

## **Economic and Social Council**

Distr.: General 14 November 2013

English

Original: English and French

### **Economic Commission for Europe**

**Inland Transport Committee** 

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

Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)

Twenty-fourth session

Geneva, 27–31 January 2014 Item 5 (a) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN:

Work of the RID/ADR/ADN Joint Meeting

# Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2015

#### Note by the secretariat<sup>1,2</sup>

- 1. Proposed amendments adopted by the RID/ADR/ADN Joint Meeting at its March and September 2012 and March 2013 sessions and corresponding to documents ECE/TRANS/WP.15/AC.1/126, annex III; ECE/TRANS/WP.15/AC.1/128, annex I; and ECE/TRANS/WP.15/AC.1/130, annex I have already been endorsed by the Safety Committee (see ECE/ADN/2014/1).
- 2. The proposed amendments adopted by the Joint Meeting at its September 2013 session and corresponding to documents ECE/TRANS/WP.15/AC.1/132/Add.2 and ECE/TRANS/WP.15/AC.1/2013/31/Add.1 are presented for endorsement by the ADN Safety Committee.
- 3. They include modifications and corrections to the texts adopted at the 95<sup>th</sup> session of the Working Party on the Transport of Dangerous Goods (WP.15) (4-8 November 2013) (see ECE/TRANS/WP.15/221 and Adds. 1 and 2).

Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2014/2.



<sup>&</sup>lt;sup>1</sup> In accordance with the programme of work of the Inland Transport Committee for 2012-2016 (ECE/TRANS/224, para 94, ECE/TRANS/2012/12, programme activity 02.7, (A1b)).

#### Chapter 1.1

1.1.3.2 (c) Add the following new Note at the end:

"NOTE: This exemption does not apply to lamps. For lamps see 1.1.3.10.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.1.3.2 (h) Delete 1.1.3.2 (h) and replace by

"(h) (Deleted)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.1.3.10 Insert a new sub-section to read as follows:

#### "1.1.3.10 Exemptions related to the carriage of lamps containing dangerous goods

The following lamps are not subject to ADN provided that they do not contain radioactive material and do not contain mercury in quantities above those specified in special provision 366 of Chapter 3.3:

(a) Lamps that are collected directly from individuals and households when carried to a collection or recycling facility;

**NOTE:** This also includes lamps brought by individuals to a first collection point, and then carried to another collection point, intermediate processing or recycling facility.

- (b) Lamps each containing not more than 1 g of dangerous goods and packaged so that there is not more than 30 g of dangerous goods per package, provided that:
  - (i) the lamps are manufactured according to a certified quality management system;

NOTE: ISO 9001:2008 may be used for this purpose.

and

- (ii) each lamp is either individually packed in inner packagings, separated by dividers, or surrounded with cushioning material to protect the lamps and packed into strong outer packagings meeting the general provisions of 4.1.1.1 of ADR and capable of passing a 1.2 m drop test;
- (c) Used, damaged or defective lamps each containing not more than 1 g of dangerous goods with not more than 30 g of dangerous goods per package when carried from a collection or recycling facility. The lamps shall be packed in strong outer packagings sufficient for preventing release of the contents under normal conditions of carriage meeting the general provisions of 4.1.1.1 of ADR and that are capable of passing a drop test of not less than 1.2 m;
- (d) Lamps containing only gases of Groups A and O (according to 2.2.2.1) provided they are packaged so that the projectile effects of any rupture of the lamp will be contained within the package.

NOTE: Lamps containing radioactive material are addressed in 2.2.7.2.2.2 (b).".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

#### Chapter 1.2

1.2.1 In the definitions, whenever the term "for the carriage of Class 7 material" is used, replace it by "for the carriage of radioactive material".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.2.1 Amend the definitions hereafter as follows:

Approval Replace "6.4.22.6" by "6.4.22.8".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

*Container:* In the definition of "Small container", delete "either any overall outer dimension (length, width or height) less than 1.5 m, or".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

*Design*: In the first sentence, insert "fissile material excepted under 2.2.7.2.3.5 (f)," after "the description of".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Exclusive use: Replace "and unloading is carried" by "and unloading and shipment are carried" and insert ", where so required by ADN;" after "consignee".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

GHS: Replace "fourth" by "fifth" and "ST/SG/AC.10/30/Rev.4" by "ST/SG/AC.10/30/Rev.5".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Manual of Tests and Criteria: Amend the text in parentheses to read "ST/SG/AC.10/11/Rev.5 as amended by documents ST/SG/AC.10/11/Rev.5/Amend.1 and ST/SG/AC.10/11/Rev.5/Amend.2".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Multiple-element gas container: replace "and bundles" by "or bundles".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Nominal capacity of the receptacle Delete the definition.

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

*Radiation level*: Amend the end of the definition to read: "millisieverts per hour or microsieverts per hour;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Small receptacle containing gas (gas cartridge) Replace "meeting the relevant requirements of 6.2.6 of ADR" by "having a water capacity not exceeding 1000 ml for receptacles made of metal and not exceeding 500 ml for receptacles made of synthetic material or glass,".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

UN Model Regulations: Replace "seventeenth" by "eighteenth" and "(ST/SG/AC.10/1/Rev.17)" by "(ST/SG/AC.10/1/Rev.18)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.2.1 Add the following new definitions in alphabetical order:

"Large salvage packaging means a special packaging which

- (a) is designed for mechanical handling; and
- (b) exceeds 400 kg net mass or 450 litres capacity but has a volume of not more than 3 m³;

into which damaged, defective or leaking dangerous goods packages, or dangerous goods that have spilled or leaked are placed for purposes of carriage for recovery or disposal;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"Management system, for the carriage of radioactive material, means a set of interrelated or interacting elements (system) for establishing policies and objectives and enabling the objectives to be achieved in an efficient and effective manner;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"Neutron radiation detector means a device that detects neutron radiation. In such a device, a gas may be contained in a hermetically sealed electron tube transducer that converts neutron radiation into a measureable electric signal;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"Radiation detection system means an apparatus that contains radiation detectors as components;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### Chapter 1.6

- 1.6.1.1 Amend to read as follows:
- "1.6.1.1 Unless otherwise provided, the substances and articles of ADN may be carried until 30 June 2015 in accordance with the requirements of ADN applicable up to 31 December 2014."

(Reference document: Informal document INF.24, 95th session of WP.15)

1.6.1.10 Delete 1.6.1.10 and replace by "1.6.1.10 (*Deleted*)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.6.1.15 At the end, add "IBCs manufactured, remanufactured or repaired between 1 January 2011 and 31 December 2016 and marked with the maximum permitted stacking load in accordance with 6.5.2.2.2 of ADR in force up to 31 December 2014 may continue to be used."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 1.6.1.16 Delete the transitional measure and replace by "1.6.1.16 *Deleted*."
- 1.6.1.19 Delete the transitional measure and replace by "1.6.1.19 *Deleted*."

(Reference document: Informal document INF.24, 95th session of WP.15)

1.6.1.24 Delete 1.6.1.24 and replace by "1.6.1.24 (*Deleted*)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.6.1.26 At the end, add "Large packagings manufactured or remanufactured between 1 January 2011 and 31 December 2016 and marked with the maximum permitted stacking

load in accordance with 6.6.3.3 of ADR in force up to 31 December 2014 may continue to be used.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.6.1 Add the following new transitional measures:

"1.6.1.28 As an exception to the provisions of 1.6.1.1, accreditations in accordance with EN ISO/IEC 17020:2004 for the purposes of 1.8.6.8, 6.2.2.11, 6.2.3.6.1 and special provisions TA4 and TT9 of 6.8.4 shall not be recognised after 28 February 2015.".

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II)

"1.6.1.29 Lithium cells and batteries manufactured according to a type meeting the requirements of sub-section 38.3 of the Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing may continue to be carried, unless otherwise provided in ADN.

Lithium cells and batteries manufactured before 1 July 2003 meeting the requirements of the Manual of Tests and Criteria, Revision 3, may continue to be carried if all other applicable requirements are fulfilled."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"1.6.1.30 Labels, placards and markings which meet the requirements of 3.4.7, 3.4.8, 3.5.4.2, 5.2.1.8.3, 5.2.2.2.1.1, 5.3.1.7.1, 5.3.3, 5.3.6, 5.5.2.3.2 and 5.5.3.6.2 applicable up to 31 December 2014 may continue to be used until 31 December 2016."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"1.6.1.31 Overpacks marked with the word "OVERPACK" in accordance with the provisions of ADN applicable up to 31 December 2014 and which do not conform to the requirements of 5.1.2.1 (a) regarding the size of the letters applicable as from 1 January 2015 may continue to be used until 31 December 2015."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

"1.6.1.32 Salvage packagings and salvage pressure receptacles marked with the word "SALVAGE" in accordance with the provisions of ADN applicable up to 31 December 2014 and which do not conform to the requirements of 5.2.1.3 regarding the size of the letters applicable as from 1 January 2015 may continue to be used until 31 December 2015.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- "1.6.1.33 Electric double layer capacitors of UN No. 3499, manufactured before 1 January 2014, need not be marked with the energy storage capacity in Wh as required by sub-paragraph (e) of special provision 361 of Chapter 3.3.".
- "1.6.1.34 Asymmetric capacitors of UN No. 3508, manufactured before 1 January 2016, need not be marked with the energy storage capacity in Wh as required by subparagraph (c) of special provision 372 of Chapter 3.3.".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

#### Chapter 1.7

1.7 Replace the title by "GENERAL PROVISIONS CONCERNING RADIOACTIVE MATERIAL".

In Note 1 after 1.7.1 Insert "IAEA" before "Safety Standard Series".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.7.1.1 Amend the second and third sentences to read:

"These standards are based on the IAEA Regulations for the Safe Transport of Radioactive material, 2012 Edition, IAEA Safety Standards Series No. SSR-6, IAEA, Vienna (2012). Explanatory material can be found in "Advisory material for the IAEA Regulations for the Safe Transport of Radioactive Material, IAEA Safety Standards Series No. TS-G-1.1 (Rev.2), IAEA, Vienna (2012)."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.7.1.2 In the second sentence of the last paragraph replace "imposing requirements" by "imposing conditions".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 1.7.1.4 Amend the first sentence to read: "The provisions laid down in ADN do not apply to any of the following:"
- 1.7.1.4 Insert a new sub-paragraph (d) to read as follows and rename current sub-paragraphs (d) to (f) accordingly:
- "(d) Radioactive material in or on a person who is to be transported for medical treatment because the person has been subject to accidental or deliberate intake of radioactive material or to contamination;".

Amend sub-paragraph (f) (former (e)) to read as follows:

"(f) Natural material and ores containing naturally occurring radionuclides (which may have been processed), provided the activity concentration of the material does not exceed 10 times the values specified in Table 2.2.7.2.2.1, or calculated in accordance with 2.2.7.2.2.2 (a) and 2.2.7.2.2.3 to 2.2.7.2.2.6. For natural materials and ores containing naturally occurring radionuclides that are not in secular equilibrium the calculation of the activity concentration shall be performed in accordance with 2.2.7.2.2.4;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

- 1.7.1.5.1 Amend to read as follows:
- "1.7.1.5.1 Excepted packages which may contain radioactive material in limited quantities, instruments, manufactured articles or empty packagings as specified in 2.2.7.2.4.1 shall be subject only to the following provisions of Parts 5 to 7:
- (a) The applicable provisions specified in 5.1.2.1, 5.1.3.2, 5.1.5.2.2, 5.1.5.4, 5.2.1.9, 7.1.4.14.7.3.1, 7.1.4.14.7.5.1 to 7.1.4.14.7.5.4 and 7.1.4.14.7.7; and
  - (b) The requirements for excepted packages specified in 6.4.4.

except when the radioactive material possesses other hazardous properties and has to be classified in a class other than Class 7 in accordance with special provision 290 or 369 of Chapter 3.3, where the provisions listed in (a) and (b) above apply only as relevant and in addition to those relating to the main class."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

1.7.1.5.2 Insert a new second sentence to read as follows:

"If the excepted package contains fissile material, one of the fissile exceptions provided by 2.2.7.2.3.5 shall apply and the requirements of 7.1.4.14.7.4.3 shall be met."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.7.2.2 In the second sentence, delete the comma after "persons exposed"...

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

1.7.2.4 Amend the end of the introductory sentence to read "that the effective dose either:" and insert "or" at the end of sub-paragraph (a).

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.7.3 Amend to read as follows:

#### "1.7.3 Management system

- 1.7.3.1 A management system based on international, national or other standards acceptable to the competent authority shall be established and implemented for all activities within the scope of ADN, as identified in 1.7.1.3, to ensure compliance with the relevant provisions of ADN. Certification that the design specification has been fully implemented shall be available to the competent authority. The manufacturer, consignor or user shall be prepared:
  - (a) To provide facilities for inspection during manufacture and use; and
  - (b) To demonstrate compliance with ADN to the competent authority.

Where competent authority approval is required, such approval shall take into account and be contingent upon the adequacy of the management system.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

1.7.4.2 Replace "Class 7" by "radioactive material", twice.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 1.7.6 The amendment does not apply to the English text.
- 1.7.6.1 In the introductory sentence, delete "a" before "non-compliance". In (a) amend the introductory sentence to read:

"The consignor, consignee, carrier and any organization involved during carriage who may be affected, as appropriate, shall be informed of the non-compliance by:".

1.7.6.1 In (b) (iv), delete "and" at the end of the sentence.

The other amendments to 1.7.6.1 do not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

#### Chapter 2.1

2.1.1.3 Add the following new paragraph at the end:

"Articles are not assigned to packing groups. For packing purposes any requirement for a specific packaging performance level is set out in the applicable packing instruction.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.1.3.5.3 (a) Replace "for which special provision 290 of Chapter 3.3 applies" by "for which, except for UN 3507 URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, special provision 290 of Chapter 3.3 applies".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.1.5 Add a new paragraph to read as follows:

#### "2.1.5 Classification of packagings, discarded, empty, uncleaned

Empty uncleaned packagings, large packagings or IBCs, or parts thereof, carried for disposal, recycling or recovery of their material, other than reconditioning, repair, routine maintenance, remanufacturing or reuse, may be assigned to UN 3509 if they meet the requirements for this entry."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

#### Chapter 2.2

Amend Note 2 in 2.2.1.1.7.5 to read as follows:

"NOTE 2: "Flash composition" in this table refers to pyrotechnic substances in powder form or as pyrotechnic units as presented in the firework that are used to produce an aural effect or used as a bursting charge, or propellant charge unless the time taken for the pressure rise is demonstrated to be more than 6 ms for 0.5 g of pyrotechnic substance in the HSL Flash Composition Test in Appendix 7 of the Manual of Tests and Criteria.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.1.4 Amend the entry for "AIR BAG INFLATORS or AIR BAG MODULES or SEAT BELT PRETENSIONERS: UN No. 0503" to read as follows:

"SAFETY DEVICES, PYROTECHNIC: UN No. 0503

Articles which contain pyrotechnic substances or dangerous goods of other classes and are used in vehicles, vessels or aircraft to enhance safety to persons. Examples are: air bag inflators, air bag modules, seat-belt pretensioners and pyromechanical devices. These pyromechanical devices are assembled components for tasks such as but not limited to separation, locking, or occupant restraint."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.2.1.2 Add a new indent 9. to read as follows:

"9. Adsorbed gas: a gas which when packaged for carriage is adsorbed onto a solid porous material resulting in an internal receptacle pressure of less than 101.3 kPa at 20 °C and less than 300 kPa at 50 °C.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.2.3	Insert the following new table at the end:
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Adsorbed gases		
Classification code	UN No.	Name of the substance or article
9A	3511	ADSORBED GAS, N.O.S.
90	3513	ADSORBED GAS, OXIDIZING, N.O.S.
9F	3510	ADSORBED GAS, FLAMMABLE, N.O.S.
9T	3512	ADSORBED GAS, TOXIC, N.O.S.
9TF	3514	ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.
9TC	3516	ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.
9TO	3515	ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.
9TFC	3517	ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.
9TOC	3518	ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### 2.2.3.1.1 Amend NOTE 3 to read as follows:

"NOTE 3: Flammable liquids which are highly toxic by inhalation, as defined in 2.2.61.1.4 to 2.2.61.1.9, and toxic substances having a flash-point of 23 °C or above are substances of Class 6.1 (see 2.2.61.1). Liquids which are highly toxic by inhalation are indicated as "toxic by inhalation" in their proper shipping name in Column (2) or by special provision 354 in Column (6) of Table A of Chapter 3.2."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

#### 2.2.3.1.4 Amend to read as follows:

"2.2.3.1.4 Viscous flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes having a flash-point of less than 23 °C may be assigned to packing group III in conformity with the procedures prescribed in the Manual of Tests and Criteria, Part III, sub-section 32.3 [except sub-paragraph 32.3.1.7 (d)], provided that:

(a) The viscosity expressed as the flowtime in seconds and flash-point are in accordance with the following table:

Flow-time <b>t</b> in seconds	Jet diameter (mm)	Flash-point, closed-cup (°C)
$20 < t \le 60$	4	above 17
$60 < t \le 100$	4	above 10
20 < t ≤ 32	6	above 5
32 < t ≤ 44	6	above -1
44 < t ≤ 100	6	above -5
100 < t	6	no limit

- (b) Less than 3% of the clear solvent layer separates in the solvent separation test;
- (c) The mixture or any separated solvent does not meet the criteria for Class 6.1 or Class 8;
  - [(d) The substances are packed in receptacles of not more than 450 litre capacity].

**NOTE:** These provisions also apply to mixtures containing no more than 20% nitrocellulose with a nitrogen content not exceeding 12.6% by dry mass.

Mixtures containing more than 20% but not more than 55% nitrocellulose with a nitrogen content not exceeding 12.6% by dry mass are substances assigned to UN No. 2059.

Mixtures having a flash-point below 23 °C and containing:

- more than 55% nitrocellulose, whatever their nitrogen content; or
- not more than 55% nitrocellulose with a nitrogen content above 12.6% by dry mass.

are substances of Class 1 (UN Nos. 0340 or 0342) or of Class 4.1 (UN Nos. 2555, 2556 or 2557).".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

- 2.2.3.1.5 Amend to read as follows:
- "2.2.3.1.5 Viscous liquids which:
  - have a flash-point of 23 °C or above and less than or equal to 60 °C;
  - are not toxic, corrosive or environmentally hazardous;
- contain not more than 20% nitrocellulose provided the nitrocellulose contains not more than 12.6% nitrogen by dry mass; and
  - are packed in receptacles of not more than 450 litre capacity;
  - are not subject to ADN, if:
- (a) in the solvent separation test (see *Manual of Tests and Criteria*, Part III, subsection 32.5.1), the height of the separated layer of solvent is less than 3% of the total height; and
- (b) the flowtime in the viscosity test (see *Manual of Tests and Criteria*, Part III, sub-section 32.4.3), with a jet diameter of 6 mm is equal to or greater than:
  - (i) 60 seconds; or
  - (ii) 40 seconds if the viscous substance contains not more than 60% of Class 3 substances.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.43.1.3 Replace "light bulbs" by "lamps".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

2.2.51.1.6 and 2.2.51.1.7 Amend to read as follows:

#### "Oxidizing solids

Classification

- 2.2.51.1.6 When oxidizing solid substances not mentioned by name in Table A of Chapter 3.2 are assigned to one of the entries listed in 2.2.51.3 on the basis of the test procedure in accordance with the Manual of Tests and Criteria, Part III, sub-section 34.4.1 (test O.1) or alternatively, sub section 34.4.3 (test O.3), the following criteria shall apply:
- (a) In the test O.1, a solid substance shall be assigned to Class 5.1 if, in the 4:1 or the 1:1 sample-to-cellulose ratio (by mass) tested, it ignites or burns or exhibits mean

burning times equal to or less than that of a 3:7 mixture (by mass) of potassium bromate and cellulose; or

(b) In the test O.3, a solid substance shall be assigned to Class 5.1 if, in the 4:1 or the 1:1 sample-to-cellulose ratio (by mass) tested, it exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose."

Assignment of packing groups

- 2.2.51.1.7 Oxidizing solids classified under the various entries in Table A of Chapter 3.2 shall be assigned to packing groups I, II or III on the basis of test procedures of the Manual of Tests and Criteria, Part III, sub-section 34.4.1 (test O.1) or sub-section 34.4.3 (test O.3), in accordance with the following criteria:
  - (a) Test O.1:
  - (i) Packing group I: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time less than the mean burning time of a 3:2 mixture, by mass, of potassium bromate and cellulose;
  - (ii) Packing group II: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 2:3 mixture (by mass) of potassium bromate and cellulose and the criteria for packing group I are not met;
  - (iii) Packing group III: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose and the criteria for packing groups I and II are not met;
  - (b) Test O.3:
  - (i) Packing group I: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate greater than the mean burning rate of a 3:1 mixture (by mass) of calcium peroxide and cellulose;
  - (ii) Packing group II: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:1 mixture (by mass) of calcium peroxide and cellulose, and the criteria for packing group I are not met;
  - (iii) Packing group III: any substance which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose, and the criteria for packing groups I and II are not met."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 2.2.61.3 Amend the text of footnote (j) at the end, to read as follows:
- "(j) Highly toxic and toxic flammable liquids having a flash-point below 23 °C are substances of Class 3 except those which are highly toxic by inhalation, as defined in 2.2.61.1.4 to 2.2.61.1.9. Liquids which are highly toxic by inhalation are indicated as "toxic by inhalation" in their proper shipping name in Column (2) or by special provision 354 in Column (6) of Table A of Chapter 3.2.".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

2.2.62.1.5.5 Amend to read as follows:

"2.2.62.1.5.5 Dried blood spots, collected by applying a drop of blood onto absorbent material, are not subject to ADN.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.62.1.5 Insert two new paragraphs 2.2.62.1.5.6 and 2.2.62.1.5.7 to read as follows and renumber existing paragraphs accordingly:

"2.2.62.1.5.6 Faecal occult blood screening samples are not subject to ADN.

2.2.62.1.5.7 Blood or blood components which have been collected for the purposes of transfusion or for the preparation of blood products to be used for transfusion or transplantation and any tissues or organs intended for use in transplantation as well as samples drawn in connection with such purposes are not subject to ADN.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

The first amendment to 2.2.7 does not apply to the English text.

2.2.7.1.3 Amend the definitions hereafter as follows:

*Fissile nuclides*: Amend the end of the introductory text before (a) to read: "of fissile material are the following:".

In (a), delete "and". In (b), replace "." by ";".

Insert the following new sub-paragraphs and text:

- "(c) Material with fissile nuclides less than a total of 0.25 g;
- (d) Any combination of (a), (b) and/or (c).

These exclusions are only valid if there is no other material with fissile nuclides in the package or in the consignment if shipped unpackaged.".

Surface contaminated object At the end, replace "surfaces" by "surface".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.1.1 Amend to read as follows: "Radioactive material shall be assigned to one of the UN numbers specified in Table 2.2.7.2.1.1, in accordance with 2.2.7.2.4 and 2.2.7.2.5, taking into account the material characteristics determined in 2.2.7.2.3.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

Table 2.2.7.2.1.1 Add a new heading row to read:

UN Nos. Proper shipping name and description <sup>a</sup>	
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(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Table 2.2.7.2.1.1 For UN Nos. 2912, 3321, 3322, 2913, 2915, 3332, 2916, 2917, 3323, 2919 and 2978, insert a reference to a new note "b" after "fissile-excepted".

Table 2.2.7.2.1.1 Under the headings "Excepted packages" and "Uranium hexafluoride" add the following new entry:

"UN 3507 URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE less than 0.1 kg per package, non-fissile or fissile-excepted<sup>b,c</sup>".

Table 2.2.7.2.1.1 Under the heading "Excepted packages", the amendments to the name for UN Nos. 2909, 2910 and 2911 do not apply to the English text.

Table 2.2.7.2.1.1 Add the following table notes "a", "b" and "c" after the table:

- "The proper shipping name is found in the column "proper shipping name and description" and is restricted to that part shown in capital letters. In the cases of UN Nos. 2909, 2911, 2913 and 3326, where alternative proper shipping names are separated by the word "or" only the relevant proper shipping name shall be used.
- The term "fissile-excepted" refers only to material excepted under 2.2.7.2.3.5.
- For UN No. 3507, see also special provision 369 in Chapter 3.3.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.2.1 In (b), insert "limits" after "concentration".

Table 2.2.7.2.2.1 In the heading of column 4 insert "limit" after "concentration".

In (a) after the table, in the introductory sentence, replace "from daughter radionuclides" by "from their progeny".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.2.2 Amend the text before the Table to read as follows:

"For individual radionuclides:

- (a) Which are not listed in Table 2.2.7.2.2.1 the determination of the basic radionuclide values referred to in 2.2.7.2.2.1 shall require multilateral approval. For these radionuclides, activity concentration limits for exempt material and activity limits for exempt consignments shall be calculated in accordance with the principles established in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996). It is permissible to use an  $A_2$  value calculated using a dose coefficient for the appropriate lung absorption type as recommended by the International Commission on Radiological Protection, if the chemical forms of each radionuclide under both normal and accident conditions of carriage are taken into consideration. Alternatively, the radionuclide values in Table 2.2.7.2.2.2 may be used without obtaining competent authority approval;
- (b) In instruments or articles in which the radioactive material is enclosed or is included as a component part of the instrument or other manufactured article and which meet 2.2.7.2.4.1.3 (c), alternative basic radionuclide values to those in Table 2.2.7.2.2.1 for the activity limit for an exempt consignment are permitted and shall require multilateral approval. Such alternative activity limits for an exempt consignment shall be calculated in accordance with the principles set out in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No.115, IAEA, Vienna (1996)."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Table 2.2.7.2.2.2 In the heading of the fourth column, insert "limit" after "concentration".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.2.4 In the introductory sentence delete "the determination of" and in the legend for X(i) and  $X_m$  replace "concentration" by "concentration limit".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.1.2 In (a) (i), delete "which are intended to be processed for the use of these radionuclides".

2.2.7.2.3.1.2 Amend (a) (iii) to read: "(iii) radioactive material for which the A<sub>2</sub> value is unlimited. Fissile material may be included only if excepted under 2.2.7.2.3.5;".

2.2.7.2.3.1.2 In (a) (iv), replace ", excluding fissile material not excepted under 2.2.7.2.3.5" by ". Fissile material may be included only if excepted under 2.2.7.2.3.5".

2.2.7.2.3.1.2 In (b) (i), delete "or".

2.2.7.2.3.1.2 In (c), introductory sentence, replace "meeting the requirements" by "that meet the requirements".

2.2.7.2.3.1.2 In (c) (i) replace "bitumen, ceramic, etc." by "bitumen and ceramic".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.3.5 (d) The amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.3.6 The amendment to the introductory sentence does not apply to the English text.

Amend (a) to read as follows:

- "(a) The tests prescribed in 2.2.7.2.3.3.5 (a) and (b) provided that the specimens are alternatively subjected to the impact test prescribed in ISO 2919:2012: "Radiation Protection Sealed Radioactive Sources General requirements and classification":
  - (i) The Class 4 impact test if the mass of the special form radioactive material is equal to or less than 200 g;
  - (ii) The Class 5 impact test if the mass of the special form radioactive material is more than 200 g but less than 500 g;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.3.6 In (b), replace "ISO 2919:1999" by "ISO 2919:2012".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.3.8 In (b), replace "which are acceptable" by "provided that they are acceptable".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

2.2.7.2.3.5 Amend the first paragraph to read as follows:

"Fissile material and packages containing fissile material shall be classified under the relevant entry as "FISSILE" in accordance with Table 2.2.7.2.1.1 unless excepted by one of the provisions of sub-paragraphs (a) to (f) below and carried subject to the requirements of 7.1.4.14.7.4.3. All provisions apply only to material in packages that meets the requirements of 6.4.7.2 of ADR unless unpackaged material is specifically allowed in the provision."

- 2.2.7.2.3.5 Delete current sub-paragraphs (a) and (d). Current (b) and (c) become new (a) and (b) respectively.
- 2.2.7.2.3.5 Insert the following new sub-paragraphs (c) to (f):
- "(c) Uranium with a maximum uranium enrichment of 5% by mass uranium-235 provided:
  - (i) There is no more than 3.5 g of uranium-235 per package;

- (ii) The total plutonium and uranium-233 content does not exceed 1% of the mass of uranium-235 per package;
- (iii) Carriage of the package is subject to the consignment limit provided in 7.1.4.14.7.4.3 (c);
- (d) Fissile nuclides with a total mass not greater than 2.0 g per package provided the package is carried subject to the consignment limit provided in 7.1.4.14.7.4.3 (d);
- (e) Fissile nuclides with a total mass not greater than 45 g either packaged or unpackaged subject to limits provided in 7.1.4.14.7.4.3 (e);
- (f) A fissile material that meets the requirements of 7.1.4.14.7.4.3 (b), 2.2.7.2.3.6 and 5.1.5.2.1."

Table 2.2.7.2.3.5 Delete.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.3.6 Insert a new paragraph to read as follows:

"2.2.7.2.3.6 A fissile material excepted from classification as "FISSILE" under 2.2.7.2.3.5 (f) shall be subcritical without the need for accumulation control under the following conditions:

- (a) The conditions of 6.4.11.1 (a) of ADR;
- (b) The conditions consistent with the assessment provisions stated in 6.4.11.12 (b) and 6.4.11.13 (b) of ADR for packages.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.1.1 Amend to read as follows:

- "2.2.7.2.4.1.1 A package may be classified as an excepted package if it meets one of the following conditions:
  - (a) It is an empty package having contained radioactive material;
- (b) It contains instruments or articles not exceeding the activity limits specified in columns (2) and (3) of Table 2.2.7.2.4.1.2;
- (c) It contains articles manufactured of natural uranium, depleted uranium or natural thorium;
- (d) It contains radioactive material not exceeding the activity limits specified in column (4) of Table 2.2.7.2.4.1.2; or
- (e) It contains less than 0.1 kg of uranium hexafluoride not exceeding the activity limits specified in column (4) of Table 2.2.7.2.4.1.2.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 2.2.7.2.4.1.3 In the introductory sentence replace "only if" by "provided that".
- 2.2.7.2.4.1.3 First amendment to (a) does not apply to the English text.
- 2.2.7.2.4.1.3 (a) Delete "and" at the end.
- 2.2.7.2.4.1.3 (b) Amend to read as follows:
- "(b) Each instrument or manufactured article bears the marking "RADIOACTIVE" on its external surface except for the following:
  - (i) radioluminescent time-pieces or devices;

- (ii) consumer products that have either received regulatory approval in accordance with 1.7.1.4 (e) or do not individually exceed the activity limit for an exempt consignment in Table 2.2.7.2.2.1 (column 5), provided such products are transported in a package that bears the marking "RADIOACTIVE" on its internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package; and
- (iii) other instruments or articles too small to bear the marking "RADIOACTIVE", provided that they are transported in a package that bears the marking "RADIOACTIVE" on its internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package;".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 2.2.7.2.4.1.4 Amend (b) to read as follows:
  - "(b) The package bears the marking "RADIOACTIVE" on either:
  - (i) An internal surface in such a manner that a warning of the presence of radioactive material is visible on opening the package; or
  - (ii) The outside of the package, where it is impractical to mark an internal surface.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.1.5 Insert a new paragraph to read as follows:

"2.2.7.2.4.1.5 Uranium hexafluoride not exceeding the limits specified in Column 4 of Table 2.2.7.2.4.1.2 may be classified under UN 3507 URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted provided that:

- (a) The mass of uranium hexafluoride in the package is less than 0.1 kg;
- (b) The conditions of 2.2.7.2.4.5.1 and 2.2.7.2.4.1.4 (a) and (b) are met.".

Current 2.2.7.2.4.1.5 becomes new 2.2.7.2.4.1.7.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.1.6 Replace "only if" by "provided that". The second amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.1.7 (former 2.7.2.4.1.5) In the introductory sentence replace "only if" by "provided that". The other amendments do not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.4 In the sentence preceding sub-paragraph (a), replace "activities greater than the following:" by "activities greater than either of the following:".

2.2.7.2.4.4 In (a), delete "or".

2.2.7.2.4.4 In the legend for C(j), delete "and".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.5 Amend to read as follows:

"2.2.7.2.4.5 Classification of uranium hexafluoride

2.2.7.2.4.5.1 Uranium hexafluoride shall only be assigned to:

- (a) UN No. 2977, RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, FISSILE;
- (b) UN No. 2978, RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE, non-fissile or fissile-excepted; or
- (c) UN No. 3507, URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE less than 0.1 kg per package, non-fissile or fissile-excepted.
- 2.2.7.2.4.5.2 The contents of a package containing uranium hexafluoride shall comply with the following requirements:
- (a) For UN Nos. 2977 and 2978, the mass of uranium hexafluoride shall not be different from that allowed for the package design, and for UN No. 3507, the mass of uranium hexafluoride shall be less than 0.1 kg;
- (b) The mass of uranium hexafluoride shall not be greater than a value that would lead to an ullage smaller than 5% at the maximum temperature of the package as specified for the plant systems where the package shall be used; and
- (c) The uranium hexafluoride shall be in solid form and the internal pressure shall not be above atmospheric pressure when presented for carriage.".

(Reference documents: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 and ECE/TRANS/WP.15/AC.1/132/Add.2)

2.2.7.2.4.6.1 Replace "competent authority approval certificate" by "competent authority certificate of approval".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.6.2 Amend to read:

"2.2.7.2.4.6.2 The contents of a Type B(U), Type B(M) or Type C package shall be as specified in the certificate of approval".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.7.2.4.6.3 and 2.2.7.2.4.6.4 Delete 2.2.7.2.4.6.3 and 2.2.7.2.4.6.4 and replace by "2.2.7.2.4.6.3 (*Deleted*)"

"2.2.7.2.4.6.4 (Deleted)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

2.2.9.2 After "230" add ", 310"

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

- 2.2.9.3 Under "Substances which, on inhalation as fine dust, may endanger health" (M1), replace all three entries by:
- "2212 ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophyllite, crocidolite)
- 2590 ASBESTOS, CHRYSOTILE".
- 2.2.9.3 Under "Live-saving appliances" (M5), replace the three entries for UN No. 3268 by:
- "3268 SAFETY DEVICES, electrically initiated".
- 2.2.9.3 Under "Other substances..." (M11), replace the entry for UN No. 3499 by the following entries:

"3499 CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3Wh)

3508 CAPACITOR, ASYMMETRIC (with an energy storage capacity greater than 0.3Wh).

3509 PACKAGINGS, DISCARDED, EMPTY, UNCLEANED".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1) and ECE/TRANS/WP.15/AC.1/132, annex II)

#### Chapter 3.2

3.2.1 Under "Explanations", in the second paragraph, add the following new sentence at the end of the second indent:

"When used in this table, an alphanumeric code starting with the letters "SP" designates a special provision of Chapter 3.3.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### Table A

For UN No. 0222 Amend the designation in column (2) to read "AMMONIUM NITRATE". In column (6) insert "370".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 0503 In column (2), amend name to read: "SAFETY DEVICES, PYROTECHNIC".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 1001, 1002, 1006, 1009, 1010, 1011, 1012, 1013, 1018, 1020, 1021, 1022, 1027, 1028, 1029, 1030, 1032, 1033, 1035, 1036, 1037, 1039, 1041, 1046, 1049, 1055, 1056, 1058, 1060, 1061, 1063, 1065, 1066, 1070, 1072, 1075, 1077, 1078, 1080, 1081, 1083, 1085, 1086, 1087, 1858, 1860, 1912, 1952, 1954, 1956, 1957, 1958, 1959, 1962, 1964, 1965, 1968, 1969, 1971, 1973, 1974, 1976, 1978, 1982, 1983, 1984, 2034, 2035, 2036, 2044, 2193, 2200, 2203, 2419, 2422, 2424, 2451, 2452, 2453, 2454, 2517, 2599, 2601, 2602, 3070, 3153, 3154, 3156, 3157, 3159, 3161, 3163, 3220, 3252, 3296, 3297, 3298, 3299, 3337, 3338, 3339, 3340, 3354, 3374 in column (6) add "662".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

For UN No. 1008, in column (6) insert "373".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 1051 PG I, 1089 PG I, 1228 PG II, 1259 PG I, 1261 PG II, 1278 PG II, 1308 PG I, 1331 PG III, 1361 PG II and PG III, 1363 PG III, 1364 PG III, 1365 PG III, 1373 PG III, 1376 PG III, 1378 PG II, 1379 PG III, 1386 PG III, 1545 PG II, 1560 PG I, 1569 PG II, 1583 all packing groups, 1603 PG II, 1613 PG I, 1614 PG I, 1649 PG I, 1672 PG I, 1693 PG I and PG II, 1694 PG I, 1697 PG II, 1698 PG I, 1699 PG I, 1701 PG II, 1722 PG I, 1732 PG II, 1792 PG II, 1796 PG II, 1802 PG II, 1806 PG II, 1808 PG II, 1826 PG II, 1832 PG II, 1837 PG II, 1868 PG II, 1889 PG I, 1906 PG II, 1932 PG III, 1939 PG II, 2002 PG III, 2006 PG III, 2030 PG II, 2073, 2212 PG II, 2217 PG III, 2254 PG III, 2295 PG I, 2363 PG I, 2381 PG II, 2404 PG II, 2438 PG I, 2442 PG II, 2443 PG II, 2558 PG I, 2626 PG II, 2691 PG II, 2740 PG I, 2743 PG II, 2749 PG I, 2799 PG II, 2826 PG II, 2835 PG II,

2881 PG II, 2956 PG III, 3048 PG I, 3122 PG I, 3123 PG I, 3129 PG II, 3130 PG II, 3208 PG II, 3242 PG II, 3251 PG III, 3294 PG I, 3315 PG I, 3336 PG I, 3416 PG II, 3448 PG I and PG II, 3450 PG I, 3483 PG I and 3498 PG II, amend the code in column (7b) to read "EO".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 1082, in column (2), add "(REFRIGERANT GAS R 1113)" at the end.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 1210, 1263, 3066, 3469 and 3470 In column (6), insert "367".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 1700, 2016, 2017, 3090, 3091, 3268, 3292, 3356, 3480, 3481 and 3506, delete the packing group in column (4).

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 1942 Amend column (2) to read "AMMONIUM NITRATE with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 2025 (all three packing groups), in column (6), insert "66" and delete "585".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 2187 In column (6) delete "593".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

For UN No. 2212 In column (2) amend the name to read "ASBESTOS, AMPHIBOLE (amosite, tremolite, actinolite, anthophyllite, crocidolite)". In column (6), insert "274".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 2590 In column (2) amend the name to read "ASBESTOS, CHRYSOTILE".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN 2909 The amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN 2910 The amendment to the name in column (2) does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN 2910 Delete "325" and insert "368" in column (6).

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN 2911 The amendment to the name in column (2) does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 2977 and 2978 In column (6), delete "172".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

For UN Nos. 3077 and 3082, in column (6), insert "375".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN Nos. 3090, 3091, 3480 and 3481 In column (6) insert "376" and "377" and delete "661".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 3164, in column (6), insert "371".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 3268 In column (2), amend the name to read: "SAFETY DEVICES, electrically initiated".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 3316 (both entries) In column (7a), replace "0" by "See SP 251". In column (7b), replace "E0" by "See SP 340".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN 3499 In column (2) amend the proper shipping name to read as follows: "CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3Wh)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

For UN No. 3509, amend column (2) to read as follows: "PACKAGINGS, DISCARDED, EMPTY, UNCLEANED".

(Reference document: ECE/TRANS/WP.15/2013/CRP.4/Add.3)

Add the following new entries (columns 8 to 13 have to be confirmed):

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)
3507	URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted	8		I	8	317 369	0	ЕО		[PP,EP]				0
3508	CAPACITOR, ASYMMETRIC (with an energy storage capacity greater than 0.3Wh)	9	M11		9	372	0	E0		[PP]				0
3509	PACKAGING DISCARDED, EMPTY, UNCLEANED	9	M11		9	663	0	E0		[PP]				[0]
3510	ADSORBED GAS, FLAMMABLE, N.O.S.	2	9F		2.1	274	0	E0		[PP,EX,A]	[VE01]			1
3511	ADSORBED GAS, N.O.S.	2	9A		2.2	274	0	E0		[PP]				0
3512	ADSORBED GAS, TOXIC, N.O.S.	2	9T		2.3	274	0	E0		[PP,EP,TOX,A]	[VE02]			2
3513	ADSORBED GAS, OXIDIZING, N.O.S.	2	90		2.2+5.1	274	0	E0		[PP]				0
3514	ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.	2	9TF		2.3+2.1	274	0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2
3515	ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.	2	9ТО		2.3+5.1	274	0	E0		[PP,EP,TOX,A]	[VE02]			2
3516	ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.	2	9TC		2.3+8	274	0	E0		[PP,EP,TOX,A]	[VE02]			2
3517	ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2	9TFC		2.3+2.1	274	0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2
3518	ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2	9ТОС		2.3+5.1 +8	274	0	E0		[PP,EP,TOX,A]	[VE02]			2

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)
3519	BORON TRIFLUORIDE, ADSORBED	2	9TC		2.3+8		0	E0		[PP,EP,TOX,A]	[VE02]			2
3520	CHLORINE, ADSORBED	2	9ТОС		2.3+5.1 +8		0	ЕО		[PP,EP,TOX,A]	[VE02]			2
3521	SILICON TETRAFLUORIDE, ADSORBED	2	9TC		2.3+8		0	E0		[PP,EP,TOX,A]	[VE02]			2
3522	ARSINE, ADSORBED	2	9TF		2.3+2.1		0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2
3523	GERMANE, ADSORBED	2	9TF		2.3+2.1		0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2
3524	PHOSPHORUS PENTAFLUORIDE, ADSORBED	2	9TC		2.3+8		0	E0		[PP,EP,TOX,A]	[VE02]			2
3525	PHOSPHINE, ADSORBED	2	9TF		2.3+2.1		0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2
3526	HYDROGEN SELENIDE, ADSORBED	2	9TF		2.3+2.1		0	E0		[PP,EP,EX,TOX,A]	[VE01, VE02]			2

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

#### **3.2.2 Table B**

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

Amend the entries for "AIR BAG INFLATORS", "AIR BAG MODULES", and "SEAT-BELT PRETENSIONERS" to read as follows:

«Air bag inflators, see	1 9	0503 3268»
«Air bag modules, see	1 9	0503 3268»
«Seat-belt pretensioners, see	1 9	0503 3268»

In the entries for "Actinolite", "Anthophyllite", "Talcum with tremolite and/or actinolite" and "Tremolite" in the UN No. column, replace "2590" by "2212".

Delete the entries for "Asbestos, blue or brown", "Asbestos, white", "Chryosotile", , "BLUE ASBESTOS (crocidolite)", "BROWN ASBESTOS (amosite, mysorite)", "WHITE ASBESTOS (chrysotile, actinolite, anthophyllite, tremolite)".

In the entry for "TRIFLUOROCHLOROETHYLENE, STABILIZED" UN No. 1082, add at the end ", REFRIGERANT GAS R 1113".

In the second entry for "AMMONIUM NITRATE", (UN 1942), amend the description to read as follows "AMMONIUM NITRATE with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance".

In the first entry for "AMMONIUM NITRATE", (UN 0222), amend the description to read as follows "AMMONIUM NITRATE".

In the entry for "CAPACITOR, electric double layer..." (UN 3499), amend the description to read as follows: "CAPACITOR, ELECTRIC DOUBLE LAYER (with an energy storage capacity greater than 0.3 Wh)".

The amendments to the entries for "RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - ARTICLES MANUFACTURED FROM NATURAL URANIUM or DEPLETED URANIUM or NATURAL THORIUM", "RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL" and "RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - INSTRUMENTS or ARTICLES" do not apply to the English text.

Add the following new entries in alphabetical order:

Name and description	Class	UN No.
ADSORBED GAS, FLAMMABLE, N.O.S.	2	3510
ADSORBED GAS, N.O.S.	2	3511
ADSORBED GAS, OXIDIZING, N.O.S.	2	3513
ADSORBED GAS, TOXIC, CORROSIVE, N.O.S.	2	3516
ADSORBED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.	2	3517
ADSORBED GAS, TOXIC, FLAMMABLE, N.O.S.	2	3514

Name and description	Class	UN No.
ADSORBED GAS, TOXIC, N.O.S.	2	3512
ADSORBED GAS, TOXIC, OXIDIZING, CORROSIVE, N.O.S.	2	3518
ADSORBED GAS, TOXIC, OXIDIZING, N.O.S.	2	3515
Amphibole asbestos, see	9	2212
ARSINE, ADSORBED	2	3522
ASBESTOS, AMPHIBOLE	9	2212
ASBESTOS, CHRYSOTILE	9	2590
BORON TRIFLUORIDE, ADSORBED	2	3519
CAPACITOR, ASYMMETRIC (with an energy storage capacity greater han 0.3Wh)	9	3508
CHLORINE, ADSORBED	2	3520
Chrysotile, see	9	2590
GERMANE, ADSORBED	2	3523
HYDROGEN SELENIDE, ADSORBED	2	3526
Mercurous chloride, see	6.1	2025
PACKAGINGS, DISCARDED, EMPTY, UNCLEANED	9	3509
PHOSPHINE, ADSORBED	2	3525
PHOSPHORUS PENTAFLUORIDE, ADSORBED	2	3524
SAFETY DEVICES, electrically initiated	9	3268
SAFETY DEVICES, PYROTECHNIC	1	0503
SILICON TETRAFLUORIDE, ADSORBED	2	3521
URANIUM HEXAFLUORIDE, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, less than 0.1 kg per package, non-fissile or fissile-excepted	8	3507

#### Chapter 3.3

References for Chapter 3.3 are: ECE/TRANS/WP.15/AC.1/2013/31/Add.1, ECE/TRANS/WP.15/AC.1/132/Add.2 and ECE/TRANS/WP.15/AC.1/130/Add.2.

SP122 At the end, add: ", 4.1.4.2 packing instruction IBC520 and 4.2.5.2.6 portable tank instruction T23 of ADR.".

SP135 Amend to read as follows:

"135 The dihydrated sodium salt of dichloroisocyanuric acid does not meet the criteria for inclusion in Class 5.1 and is not subject to ADN unless meeting the criteria for inclusion in another Class.".

SP172 Amend to read as follows:

"172 Where a radioactive material has (a) subsidiary risk(s):

- (a) The substance shall be allocated to packing group I, II or III, if appropriate, by application of the packing group criteria provided in Part 2 corresponding to the nature of the predominant subsidiary risk;
- (b) Packages shall be labelled with subsidiary risk labels corresponding to each subsidiary risk exhibited by the material; corresponding placards shall be affixed to vehicles or containers in accordance with the relevant provisions of 5.3.1;
- (c) For the purposes of documentation and package marking, the proper shipping name shall be supplemented with the name of the constituents which most predominantly contribute to this (these) subsidiary risk(s) and which shall be enclosed in parenthesis;
- (d) The dangerous goods transport document shall indicate the label model number(s) corresponding to each subsidiary risk in parenthesis after the Class number "7" and, where assigned the packing group as required by 5.4.1.1.1 (d).

For packing, see also 4.1.9.1.5 of ADR.".

SP225 At the end, add:

"Fire extinguishers shall be manufactured, tested, approved and labelled according to the provisions applied in the country of manufacture.

**NOTE:** Provisions applied in the country of manufacture" means the provisions applicable in the country of manufacture or those applicable in the country of use.

Fire extinguishers under this entry include:

- (a) portable fire extinguishers for manual handling and operation;
- (b) fire extinguishers for installation in aircraft;
- (c) fire extinguishers mounted on wheels for manual handling;
- (d) fire extinguishing equipment or machinery mounted on wheels or wheeled platforms or units carried similar to (small) trailers, and
- (e) fire extinguishers composed of a non-rollable pressure drum and equipment, and handled e.g. by fork lift or crane when loaded or unloaded.

**NOTE:** Pressure receptacles which contain gases for use in the above-mentioned fire extinguishers or for use in stationary fire-fighting installations shall meet the requirements of Chapter 6.2 of ADR and all requirements applicable to the relevant gas when these pressure receptacles are carried separately.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

SP235 Amend to read as follows:

"235 This entry applies to articles which contain Class 1 explosive substances and which may also contain dangerous goods of other classes. These articles are used to enhance safety in vehicles, vessels or aircraft – e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices."

SP251 Insert the following new third paragraph (after "to any individual substance in the kit."):

"Where the kit contains only dangerous goods to which no packing group is assigned, no packing group need be indicated on the dangerous goods transport document.".

SP280 Amend to read as follows:

"280 This entry applies to safety devices for vehicles, vessels or aircraft, e.g. air bag inflators, air bag modules, seat-belt pretensioners, and pyromechanical devices, which contain dangerous goods of Class 1 or of other classes, when carried as component parts and if these articles as presented for carriage have been tested in accordance with Test Series 6(c) of Part 1 of the Manual of Tests and Criteria, with no explosion of the device, no fragmentation of device casing or pressure receptacle, and no projection hazard nor thermal effect which would significantly hinder fire-fighting or emergency response efforts in the immediate vicinity. This entry does not apply to life saving appliances described in special provision 296 (UN Nos. 2990 and 3072)."

SP289 Amend to read as follows:

"289 Safety devices, electrically initiated and safety devices, pyrotechnic installed in vehicles, wagons, vessels or aircraft or in completed components such as steering columns, door panels, seats, etc. are not subject to ADN.".

SP306 Amend to read as follows:

"306 This entry may only be used for substances that are too insensitive for acceptance into Class 1 when tested in accordance with Test Series 2 (see Manual of Tests and Criteria, Part I).".

SP309 Amend the last sentence to read as follows:

"Substances shall satisfactorily pass Tests 8 (a), (b) and (c) of Test Series 8 of the *Manual of Tests and Criteria*, Part I, Section 18 and be approved by the competent authority."

SP363 In subparagraph (c), replace "orientated" by "oriented".

SP580 Delete special provision 580 and replace by "580 (*Deleted*)".

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II)

SP582 Amend to read as follows:

"582 This entry covers, <u>inter alia</u>, mixtures of gases indicated by the letter R ..., with the following properties:

Mixture	Maximum vapour pressure at 70 °C (MPa)	Minimum density at 50 °C (kg/l)	Permitted technical name for purposes of 5.4.1.1
F1	1.3	1.30	"Mixture F1"
F2	1.9	1.21	"Mixture F2"
F3	3.0	1.09	"Mixture F3"

**NOTE 1:** Trichlorofluoromethane (refrigerant R 11), 1,1,2-trichloro-1,2,2-trifluoroethane (refrigerant R 113), 1,1,1-trichloro-2,2,2-trifluoroethane (refrigerant R 113a), 1-chloro-1,2,2-trifluoroethane (refrigerant R 133) and 1-chloro-1,1,2-trifluoroethane (refrigerant R 133 b) are not substances of Class 2. They may, however, enter into the composition of mixtures F 1 to F 3.

**NOTE 2:** The reference densities correspond to the densities of dichlorofluoromethane (1.30 kg/l), dichloridifluoromethane (1.21 kg/l) and chlorodifluoromethane (1.09 kg/l).".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

SP583 Amend to read as follows:

"583 This entry covers, *inter alia*, mixtures of gases, with the following properties:

Mixture	Maximun vapour pressure at 70 °C (MPa)	Minimun density at 50 •C (kg/l)	Permitted technical name <sup>(a)</sup> for purposes of 5.4.1.1
A	1.1	0.525	"Mixture A" or "Butane"
A01	1.6	0.516	"Mixture A01" or "Butane"
A02	1.6	0.505	"Mixture A02" or "Butane"
A0	1.6	0.495	"Mixture A0" or "Butane"
A1	2.1	0.485	"Mixture A1"
B1	2.6	0.474	"Mixture B1"
B2	2.6	0.463	"Mixture B2"
В	2.6	0.450	"Mixture B"
C	3.1	0.440	"Mixture C" or "Propane"

<sup>(</sup>a) For carriage in tanks, the trade names "Butane" or "Propane" may be used only as a complement."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

SP585 Delete special provision 585 and insert "585 (Deleted)".

SP594 Replace "according to the Regulations of the manufacturing State" by "according to the provisions applied in the country of manufacture". At the end, insert the following new NOTE:

"NOTE: "Provisions applied in the country of manufacture" means the provisions applicable in the country of manufacture or those applicable in the country of use."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

SP636 (b) Amend to read as follows:

- "(b) Up to the intermediate processing facility, lithium cells and batteries with a gross mass of not more than 500 g each or lithium ion cells with a Watt-hour rating of not more than 20 Wh, lithium ion batteries with a Watt-hour rating of not more than 100 Wh, lithium metal cells with a lithium content of not more than 1 g and lithium metal batteries with an aggregate lithium content of not more than 2 g, whether or not contained in equipment, collected and handed over for carriage for disposal or recycling, together with or without other non-lithium cells or batteries, are not subject to the other provisions of ADN including special provision 376 and paragraph 2.2.9.1.7, if they meet the following conditions:
  - (i) The provisions of packing instruction P909 of 4.1.4.1 of ADR apply except for the additional requirements 1 and 2;
  - (ii) A quality assurance system is in place to ensure that the total amount of lithium cells or batteries per transport unit does not exceed 333 kg;

**NOTE:** The total quantity of lithium cells and batteries in the mix may be assessed by means of a statistical method included in the quality assurance system. A copy of the quality assurance records shall be made available to the competent authority upon request.

(iii) Packages are marked "LITHIUM BATTERIES FOR DISPOSAL" or "LITHIUM BATTERIES FOR RECYCLING" as appropriate.".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

SP660 (g) (v) Replace "nominal capacity" by "water capacity".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

SP661 Delete special provision 661 and replace by "661 (*Deleted*)".

Add the following new special provisions:

"66 Cinnabar is not subject to the requirements of ADN.".

"367 For the purposes of documentation:

The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package;

The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package;

The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and

The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package."

"368 In the case of non-fissile or fissile-excepted uranium hexafluoride, the material shall be classified under UN No. 3507 or UN No. 2978.".

"369 In accordance with 2.1.3.5.3 (a), this radioactive material in an excepted package possessing corrosive properties is classified in Class 8 with a radioactive material subsidiary risk.

Uranium hexafluoride may be classified under this entry only if the conditions of 2.2.7.2.4.1.2, 2.2.7.2.4.1.5, 2.2.7.2.4.5.2 and, for fissile-excepted material, of 2.2.7.2.3.6 are met.

In addition to the provisions applicable to the carriage of Class 8 substances, the provisions of 5.1.3.2, 5.1.5.2.2, 5.1.5.4.1 (b), 7.1.4.14.7.3.1, 7.1.4.14.7.5.1 to 7.1.4.14.7.5.4 and 7.1.4.14.7.7 apply.

No Class 7 label is required to be displayed.".

"370 This entry applies to:

- ammonium nitrate with more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance; and
- ammonium nitrate with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any added substance, that is not too sensitive for acceptance into Class 1 when tested in accordance with Test Series 2 (see Manual of Tests and Criteria, Part I). See also UN No. 1942.".
- "371 (1) This entry also applies to articles, containing a small pressure receptacle with a release device. Such articles shall comply with the following requirements:
- (a) The water capacity of the pressure receptacle shall not exceed 0.5 litres and the working pressure shall not exceed 25 bar at 15  $^{\circ}$ C;
- (b) The minimum burst pressure of the pressure receptacle shall be at least four times the pressure of the gas at 15  $^{\circ}$ C;

- (c) Each article shall be manufactured in such a way that unintentional firing or release is avoided under normal conditions of handling, packing, carriage and use. This may be fulfilled by an additional locking device linked to the activator;
- (d) Each article shall be manufactured in such a way as to prevent hazardous projections of the pressure receptacle or parts of the pressure receptacle;
- (e) Each pressure receptacle shall be manufactured from material which will not fragment upon rupture;
- (f) The design type of the article shall be subjected to a fire test. For this test, the provisions of paragraphs 16.6.1.2 except letter g, 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7 (b) and 16.6.1.3.8 of the Manual of Tests and Criteria shall be applied. It shall be demonstrated that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, in such a way that the pressure receptacle will not fragment and that the article or fragments of the article do not rocket more than 10 metres;
- (g) The design type of the article shall be subjected to the following test. A stimulating mechanism shall be used to initiate one article in the middle of the packaging. There shall be no hazardous effects outside the package such as disruption of the package, metal fragments or a receptacle which passes through the packaging.
- (2) The manufacturer shall produce technical documentation of the design type, manufacture as well as the tests and their results. The manufacturer shall apply procedures to ensure that articles produced in series are made of good quality, conform to the design type and are able to meet the requirements in (1). The manufacturer shall provide such information to the competent authority on request."
- "372 This entry applies to asymmetric capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to ADN.

Energy storage capacity means the energy stored in a capacitor, as calculated according to the following equation,

Wh = 
$$1/2C_N(U_R^2-U_L^2) \times (1/3600)$$
,

using the nominal capacitance  $(C_N)$ , rated voltage  $(U_R)$  and rated lower limit voltage  $(U_L)$ .

All asymmetric capacitors to which this entry applies shall meet the following conditions:

- (a) Capacitors or modules shall be protected against short circuit;
- (b) Capacitors shall be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid which is released upon venting shall be contained by packaging or by equipment in which a capacitor is installed;
  - (c) Capacitors shall be marked with the energy storage capacity in Wh; and
- (d) Capacitors containing an electrolyte meeting the classification criteria of any class of dangerous goods shall be designed to withstand a 95 kPa pressure differential;

Capacitors containing an electrolyte not meeting the classification criteria of any class of dangerous goods, including when configured in a module or when installed in equipment are not subject to other provisions of ADN.

Capacitors containing an electrolyte meeting the classification criteria of any class of dangerous goods, with an energy storage capacity of 20 Wh or less, including when configured in a module, are not subject to other provisions of ADN when the capacitors are

capable of withstanding a 1.2 metre drop test unpackaged on an unyielding surface without loss of contents

Capacitors containing an electrolyte meeting the classification criteria of any class of dangerous goods that are not installed in equipment and with an energy storage capacity of more than 20 Wh are subject to ADN.

Capacitors installed in equipment and containing an electrolyte meeting the classification criteria of any class of dangerous goods, are not subject to other provisions of ADN provided that the equipment is packaged in a strong outer packaging constructed of suitable material, and of adequate strength and design, in relation to the packaging's intended use and in such a manner as to prevent accidental functioning of capacitors during carriage. Large robust equipment containing capacitors may be offered for carriage unpackaged or on pallets when capacitors are afforded equivalent protection by the equipment in which they are contained.

**NOTE:** Notwithstanding the provisions of this special provision, nickel-carbon asymmetric capacitors containing Class 8 alkaline electrolytes shall be carried as UN 2795 BATTERIES, WET, FILLED WITH ALKALI, electric storage.".

- "373 Neutron radiation detectors containing non-pressurized boron trifluoride gas may be carried under this entry provided that the following conditions are met:
  - (a) Each radiation detector shall meet the following conditions.
  - (i) The pressure in each detector shall not exceed 105 kPa absolute at 20°C;
  - (ii) The amount of gas shall not exceed 13 g per detector;
  - (iii) Each detector shall be manufactured under a registered quality assurance programme;

NOTE: ISO 9001:2008 may be used for this purpose.

- (iv) Each neutron radiation detector shall be of welded metal construction with brazed metal to ceramic feed through assemblies. These detectors shall have a minimum burst pressure of 1800 kPa as demonstrated by design type qualification testing; and
- (v) Each detector shall be tested to a  $1 \times 10^{-10} \text{ cm}^3/\text{s}$  leaktightness standard before filling.
- (b) Radiation detectors carried as individual components shall be carried as follows:
  - (i) Detectors shall be packed in a sealed intermediate plastics liner with sufficient absorbent material to absorb the entire gas contents;
  - (ii) They shall be packed in strong outer packaging. The completed package shall be capable of withstanding a 1.8 m drop test without leakage of gas contents from detectors;
  - (iii) The total amount of gas from all detectors per outer packaging shall not exceed 52 g.
- (c) Completed neutron radiation detection systems containing detectors meeting the conditions of paragraph (a) shall be carried as follows:
  - (i) The detectors shall be contained in a strong sealed outer casing;
  - (ii) The casing shall contain sufficient absorbent material to absorb the entire gas contents;

(iii) The completed systems shall be packed in strong outer packagings capable of withstanding a 1.8 m drop test without leakage unless a system's outer casing affords equivalent protection.

Packing instruction P200 of 4.1.4.1 of ADR is not applicable.

The transport document shall include the following statement "Carriage in accordance with special provision 373". Neutron radiation detectors containing not more than 1 g of boron trifluoride, including those with solder glass joints, are not subject to ADN provided they meet the requirements in paragraph (a) and are packed in accordance with paragraph (b). Radiation detection systems containing such detectors are not subject to ADN provided they are packed in accordance with paragraph (c)."

"374 (Reserved)".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

"375 These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADN provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of ADR."

"376 Lithium ion cells or batteries and lithium metal cells or batteries identified as being damaged or defective such that they do not conform to the type tested according to the applicable provisions of the Manual of Tests and Criteria shall comply with the requirements of this special provision.

For the purposes of this special provision, these may include, but are not limited to:

- Cells or batteries identified as being defective for safety reasons;
- Cells or batteries that have leaked or vented;
- Cells or batteries that cannot be diagnosed prior to carriage; or
- Cells or batteries that have sustained physical or mechanical damage.

**NOTE:** In assessing a battery as damaged or defective, the type of battery and its previous use and misuse shall be taken into account.

Cells and batteries shall be carried according to the provisions applicable to UN No. 3090, UN No. 3091, UN No. 3480 and No. UN 3481, except special provision 230 and as otherwise stated in this special provision.

Packages shall be marked "DAMAGED/DEFECTIVE LITHIUM-ION BATTERIES" or "DAMAGED/DEFECTIVE LITHIUM METAL BATTERIES", as applicable.

Cells and batteries shall be packed in accordance with packing instructions P908 of 4.1.4.1 or LP904 of 4.1.4.3 of ADR, as applicable.

Cells and batteries liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of carriage shall not be carried except under conditions specified by the competent authority."

"377 Lithium ion and lithium metal cells and batteries and equipment containing such cells and batteries carried for disposal or recycling, either packed together with or packed without non-lithium batteries, may be packaged in accordance with packing instruction P909 of 4.1.4.1 of ADR.

These cells and batteries are not subject to the requirements of 2.2.9.1.7 (a) to (e).

Packages shall be marked "LITHIUM BATTERIES FOR DISPOSAL" or "LITHIUM BATTERIES FOR RECYCLING".

Identified damaged or defective batteries shall be carried in accordance with special provision 376 and packaged in accordance with P908 of 4.1.4.1 or LP904 of 4.1.4.3 of ADR, as applicable.".

"662 Cylinders not conforming to the provisions of Chapter 6.2 which are used exclusively on board a ship or aircraft, may be carried for the purpose of filling or inspection and subsequent return, provided the cylinders are designed and constructed in accordance with a standard recognized by the competent authority of the country of approval and all the other relevant requirements of ADN and other conditions are met including:

- (a) The cylinders shall be carried with valve protection in conformity with 4.1.6.8;
- (b) The cylinders shall be marked and labelled in conformity with 5.2.1 and 5.2.2; and
- (c) All the relevant filling requirements of packing instruction P200 of 4.1.4.1 of ADR are complied with.

The transport document shall include the following statement: "Carriage in accordance with Special Provision 662"."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II, as modified by informal document INF.14 (95<sup>th</sup> session of WP.15))

"663 This entry may only be used for packagings, large packagings or IBCs, or parts thereof, which have contained dangerous goods which are carried for disposal, recycling or recovery of their material, other than reconditioning, repair, routine maintenance, remanufacturing or reuse, and which have been emptied to the extent that only residues of dangerous goods adhering to the packaging parts are present when they are handed over for carriage.

#### Scope:

Residues present in the packagings, discarded, empty, uncleaned shall only be of dangerous goods of classes 3, 4.1, 5.1, 6.1, 8 or 9. In addition, they shall not be:

- Substances assigned to packing group I or that have "0" assigned in Column (7a) of Table A of Chapter 3.2; nor
- Substances classified as desensitized explosive substances of Class 3 or Class 4.1; nor
- Substances classified as self-reactive substances of Class 4.1; nor
- Asbestos (UN 2212 and UN 2590), polychlorinated biphenyls (UN 2315 and UN 3432) and polyhalogenated biphenyls or polyhalogenated terphenyls (UN 3151 and UN 3152).

#### General provisions:

Packagings, discarded, empty, uncleaned with residues presenting a risk or a subsidiary risk of Class 5.1 shall not be packed together with other packagings, discarded, empty, uncleaned, or loaded together with other packagings, discarded, empty, uncleaned in the same bulk container.

Documented sorting procedures shall be implemented on the loading site to ensure compliance with the provisions applicable to this entry.

NOTE: All the other provisions of ADN apply.".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

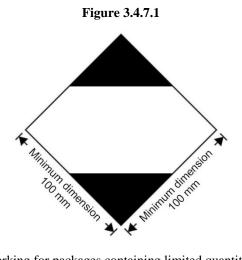
#### Chapter 3.4

References ECE/TRANS/WP.15/AC.1/2013/31/Add.1, for Chapter 3.4 are: ECE/TRANS/WP.15/AC.1/132/Add.2.

Amend section 3.4.7 and 3.4.8 to read as follows:

#### **"3.4.7** Marking for packages containing limited quantities

3.4.7.1 Except for air transport, packages containing dangerous goods in limited quantities shall bear the marking shown in Figure 3.4.7.1:



Marking for packages containing limited quantities

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

The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line forming the diamond shall be 2 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

If the size of the package so requires, the minimum outer dimensions shown 3.4.7.2 in Figure 3.4.7.1 may be reduced to be not less than 50 mm x 50 mm provided the marking remains clearly visible. The minimum width of the line forming the diamond may be reduced to a minimum of 1 mm.

#### 3.4.8 Marking for packages containing limited quantities conforming to Part 3, **Chapter 4 of the ICAO Technical Instructions**

3.4.8.1 Packages containing dangerous goods packed in conformity with the provisions of Part 3, Chapter 4 of the ICAO Technical Instructions may bear the marking shown in Figure 3.4.8.1 to certify conformity with these provisions:

**Figure 3.4.8.1** 



Marking for packages containing limited quantities conforming to Part 3, Chapter 4 of the ICAO Technical Instructions

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

The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The top and bottom portions and the surrounding line shall be black. The centre area shall be white or a suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line forming the diamond shall be 2 mm. The symbol "Y" shall be placed in the centre of the mark and shall be clearly visible. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

3.4.8.2 If the size of the package so requires, the minimum outer dimensions shown in Figure 3.4.8.1 may be reduced to be not less than 50 mm x 50 mm provided the marking remains clearly visible. The minimum width of the line forming the diamond may be reduced to a minimum of 1 mm. The symbol "Y" shall remain in approximate proportion to that shown in Figure 3.4.8.1.".

#### 3.4.9 Amend to read as follows:

"3.4.9 Packages containing dangerous goods bearing the marking shown in 3.4.8 with or without the additional labels and markings for air transport shall be deemed to meet the provisions of section 3.4.1 as appropriate and of sections 3.4.2 to 3.4.4 and need not bear the marking shown in 3.4.7."

#### 3.4.10 Amend to read as follows:

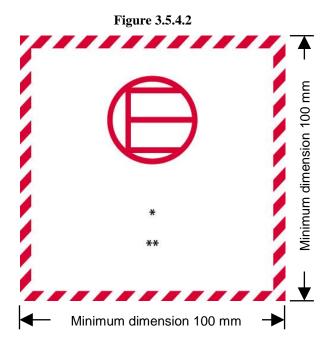
"3.4.10 Packages containing dangerous goods in limited quantities bearing the marking shown in 3.4.7 and conforming with the provisions of the ICAO Technical Instructions, including all necessary marks and labels specified in Parts 5 and 6, shall be deemed to meet the provisions of section 3.4.1 as appropriate and of sections 3.4.2 to 3.4.4."

#### Chapter 3.5

References for Chapter 3.5 are: ECE/TRANS/WP.15/AC.1/2013/31/Add.1, ECE/TRANS/WP.15/AC.1/132/Add.2.

3.5.4.2 Amend to read as follows:

#### "3.5.4.2 Excepted quantities mark



Excepted quantities mark

- \* The 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.

The marking shall be in the form of a square. The hatching and symbol shall be of the same colour, black or red, on white or suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II as amended by ECE/TRANS/WP.15/AC.1/132, annex II)

#### [Chapter 4.1

4.1.3 In the first sentence, insert ", bulk containers" after "wagons".

In the first indent, delete "with the exception of BK3 containers".

(Document de référence: ECE/TRANS/WP.15/AC.1/2013/37)]

#### Chapter 5.1

Reference for Chapter 5.1 is: ECE/TRANS/WP.15/AC.1/2013/31/Add.1.

5.1.2.1 (a) Add the following new sentence at the beginning of the last paragraph (before "The marking of the word..."):

"The lettering of the "OVERPACK" marking shall be at least 12 mm high.".

- 5.1.2.1 Amend paragraph (b) to read as follows:
- "(b) Orientation arrows illustrated in 5.2.1.9 shall be displayed on two opposite sides of overpacks containing packages which shall be marked in accordance with 5.2.1.9.1, unless the marking remains visible."

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II)

- 5.1.3.2 Replace "Packagings, including IBCs, and tanks" by "Containers, tanks, IBCs, as well as other packagings and overpacks,".
- 5.1.5.1.1 In the first sentence replace "for package designs" by "of package designs".
- 5.1.5.1.2 Add a new sub-paragraph (d) to read as follows:
- "(d) Radiation protection programmes for shipments by special use vessels in accordance with 7.1.4.14.7.3.7.".
- 5.1.5.1.4 (c) Replace "for shipment approval" by "for approval of shipment (see 6.4.23.2 of ADR)".
- 5.1.5.2.1 In (a), insert a new sub-paragraph (iii) to read as follows:
  - "(iii) fissile material excepted under 2.2.7.2.3.5 (f);".

Consequently, current sub-paragraphs (iii) to (vi) become new (iv) to (vii).

- 5.1.5.2.1 In (v) (former (iv)) delete "all" and "replace "6.4.11.2" by "2.2.7.2.3.5, 6.4.11.2 or 6.4.11.3".
- 5.1.5.2.1 At the end of (c), replace "." by ";".
- 5.1.5.2.1 Insert new (d) and (e) to read as follows:
- "(d) Determination of the basic radionuclide values referred to in 2.2.7.2.2.1 for individual radionuclides which are not listed in Table 2.2.7.2.2.1 (see 2.2.7.2.2.2 (a));
- (e) Alternative activity limits for an exempt consignment of instruments or articles (see 2.2.7.2.2.2 (b)).".
- 5.1.5.2.1 Amend the second paragraph after sub-paragraphs (a) to (e) to read as follows:

"The certificates of approval for the package design and the shipment may be combined into a single certificate.".

- 5.1.5.2.3 In the first sentence, amend the beginning of the sentence to read: "For package designs where it is not required that a competent authority issue a certificate of approval, the consignor...".
- 5.1.5.3.4 In the first sentence, replace "and overpacks" by ", overpacks and containers".
- 5.1.5.3.4 In (a), replace (twice) "or overpack" by ", overpack or container".
- 5.1.5.3.4 In (e), insert "or container" after "overpack".
- Table 5.1.5.3.4 Replace "and overpacks" by ", overpacks and containers".

In note "b" to the table insert at end: "except for containers (see Table D in 7.1.4.14.7.3.3)".

- 5.1.5.3.5 Replace "design or shipment approval" by "approval of design or shipment".
- 5.1.5.4 Amend the title to read "Specific provisions for excepted packages of radioactive material of Class 7".

- 5.1.5.4.1 After "excepted packages", insert "of radioactive material of Class 7".
- 5.1.5.4.2 Amend to read as follows:
- "5.1.5.4.2 The documentation requirements of Chapter 5.4 do not apply to excepted packages of radioactive material of Class 7, except that:
- (a) The UN number preceded by the letters "UN" and the name and address of the consignor and the consignee and, if relevant, the identification mark for each competent authority certificate of approval (see 5.4.1.2.5.1 (g)) shall be shown on a transport document such as a bill of lading, air waybill or CMR, CIM or CMNI consignment note;
- (b) If relevant, the requirements of 5.4.1.2.5.1 (g), 5.4.1.2.5.3 and 5.4.1.2.5.4 shall apply;
  - (c) The requirements of 5.4.2 and 5.4.4 shall apply.".
- 5.1.5.4.3 Insert a new paragraph to read as follows:
- "5.1.5.4.3 The requirements of 5.2.1.7.8 and 5.2.2.1.11.5 shall apply if relevant.".
- 5.1.5.5 In the last column of the Table, in the row for "Special form radioactive material", replace "1.6.6.3" by "1.6.6.4".

#### Chapter 5.2

Reference for Chapter 5.2 are: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 and ECE/TRANS/WP.15/AC.1/132/Add.2.

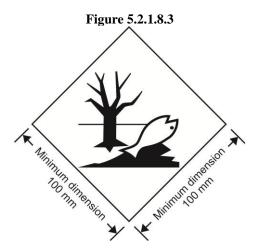
5.2.1.3 Add the following new sentence at the end:

"The lettering of the "SALVAGE" marking shall be at least 12 mm high.".

- 5.2.1.7 Replace "for goods of Class 7" by "for radioactive material".
- 5.2.1.7.1 Insert the following sentence at the end: "Each overpack shall be legibly and durably marked on the outside of the overpack with an identification of either the consignor or consignee, or both unless these markings of all packages within the overpack are clearly visible."
- 5.2.1.7.5 Amend the introductory sentence to read as follows:

"Each package which conforms to a design approved under one or more of paragraphs 5.1.5.2.1, 6.4.22.1 to 6.4.22.4, 6.4.23.4 to 6.4.23.7 and 6.4.24.2 of ADR shall be legibly and durably marked on the outside of the package with the following information:".

- 5.2.1.7.5 Amend (c) to read as follows:
- "(c) "Type B(U)", "Type B(M)" or "Type C", in the case of a Type B(U), Type B(M) or Type C package design".
- 5.2.1.7.5 Delete (d).
- 5.2.1.7.7 Replace "4.1.9.2.3" by "4.1.9.2.4".
- 5.2.1.7.8 Replace "competent authority design or shipment approval" by "competent authority approval of design or shipment".
- 5.2.1.8.3 Amend 5.2.1.8.3 to read as follows:
- "5.2.1.8.3 The environmentally hazardous substance mark shall be as shown in Figure 5.2.1.8.3.

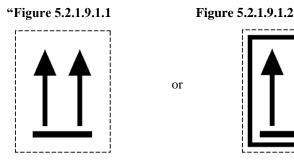


Environmentally hazardous substance mark

The marking shall be in the form of a square set at an angle of 45° (diamond-shaped). The symbol (fish and tree) shall be black on white or suitable contrasting background. The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line forming the diamond shall be 2 mm. If the size of the package so requires, the dimensions/line thickness may be reduced, provided the marking remains clearly visible. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

**NOTE**: The labelling provisions of 5.2.2 apply in addition to any requirement for packages to bear the environmentally hazardous substance mark."

#### 5.2.1.9.1 Number the figures and amend the caption to read as follows:



Two black or red arrows on white or suitable contrasting background

The rectangular border is optional

All features shall be in approximate proportion to those shown".

#### 5.2.2.1.11.1 Amend the first and second sentences to read as follows:

"Except when enlarged labels are used in accordance with 5.3.1.1.3, each package, overpack and container containing radioactive material shall bear the labels conforming to the applicable models Nos. 7A, 7B or 7C, according to the appropriate category. Labels shall be affixed to two opposite sides on the outside of the package or overpack or on the outside of all four sides of a container or tank."

#### 5.2.2.1.11.1 In the fourth sentence:

For "under 6.4.11.2" read "under the provisions of 2.2.7.2.3.5";

Replace "which conform to model" by "conforming to model";

Replace the last phrase of the fourth sentence by the following: "such labels, where applicable shall be affixed adjacent to the labels conforming to the applicable model Nos. 7A, 7B or 7C.".

- 5.2.2.1.11.2 In the introductory sentence, replace "models numbers 7A, 7B and 7C" by "the applicable model No. 7A, 7B or 7C".
- 5.2.2.1.11.2 In (b), amend the last sentence to read as follows:

"For fissile material, the total mass of fissile nuclides in units of grams (g), or multiples thereof, may be used in place of activity;".

- 5.2.2.1.11.3 Amend to read as follows:
- "5.2.2.1.11.3 Each label conforming to the model No. 7E shall be completed with the criticality safety index (CSI) as stated in the certificate of approval applicable in the countries through or into which the consignment is carried and issued by the competent authority or as specified in 6.4.11.2 or 6.4.11.3 of ADR.".
- 5.2.2.1.11.4 Amend to read as follows:
- "5.2.2.1.11.4 For overpacks and containers, the label conforming to model No. 7E shall bear the sum of the criticality safety indexes of all the packages contained therein."
- 5.2.2.1.11.5 Replace "competent authority design or shipment approval" by "competent authority approval of design or shipment".
- 5.2.2.2.1.1 Amend to read as follows:
- "5.2.2.2.1.1 Labels shall be configured as shown in Figure 5.2.2.2.1.1.

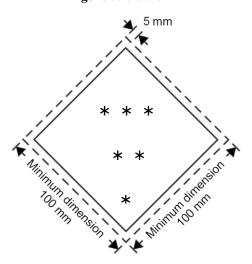


Figure 5.2.2.1.1

- Class/division label
- \* The class or for Classes 4.1, 4.2 and 4.3, the figure "4" or for Classes 6.1 and 6.2, the figure "6", shall be shown in the bottom corner.
- \*\* Additional text/numbers/letters shall (if mandatory) or may (if optional) be shown in this bottom half.
- \*\*\* The class symbol or, for divisions 1.4, 1.5 and 1.6, the division number and for Model No 7E the word "FISSILE" shall be shown in this top half".

5.2.2.2.1.1.1 Labels shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.

5.2.2.2.1.1.2 The label shall be in the form of a square set at an angle of 45° (diamond-shaped). The minimum dimensions shall be 100 mm x 100 mm and the minimum width of the line inside the edge forming the diamond shall be 2 mm. The line inside the edge shall be parallel and 5 mm from the outside of that line to the edge of the label. The line inside the edge on the upper half of the label shall be the same colour as the symbol and the line inside the edge on the lower half of the label shall be the same colour as the class or division number in the bottom corner. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

5.2.2.2.1.1.3 If the size of the package so requires the dimensions may be reduced, provided the symbols and other elements of the label remain clearly visible. The line inside the edge shall remain 5 mm to the edge of the label. The minimum width of the line inside the edge shall remain 2 mm. Dimensions for cylinders shall comply with 5.2.2.2.1.2.".

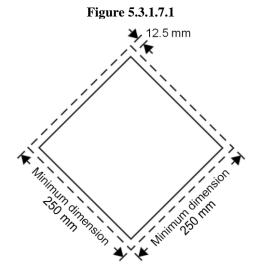
#### Chapter 5.3

5.3.1.1.3 In the last sentence, replace "the label required" by "the required label of model No. 7A, 7B or 7C". Add the following sentence at the end of the last paragraph: "In that case, the dimensions shall be not less than 250 mm by 250 mm.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### 5.3.1.7.1 Amend read as follows:

"5.3.1.7.1 Except as provided in 5.3.1.7.2 for the Class 7 placard, and in 5.3.6.2 for the environmentally hazardous substance mark, a placard shall be configured as shown in Figure 5.3.1.7.1.



Placard (except for Class 7)

The placard shall be in the form of a square set at an angle of  $45^{\circ}$  (diamond-shaped). The minimum dimensions shall be 250 mm x 250 mm (to the edge of the placard). The line inside the edge shall be parallel and 12.5 mm from the outside of that line to the edge of the placard. The symbol and line inside the edge shall correspond in colour to the label for the class or division of the dangerous goods in question. The class or division symbol/numeral shall be positioned and sized in proportion to those prescribed in 5.2.2.2 for the

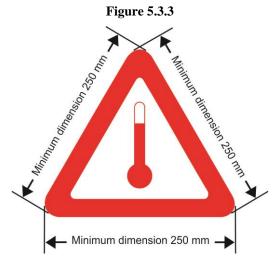
corresponding class or division of the dangerous goods in question. The placard shall display the number of the class or division (and for goods in Class 1, the compatibility group letter) of the dangerous goods in question in the manner prescribed in 5.2.2.2 for the corresponding label, in digits not less than 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### 5.3.3 Amend to read as follows:

#### "5.3.3 Mark for elevated temperature substances

Tank-vehicles, tank-wagons, tank-containers, portable tanks, special vehicles, special wagons or special containers or specially equipped vehicles, specially equipped wagons or specially equipped containers containing a substance that is carried or handed over for carriage in a liquid state at or above 100 °C or in a solid state at or above 240 °C shall bear on both sides for wagons, on both sides and at the rear for vehicles, and on both sides and at each end for containers, tank-containers and portable tanks, the mark shown in Figure 5.3.3.



Mark for carriage at elevated temperature

The marking shall be an equilateral triangle. The colour of the mark shall be red. The minimum dimension of the sides shall be 250 mm. Where dimensions are not specified, all features shall be in approximate proportion to those shown.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1 as amended in ECE/TRANS/WP.15/AC.1/130/Add.2)

5.3.6 Renumber the first paragraph as 5.3.6.1. Delete "The provisions of section 5.3.1 concerning placards shall apply mutatis mutandis to the mark."

Add a new paragraph 5.3.6.2 as follows:

"5.3.6.2 The environmentally hazardous substance mark for containers, MEGCs, tank-containers, portable tanks, wagons and vehicles shall be as described in 5.2.1.8.3 and Figure 5.2.1.8.3, except that the minimum dimensions shall be 250 mm x 250 mm. The other provisions of section 5.3.1 concerning placards shall apply mutatis mutandis to the mark."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### Chapter 5.4

5.4.1.1.1 (d) In the Note after (d) replace "172 (b)" by "172 (d)".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.4.1.1.3 Amend the third paragraph to read as follows:

"If the provision for waste as set out in 2.1.3.5.5 is applied, the following shall be added to the dangerous goods description required in 5.4.1.1.1 (a) to (d) and (k):".

Example after this paragraph remains unchanged.

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

5.4.1.1.17 After "(x)", add a reference to a footnote 1 to read as follows:

"1 (x) shall be replaced with "1" or "2" as appropriate.".

Renumber existing footnotes accordingly.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.4.1.1.19 Renumber existing 5.4.1.1.19 as 5.4.1.1.20 and add a new paragraph to read as follows:

"5.4.1.1.19 Special provisions for carriage of packagings, discarded, empty, uncleaned (UN 3509)

For packagings, discarded, empty, uncleaned, the proper shipping name specified in 5.4.1.1.1 (b) shall be complemented with the words "(WITH RESIDUES OF [...])" followed by the class(es) and subsidiary risk(s) corresponding to the residues, in the class numbering order. Moreover, 5.4.1.1.1 (f) does not apply.

Example: Packagings, discarded, empty, uncleaned having contained goods of Class 4.1 packed together with packagings, discarded, empty, uncleaned having contained goods of Class 3 with a Class 6.1 subsidiary risk should be referred to in the transport document as:

"UN 3509 PACKAGINGS, DISCARDED, EMPTY, UNCLEANED (WITH RESIDUES OF 3, 4.1, 6.1), 9".".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

5.4.1.2.5.1 (b) Replace "see last sentence of special provision 172 of Chapter 3.3" by "see sub-paragraph (c) of special provision 172 of Chapter 3.3".

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

- 5.4.1.2.5.1 Amend (f) to read as follows:
  - "(f) For fissile material:
  - (i) Shipped under one exception of 2.2.7.2.3.5 (a) to (f), reference to that paragraph;
  - (ii) Shipped under 2.2.7.2.3.5 (c) to (e), the total mass of fissile nuclides;
  - (iii) Contained in a package for which one of 6.4.11.2 (a) to (c) or 6.4.11.3 of ADR is applied, reference to that paragraph;
  - (iv) The criticality safety index, where applicable;".

 $(Reference\ document:\ ECE/TRANS/WP.15/AC.1/2013/31/Add.1)$ 

5.4.1.2.5.1 In (g), replace "competent authority approval certificate" by "competent authority certificate of approval" and insert "fissile material excepted under 2.2.7.2.3.5 (f)," before "special arrangement".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.4.1.2.5.3 Replace "competent authorities design or shipment approval" by "competent authority approval of design or shipment".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.4.2, footnote 5, paragraph .8 of 5.4.2.1 of the IMDG Code Amend to read as follows:

[Note by the secretariat: Text to be aligned with the text in the revised version of the IMDG Code.]

#### Chapter 5.5

Amend 5.5.2.3.2 and the fumigation warning mark to read as follows:

"5.5.2.3.2 The fumigation warning mark shall be as shown in Figure 5.5.2.3.2.

THIS UNIT IS UNDER FUMIGATION
WITH ( fumigant name\* ) APPLIED ON
( date\* )
( time\* )
VENTILATED ON ( date\* )

DO NOT ENTER

\* Insert details as appropriate

Minimum dimension 400 mm

Fumigation warning mark

The marking shall be a rectangle. The minimum dimensions shall be 400 mm wide x 300 mm high and the minimum width of the outer line shall be 2 mm. The marking shall be in black print on a white background with lettering not less than 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

- 5.5.3 Add two new paragraphs 5.5.3.1.4 and 5.5.3.1.5 to read as follows:
- "5.5.3.1.4 Vehicles, wagons and containers containing substances used for cooling or conditioning purposes include vehicles, wagons and containers containing substances used for cooling or conditioning purposes inside packages as well as vehicles, wagons and containers with unpackaged substances used for cooling or conditioning purposes."

"5.5.3.1.5 Sub-sections 5.5.3.6 and 5.5.3.7 only apply when there is an actual risk of asphyxiation in the vehicle, wagon or container. It is for the participants concerned to assess this risk, taking into consideration the hazards presented by the substances being used for cooling or conditioning, the amount of substance to be carried, the duration of the journey and the types of containment to be used. As a rule, it is assumed that packages containing dry ice (UN 1845) as a coolant do not present such a risk."

(Reference document: ECE/TRANS/WP.15/AC.1/130, annex II)

5.5.3.2.1, 5.5.3.2.2, 5.5.3.5, 5.5.3.6, 5.5.3.6.1, 5.5.3.7.1 Insert ", wagons" after "vehicles".

5.5.3.2.2 Amend to read as follows:

"5.5.3.2.2 When dangerous goods are loaded in vehicles, wagons or containers containing substances used for cooling or conditioning purposes any provisions of ADN relevant to these dangerous goods apply in addition to the provisions of this section."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.5.3.2.4 Amend to read as follows:

"5.5.3.2.4 Persons engaged in the handling or carriage of vehicles, wagons and containers containing substances used for cooling or conditioning purposes shall be trained commensurate with their responsibilities."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.5.3.3.3 Amend to read as follows:

"5.5.3.3.3 Packages containing a coolant or conditioner shall be carried in well ventilated vehicles, wagons and containers. This provision does not apply when such packages are carried in insulated, refrigerated or mechanically refrigerated equipment, as defined in the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP)."

(Reference document: ECE/TRANS/WP.15/AC.1/132, annex II)

5.5.3.6.1 Add "purposes" after "cooling or conditioning" in the first sentence.

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.5.3.6.2 Amend to read as follows:

"5.5.3.6.2 The warning mark shall be as shown in Figure 5.5.3.6.2



Figure 5.5.3.6.2

Coolant/conditioning warning mark for vehicles and containers

- \* Insert the name indicated in Column (2) of Table A of Chapter 3.2 of the coolant/conditioner. The lettering shall be in capitals, all be on one line and shall be at least 25 mm high. If the length of the proper shipping name is too long to fit in the space provided, the lettering may be reduced to the maximum size possible to fit. For example: CARBON DIOXIDE, SOLID.
- \*\* Insert "AS COOLANT" or "AS CONDITIONER" as appropriate. The lettering shall be in capitals, all be on one line and be at least 25 mm high.

The marking shall be a rectangle. The minimum dimensions shall be 150 mm wide x 250 mm high. The word "WARNING" shall be in red or white and be at least 25 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.

The word "WARNING" and the words "AS COOLANT" or "AS CONDITIONER", as appropriate, shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements concluded between the countries concerned in the transport operation provide otherwise."

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

5.5.3.7.1 Replace "that have been cooled or conditioned" by "containing or having contained substances used for cooling or conditioning purposes".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

#### Chapter 7.1

[7.1.1.18 In the heading and in the text, insert ", in bulk containers" after "containers".

7.1.4.14.1.1 Add the following sentence at the end:

"Flexible bulk containers shall be stowed in such way that there are no void spaces between flexible bulk containers in the hold. If the flexible bulk containers do not completely fill the hold, adequate measures shall be taken to avoid shifting of cargo.".

7.1.4.14.1.2 Add the following sentence at the end:

"Flexible bulk containers may be stacked on each other in holds provided that the stacking height does not exceed 3 high. When flexible bulk containers are fitted with venting devices, the stowage of the flexible bulk containers shall not impede their function."

(Reference documents: ECE/TRANS/WP.15/AC.1/2013/37 and informal document INF.10)] Insert a new 7.1.4.14.7.4.3 to read as follows:

"7.1.4.14.7.4.3 Fissile material meeting one of the provisions (a) to (f) of 2.2.7.2.3.5 shall meet the following requirements:

- (a) Only one of the provisions (a) to (f) of 2.2.7.2.3.5 is allowed per consignment;
- (b) Only one approved fissile material in packages classified in accordance with 2.2.7.2.3.5 (f) is allowed per consignment unless multiple materials are authorized in the certificate of approval;
- (c) Fissile material in packages classified in accordance with 2.2.7.2.3.5 (c) shall be carried in a consignment with no more than 45 g of fissile nuclides;
- (d) Fissile material in packages classified in accordance with 2.2.7.2.3.5 (d) shall be carried in a consignment with no more than 15 g of fissile nuclides;
- (e) Unpackaged or packaged fissile material classified in accordance with 2.2.7.2.3.5 (e) shall be carried under exclusive use on a vehicle with no more than 45 g of fissile nuclides.".
- 7.1.4.14.7.5.4 Amend the end of the paragraph to read as follows:
- "... and shall not be re-used unless the following conditions are fulfilled:
- (a) the non-fixed contamination shall not exceed the limits specified in 4.1.9.1.2 of ADR;
- (b) the radiation level resulting from the fixed contamination shall not exceed 5  $\mu Sv/h$  at the surface.".

(Reference document: ECE/TRANS/WP.15/AC.1/2013/31/Add.1)

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