> (when applicable);
- (e) Temperatures
  - (i) Design temperature range (in °C)<sup>2</sup>;
- (f) Materials
  - (i) Shell material(s) and material standard reference(s);
  - (ii) Equivalent thickness in reference steel (in mm)<sup>2</sup>;
  - (iii) Lining material (when applicable);
- (g) Capacity
  - (i) Tank water capacity at 20 °C (in litres)<sup>2</sup>;  
This indication is to be followed by the symbol "S" when the shell is divided by surge plates into sections of not more than 7 500 litres capacity;
  - (ii) Water capacity of each compartment at 20 °C (in litres)<sup>2</sup> (when applicable, for multi-compartment tanks).  
This indication is to be followed by the symbol "S" when the compartment is divided by surge plates into sections of not more than 7 500 litres capacity;
- (h) Periodic inspections and tests
  - (i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);
  - (ii) Date of the most recent periodic test (month and year);
  - (iii) Test pressure (in bar gauge or kPa gauge)<sup>2</sup> of the most recent periodic test (if applicable);
  - (iv) Identification mark of the authorized body who performed or witnessed the most recent test.

---

<sup>2</sup> The unit used shall be indicated.

<sup>3</sup> See 6.7.2.2.10.

Figure 6.7.2.20.1: Example of identification plate marking

Owner's registration number			
<b>MANUFACTURING INFORMATION</b>			
Country of manufacture			
Year of manufacture			
Manufacturer			
Manufacturer's serial number			
<b>APPROVAL INFORMATION</b>			
	Approval country		
	Authorized body for design approval		
	Design approval number		'AA' (if applicable)
Shell design code (pressure vessel code)			
<b>PRESSURES</b>			
MAWP		bar or kPa	
Test pressure		bar or kPa	
Initial pressure test date:	(mm/yyyy)	Witness stamp:	
External design pressure		bar or kPa	
MAWP for heating/cooling system (when applicable)		bar or kPa	
<b>TEMPERATURES</b>			
Design temperature range		°C to °C	
<b>MATERIALS</b>			
Shell material(s) and material standard reference(s)			
Equivalent thickness in reference steel		mm	
Lining material (when applicable)			
<b>CAPACITY</b>			
Tank water capacity at 20 °C		litres	'S' (if applicable)
Water capacity of compartment ___ at 20 °C (when applicable, for multi-compartment tanks)		litres	'S' (if applicable)
<b>PERIODIC INSPECTIONS / TESTS</b>			
Test type	Test date	Witness stamp and test pressure <sup>a</sup>	Test type
	(mm/yyyy)	bar or kPa	(mm/yyyy)

<sup>a</sup> Test pressure if applicable."

6.7.2.20.2 Insert "Portable tank instruction in accordance with 4.2.5.2.6" in the list.  
[\(ADR:\) and delete "Name of substance\(s\) being carried and maximum mean bulk temperature when higher than 50 °C".](#)

6.7.3.16.1 Amend to read as follows:

"6.7.3.16.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for

inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

- (a) Owner information
  - (i) Owner's registration number;
- (b) Manufacturing information
  - (i) Country of manufacture;
  - (ii) Year of manufacture;
  - (iii) Manufacturer's name or mark;
  - (iv) Manufacturer's serial number;
- (c) Approval information
  - (i) The United Nations packaging symbol  ;  
 This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;
  - (ii) Approval country;
  - (iii) Authorized body for the design approval;
  - (iv) Design approval number;
  - (v) Letters 'AA', if the design was approved under alternative arrangements (see 6.7.1.2);
  - (vi) Pressure vessel code to which the shell is designed;
- (d) Pressures
  - (i) MAWP (in bar gauge or kPa gauge)<sup>2</sup>;
  - (ii) Test pressure (in bar gauge or kPa gauge)<sup>2</sup>;
  - (iii) Initial pressure test date (month and year);
  - (iv) Identification mark of the initial pressure test witness;
  - (v) External design pressure<sup>3</sup> (in bar gauge or kPa gauge)<sup>2</sup>;
- (e) Temperatures
  - (i) Design temperature range (in °C)<sup>2</sup>;
  - (ii) Design reference temperature (in °C)<sup>2</sup>;
- (f) Materials
  - (i) Shell material(s) and material standard reference(s);
  - (ii) Equivalent thickness in reference steel (in mm)<sup>2</sup>;
- (g) Capacity

<sup>2</sup> The unit used shall be indicated.

<sup>3</sup> See 6.7.3.2.8.

- (i) Tank water capacity at 20 °C (in litres) <sup>2</sup>;
- (h) Periodic inspections and tests
  - (i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);
  - (ii) date of the most recent periodic test (month and year);
  - (iii) Test pressure (in bar gauge or kPa gauge) <sup>2</sup> of the most recent periodic test (if applicable);
  - (iv) Identification mark of the authorized body who performed or witnessed the most recent test.

Figure 6.7.3.16.1: Example of identification plate marking

Owner's registration number					
<b>MANUFACTURING INFORMATION</b>					
Country of manufacture					
Year of manufacture					
Manufacturer					
Manufacturer's serial number					
<b>APPROVAL INFORMATION</b>					
	Approval country				
	Authorized body for design approval				
	Design approval number		'AA' (if applicable)		
Shell design code (pressure vessel code)					
<b>PRESSURES</b>					
MAWP		bar or kPa			
Test pressure		bar or kPa			
Initial pressure test date:	(mm/yyyy)	Witness stamp:			
External design pressure		bar or kPa			
<b>TEMPERATURES</b>					
Design temperature range		°C to °C			
Design reference temperature		°C			
<b>MATERIALS</b>					
Shell material(s) and material standard reference(s)					
Equivalent thickness in reference steel		mm			
<b>CAPACITY</b>					
Tank water capacity at 20 °C		litres			
<b>PERIODIC INSPECTIONS / TESTS</b>					
Test type	Test date	Witness stamp and test pressure <sup>a</sup>	Test type	Test date	Witness stamp and test pressure <sup>a</sup>
	(mm/yyyy)	bar or kPa		(mm/yyyy)	bar or kPa

<sup>a</sup> Test pressure if applicable."

<sup>2</sup> The unit used shall be indicated.

6.7.3.16.2 Insert "Portable tank instruction in accordance with 4.2.5.2.6" in the list.

6.7.4.15.1 Amend to read as follows:

"6.7.4.15.1 Every portable tank shall be fitted with a corrosion resistant metal plate permanently attached to the portable tank in a conspicuous place readily accessible for inspection. When for reasons of portable tank arrangements the plate cannot be permanently attached to the shell, the shell shall be marked with at least the information required by the pressure vessel code. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

- (a) Owner information
  - (i) Owner's registration number;
- (b) Manufacturing information
  - (i) Country of manufacture;
  - (ii) Year of manufacture;
  - (iii) Manufacturer's name or mark;
  - (iv) Manufacturer's serial number;
- (c) Approval information
  - (i) The United Nations packaging symbol  ;  
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;
  - (ii) Approval country;
  - (iii) Authorized body for the design approval;
  - (iv) Design approval number;
  - (v) Letters 'AA', if the design was approved under alternative arrangements (see 6.7.1.2);
  - (vi) Pressure vessel code to which the shell is designed;
- (d) Pressures
  - (i) MAWP (in bar gauge or kPa gauge)<sup>2</sup>;
  - (ii) Test pressure (in bar gauge or kPa gauge)<sup>2</sup>;
  - (iii) Initial pressure test date (month and year);
  - (iv) Identification mark of the initial pressure test witness;
- (e) Temperatures
  - (i) Minimum design temperature (in °C)<sup>2</sup>;

---

<sup>2</sup> *The unit used shall be indicated.*

- (f) Materials
  - (i) Shell material(s) and material standard reference(s);
  - (ii) Equivalent thickness in reference steel (in mm) <sup>2</sup>;
- (g) Capacity
  - (i) Tank water capacity at 20 °C (in litres) <sup>2</sup>;
- (h) Insulation
  - (i) Either “Thermally insulated” or “Vacuum insulated” (as applicable);
  - (ii) Effectiveness of the insulation system (heat influx) (in Watts) <sup>2</sup>;
- (i) Holding times – For each refrigerated liquefied gas permitted to be ~~transported~~ carried in the portable tank:
  - (i) Name, in full, of the refrigerated liquefied gas;
  - (ii) Reference holding time (in days or hours) <sup>2</sup>;
  - (iii) Initial pressure (in bar gauge or kPa gauge) <sup>2</sup>;
  - (iv) Degree of filling (in kg) <sup>2</sup>;
- (j) Periodic inspections and tests
  - (i) Type of the most recent periodic test (2.5-year, 5-year or exceptional);
  - (ii) Date of the most recent periodic test (month and year);
  - (iii) Identification mark of the authorized body who performed or witnessed the most recent test.

---

<sup>2</sup> *The unit used shall be indicated.*

Figure 6.7.4.15.1: Example of identification plate marking

Owner's registration number					
<b>MANUFACTURING INFORMATION</b>					
Country of manufacture					
Year of manufacture					
Manufacturer					
Manufacturer's serial number					
<b>APPROVAL INFORMATION</b>					
	Approval country				
	Authorized body for design approval				
	Design approval number		'AA' (if applicable)		
Shell design code (pressure vessel code)					
<b>PRESSURES</b>					
MAWP		bar or kPa			
Test pressure		bar or kPa			
Initial pressure test date:	(mm/yyyy)	Witness stamp:			
<b>TEMPERATURES</b>					
Minimum design temperature		°C			
<b>MATERIALS</b>					
Shell material(s) and material standard reference(s)					
Equivalent thickness in reference steel		mm			
<b>CAPACITY</b>					
Tank water capacity at 20 °C		litres			
<b>INSULATION</b>					
'Thermally insulated' or 'Vacuum insulated' (as applicable)					
Heat influx		Watts			
<b>HOLDING TIMES</b>					
Refrigerated liquefied gas(es) permitted	Reference holding time	Initial pressure	Degree of filling		
	days or hours	bar or kPa	kg		
<b>PERIODIC INSPECTIONS / TESTS</b>					
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp
	(mm/yyyy)			(mm/yyyy)	

".

6.7.4.15.2 Insert "Portable tank instruction in accordance with 4.2.5.2.6" in the list.

6.7.5.4.1 Amend the last sentence to read as follows: "If so required by the competent authority of the country of use, MEGCs for other gases shall be fitted with pressure relief devices as specified by that competent authority.".

6.7.5.13.1 Amend to read as follows:

"6.7.5.13.1 Every MEGC shall be fitted with a corrosion resistant metal plate permanently attached to the MEGC in a conspicuous place readily accessible for inspection. The metal plate shall not be affixed to the elements. The elements shall be marked in accordance with Chapter 6.2. As a minimum, at least the following information shall be marked on the plate by stamping or by any other similar method:

- (a) Owner information
  - (i) Owner's registration number;
- (b) Manufacturing information
  - (i) Country of manufacture;
  - (ii) Year of manufacture;
  - (iii) Manufacturer's name or mark;
  - (iv) Manufacturer's serial number;
- (c) Approval information
  - (i) The United Nations packaging symbol  ;  
This symbol shall not be used for any purpose other than certifying that a packaging, a portable tank or a MEGC complies with the relevant requirements in Chapter 6.1, 6.2, 6.3, 6.5, 6.6 or 6.7;
  - (ii) Approval country;
  - (iii) Authorized body for the design approval;
  - (iv) Design approval number;
  - (v) Letters 'AA', if the design was approved under alternative arrangements (see 6.7.1.2);
- (d) Pressures
  - (i) Test pressure (in bar gauge)<sup>2</sup>;
  - (ii) Initial pressure test date (month and year);
  - (iii) Identification mark of the initial pressure test witness;
- (e) Temperatures
  - (i) Design temperature range (in °C)<sup>2</sup>;
- (f) Elements / Capacity
  - (i) Number of elements;
  - (ii) Total water capacity (in litres)<sup>2</sup>;

---

<sup>2</sup> *The unit used shall be indicated.*

- (h) Periodic inspections and tests
  - (i) Type of the most recent periodic test (5-year or exceptional);
  - (ii) Date of the most recent periodic test (month and year);
  - (iv) Identification mark of the authorized body who performed or witnessed the most recent test.

Figure 6.7.5.13.1: Example of identification plate marking

Owner's registration number						
<b>MANUFACTURING INFORMATION</b>						
Country of manufacture						
Year of manufacture						
Manufacturer						
Manufacturer's serial number						
<b>APPROVAL INFORMATION</b>						
	Approval country					
	Authorized body for design approval					
	Design approval number				'AA' (if applicable)	
<b>PRESSURES</b>						
Test pressure						bar
Initial pressure test date:	(mm/yyyy)	Witness stamp:				
<b>TEMPERATURES</b>						
Design temperature range				°C	to	°C
<b>ELEMENTS / CAPACITY</b>						
Number of elements						
Total water capacity						litres
<b>PERIODIC INSPECTIONS / TESTS</b>						
Test type	Test date	Witness stamp	Test type	Test date	Witness stamp	
	(mm/yyyy)			(mm/yyyy)		

".

## Chapter 7.1

(ADR:) Amend 1.4.2.2.1 (b) to read as follows:

“(b) Ascertain all information related to the dangerous goods to be carried has been provided by the consignor before carriage, that the prescribed documentation is on board the transport unit or if electronic data processing (EDP) or if electronic data interchange (EDI) techniques are used instead of paper documentation, that data may be made available during transport in a manner at least equivalent to that of paper documentation.”.

(RID:) Amend 1.4.2.2.1 (b) to read as follows:

“(b) Ascertain all information related to the dangerous goods to be carried has been provided by the consignor before carriage, that the prescribed documentation is

attached to the transport document or if electronic data processing (EDP) or if electronic data interchange (EDI) techniques are used instead of paper documentation, that data may be made available during transport in a manner at least equivalent to that of paper documentation.”.

~~7.1.1.3~~ — ~~Insert a new sub-section 7.1.1.3 to read as follows:~~

~~"7.1.1.3~~ — ~~*Acceptance of dangerous goods by carriers*~~

~~7.1.1.3.1~~ — ~~A carrier shall not accept dangerous goods for transport unless:~~

- ~~(a) — A copy of the dangerous goods transport document and other documents or information as required by these Regulations are provided; or~~
- ~~(b) — The information applicable to the dangerous goods is provided in electronic form.~~

~~7.1.1.3.2~~ — ~~The information applicable to the dangerous goods shall accompany the dangerous goods to final destination. This information may be on the dangerous goods transport document or may be on another document. This information shall be given to the consignee when the dangerous goods are delivered.~~

~~7.1.1.3.3~~ — ~~When the information applicable to the dangerous goods is given to the carrier in electronic form, the information shall be available to the carrier at all times during transport to final destination. The information shall be able to be produced without delay as a paper document.”.~~

~~— Renumber accordingly existing paragraphs 7.1.1.3 to 7.1.1.9 as paragraphs 7.1.1.4 to 7.1.1.10.~~

~~7.1.3.2.3~~7.5.2.1 At the end of note d to the table, add the following ~~new note~~two sentences:

"~~**NOTE:**~~ — *Alkali metal nitrates include caesium nitrate (UN 1451), lithium nitrate (UN 2722), potassium nitrate (UN 1486), rubidium nitrate (UN 1477) and sodium nitrate (UN 1498). Alkaline earth metal nitrates include barium nitrate (UN 1446), beryllium nitrate (UN 2464), calcium nitrate (UN 1454), magnesium nitrate (UN 1474) and strontium nitrate (UN 1507)."*

Consequential amendment:

*In the alphabetical index, add the following new entry:*

"Rubidium nitrate, see 1477~~5~~: 1477  
+ 5.1".

~~7.1.8.2~~ — ~~Replace "inland water craft" with "inland waterway craft".~~

~~Table 7.1.8.2~~ ~~In the heading of the third column, replace "inland water craft" with "inland waterways craft".~~

~~7.1.10~~ — ~~Add a new section 7.1.10 to read as follows:~~

~~"7.1.10~~ — ~~**Retention of dangerous goods transport information**~~

~~7.1.10.1~~ — ~~The carrier shall retain a copy of the dangerous goods transport document and additional information and documentation as specified in these Regulations, for a minimum period of three months.~~

~~7.1.10.2~~ — ~~When the documents are kept electronically or in a computer system, the carrier shall be capable of reproducing them in a printed form."~~

-----