#### SCHEDULE 6

Regulation 7

# Amendments to the Carriage of Dangerous Goods by Rail Regulations (Northern Ireland) 1998

- 1. In regulation 1(2)—
  - (a) after the definition of "Carriage Information", there shall be inserted the following definition—
  - "the CDG Road Regulations" means the Carriage of Dangerous Goods by Road Regulations (Northern Ireland) 1997;???;
  - (b) in the definition of "emergency action code", after the words "displayed on" there shall be inserted the words "containers, wagons,"; and
  - (c) the definitions of "fragile package" and "multi-load" shall be omitted.
- 2. In regulation 2—
  - (a) at the end of paragraph (1), there shall be inserted the following sub-paragraphs—
    - "(k) the goods are being carried by private individuals, packaged for retail sale, and intended for the personal or domestic use of those individuals or for leisure or sporting activities;
      - (l) the goods are being carried in machinery or equipment which is not named individually in the Approved Carriage List and which contains dangerous goods in its internal or operational equipment;
    - (m) the goods are being carried by, or under the supervision of, the emergency services;
    - (n) the goods are being carried as a result of an emergency, with the intention of saving human life or protecting the environment, provided that all measures are taken to ensure that such carriage is carried out safely;
    - (o) the goods are—
      - (i) UN 1228 MERCAPTANS, LIQUID, FLAMMABLE, TOXIC, N.O.S. or MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, TOXIC, N.O.S.

UN 1986 ALCOHOLS, FLAMMABLE, TOXIC, N.O.S.

UN 1988 ALDEHYDES, FLAMMABLE, TOXIC, N.O.S.

UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S.

UN 2310 PENTANE-2,4-DIONE

UN 2478 ISOCYANATES, FLAMMABLE, TOXIC, N.O.S. or ISOCYANATE SOLUTION, FLAMMABLE, TOXIC, N.O.S.

UN 2841 DI-n-AMYLAMINE

UN 3248 MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S., of packing group III,

(ii) UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.S.

UN 2603 CYCLOHEPTATRIENE

UN 3248 MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.,

of packing group II, or

(iii) UN 1544 ALKALOIDS, SOLID, N.O.S. or ALKALOID SALTS, SOLID, N.O.S.

**UN 1570 BRUCINE** 

**UN 1654 NICOTINE** 

UN 1655 NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.

UN 1656 NICOTINE HYDROCHLORIDE or NICOTINE HYDROCHLORIDE SOLUTION

UN 1657 NICOTINE SALICYLATE

UN 1658 NICOTINE SULPHATE, SOLID, or NICOTINE SULPHATE SOLUTION

**UN 1659 NICOTINE TARTRATE** 

UN 1692 STRYCHNINE or STRYCHNINE SALTS

UN 1851 MEDICINE, LIQUID, TOXIC, N.O.S.

UN 3140 ALKALOIDS, LIQUID, N.O.S. or ALKALOID SALTS, LIQUID, N.O.S.

UN 3144 NICOTINE COMPOUND, LIQUID, N.O.S. or NICOTINE PREPARATION, LIQUID, N.O.S.

UN 3172 TOXINS EXTRACTED FROM LIVING SOURCES, N.O.S.

UN 3249 MEDICINE, SOLID, TOXIC, N.O.S.,

and are pharmaceutical products ready for use, packaged for retail sale, and intended for personal or household use, and in this sub-paragraph, "pharmaceutical products" include medicines, drugs and cosmetics;

- $(p) \ \ the \ carriage \ fulfils \ the \ conditions \ referred \ to \ in \ paragraph \ (1A).";$
- (b) after paragraph (1), there shall be inserted the following paragraph—
  - "(1A) The conditions referred to in paragraph (1)(p) are—
    - (a) the carriage is by any person whose main activity is not the carriage of dangerous goods;
    - (b) the carriage is for—
      - (i) survey, repair or maintenance activities, or
      - (ii) deliveries to building or civil engineering sites; and
    - (c) the carriage is of goods which are dangerous goods (other than radioactive material)—
      - (i) in packages where the total mass or volume of packaged dangerous goods does not exceed the number specified in column 3 of Table 2 in Schedule 1 to the CDG Road Regulations opposite the entry in column 1 of that Table for the appropriate transport category of those goods,
      - (ii) in a receptacle in any package where the mass or volume of dangerous goods in that receptacle does not exceed the number specified in column 2 of Table 2 in Schedule 1 to the CDG Road Regulations opposite the entry in column 1 of that Table for the appropriate transport category of those goods, or
      - (iii) in a receptacle which is a package, where the mass or volume of that package does not exceed the number specified in column 2 of Table 2 in

Schedule 1 to the CDG Road Regulations opposite the entry in column 1 of that Table for the appropriate transport category of those goods,

and in this paragraph "mass or volume" has the meaning assigned to it in regulation 2(3) of the CDG Road Regulations, "total mass or volume of packaged dangerous goods" has the meaning assigned to it in regulation 2(4) (a) of the CDG Road Regulations, and "transport category" has the meaning assigned to it in regulation 2(1), as applied in accordance with regulation 2(5), of the CDG Road Regulations."; and

- (c) after paragraph (5), there shall be inserted the following paragraph—
  - "(5A) Regulations 11 to 13 shall not apply to or in relation to the carriage of dangerous goods in any package where that package contains goods which appear in or have a classification which is specified in column 1 of Schedule 3 to the CDGCPL Regulations—
    - (a) insofar as they are within the packing group, if any, specified in the corresponding entry in column 2 of that Schedule; and
    - (b) are contained in individual receptacles containing quantities not exceeding those specified in the corresponding entry in column 3 of that Schedule (or, in the case of a gas, contained in individual receptacles not exceeding the volumes specified in that column),

provided that the total gross mass of any package containing any receptacles as are referred to above shall not exceed 30 kilograms.".

- 3. After regulation 3(2), there shall be inserted the following paragraph—
  - "(3) Where the Executive approves a revision referred to in paragraph (2), during the period between the publication by the Executive of a notice specifying that revision and the date on which that revision takes effect a person may comply with the requirements of these Regulations as if any reference to either of the approved documents were a reference to—
    - (a) the approved document prior to that revision; or
    - (b) the approved document as revised.".
- 4. In regulation 5(a), for the words "the letter Y" there shall be substituted the words "the word Yes".
- 5. In regulation 7(1), for the words "the letter Y" there shall be substituted the words "the word Yes".
  - 6. After 7(3) there shall be inserted the following paragraph—
    - "(4) A person shall not carry the following goods—

UN 2304 NAPHTHALENE, MOLTEN

UN 2426 AMMONIUM NITRATE, LIQUID

UN 2447 PHOSPHORUS, WHITE, MOLTEN

UN 2448 SULPHUR, MOLTEN

UN 2576 PHOSPHORUS OXYBROMIDE, MOLTEN

UN 3176 FLAMMABLE SOLID, ORGANIC, MOLTEN, N.O.S.,

otherwise than in tanks.".

- 7. After regulation 8(4) there shall be inserted the following paragraphs—
  - "(5) An operator of any large container shall not cause or permit to be carried therein any dangerous goods unless before that container is loaded it is checked to ensure that—
    - (a) it is free from any residue of a previous load; and

- (b) the interior floor and walls are free from protrusions.
- (6) An operator of any large container which has corner fittings for the purpose of securing or handling it and which is of a size such that the area enclosed by the outer bottom corners is either—
  - (a) if the container is fitted with top corner fittings, at least 7 square metres; or
  - (b) in any other case, at least 14 square metres,

shall not cause or permit to be carried therein any dangerous goods unless that container complies with the requirements of the International Convention for Safe Containers 1972 signed at Geneva on 2nd December 1972 and ratified by the United Kingdom on 8th March 1978 (published by the International Maritime Organization, 4th Edition, 1996).

- (7) An operator of any large container which—
  - (a) is 6 or more metres long; or
  - (b) is—
    - (i) 2.991 metres long, and
    - (ii) 2.438, 2.5 or 2.6 metres wide,

shall not cause or permit to be carried therein any dangerous goods unless that container complies with the requirements of those International Union of Railways UIC leaflets particularised in paragraph (8).

- (8) The leaflets referred to in paragraph (7) are—
  - (a) 590—10th edition, 1st January 1979 (as amended on 1st July 1979, and in 1981, 1985 and 1994 and updated on 1st January 1989);
  - (b) 592-2—5th edition of 1st July 1996;
  - (c) 592-3—2nd edition, 1st January 1998; and
  - (d) 592-4—1st edition, 1985 (as amended in 1987, 1989, 1990, 1991, 1992 and 1995 and reprinted on 1st July 1995).
- (9) An operator of any large container shall not cause or permit to be carried therein any dangerous goods unless the requirements specified in Schedule 3A are complied with.
- (10) An operator of any tank container which has corner fittings for the purpose of securing or handling it and which is of a size such that the area enclosed by the outer bottom corners is either—
  - (a) if the container is fitted with top corner fittings, at least 7 square metres; or
  - (b) in any other case, at least 14 square metres,

shall not cause or permit to be carried therein any dangerous goods unless the frame of that tank container complies with the requirements of the International Convention for Safe Containers 1972 signed at Geneva on 2nd December 1972 and ratified by the United Kingdom on 8th March 1978 (published by the International Maritime Organization, 4th edition, 1996).

- (11) In this regulation, "corner fittings" means an arrangement of apertures and faces at either the top or the bottom or both at the top and the bottom of the container for the purposes of handling, stacking and securing or any of those purposes."
- 8. In regulation 9(11)—
  - (a) for the word "transport" there shall be substituted the word "carry"; and
  - (b) before the word "tests" there shall be inserted the words "examination and".
- 9. In regulation 11—

- (a) at the end of paragraph (2)(a)(i), there shall be inserted the words "preceded, where those goods are waste, by the word "waste",";
- (b) for heads (iv) and (v) of paragraph (2)(a), there shall be substituted the following heads—
  - "(iv) the packing group, where appropriate,
  - (v) the mass or volume of those goods, and
  - (vi) where those goods are being carried in salvage packagings, the words "salvage packagings";";
- (c) for head (iii) of paragraph (2)(b), there shall be substituted the following head—
  - "(iii) the names and addresses of all consignees, if known,"; and
- (d) after paragraph (4), there shall be inserted the following paragraph—
  - "(5) In this regulation, "salvage packagings" means packagings conforming to the design type for salvage packagings approved under regulation 6(1)(e) of the CDGCPL Regulations and "waste" means goods for which no direct use is envisaged but which are carried for reprocessing, dumping, elimination by incineration or other methods of disposal."
- 10. In regulation 12, after paragraph (1), there shall be inserted the following paragraph—
  - "(1A) Any operator of a large container which is being used for the carriage of dangerous goods, where those goods are intended for carriage by sea, shall ensure that any train operator who has undertaken to carry that large container is provided with a container packing certificate comprising the information set out in paragraph 12.3.7 of the International Maritime Dangerous Goods Code, as revised or reissued from time to time by the International Maritime Organization (Current Edition: Volumes I and II ISBN 92-801-5090-1 and Supplement ISBN 92-801-5093-6)."
- 11. In regulation 18—
  - (a) in paragraph (2), before the word "container" there shall be inserted the word "large"; and
  - (b) for paragraph (4), there shall be substituted the following paragraphs—
    - "(4) A person shall not cause or permit any food, or any fodder or feeding stuffs for animals, birds or fish, to be carried in any container, tank container, tank wagon or wagon which is—
      - (a) being used for the carriage of packages labelled as containing toxic goods, INFECTIOUS SUBSTANCES, or any of the following goods—

UN 2212 BLUE ASBESTOS (crocidolite) or BROWN ASBESTOS (amosite or mysorite)

UN 2315 POLYCHLORINATED BIPHENYLS

UN 2590 WHITE ASBESTOS (chrysotile, actinolite, anthophyllite or tremolite)

UN 3151 POLYHALOGENATED BIPHENYLS, LIQUID or POLYHALOGENATED TERPHENYLS, LIQUID

UN 3152 POLYHALOGENATED BIPHENYLS, SOLID or POLYHALOGENATED TERPHENYLS, SOLID

UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS; or

(b) empty, uncleaned, having been used for the carriage of any goods or substances mentioned in sub-paragraph (a),

unless that food, fodder or feeding stuff is effectively separated from any such substances or goods by—

- (i) complete partitions as high as the packages containing such goods;
- (ii) packages containing goods other than those goods or substances mentioned in sub-paragraph (a); or
- (iii) a space of at least 0.8m,
- or is otherwise adequately protected, by additional packaging or complete coverage of those goods, from the risk of contamination by those goods.
- (5) The operator of any container or wagon which has been used for the carriage of packages labelled as containing toxic goods, INFECTIOUS SUBSTANCES or any of the following goods—

UN 2212 BLUE ASBESTOS (crocidolite) or BROWN ASBESTOS (amosite or mysorite)

UN 2315 POLYCHLORINATED BIPHENYLS

UN 2590 WHITE ASBESTOS (chrysotile, actinolite, anthophyllite or tremolite)

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

UN 3151 POLYHALOGENATED BIPHENYLS, LIQUID or POLYHALOGENATED TERPHENYLS, LIQUID

UN 3152 POLYHALOGENATED BIPHENYLS, SOLID or POLYHALOGENATED TERPHENYLS, SOLID

UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS,

## shall ensure that—

- (a) after unloading it is checked for any residue of the load; and
- (b) where those goods have leaked and been spilled in the container or wagon—
  - (i) all other goods and articles carried therein are examined for possible contamination,
  - (ii) the container or wagon concerned is not reused until after it has been thoroughly cleaned and, if necessary, decontaminated or, in the case of UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS or INFECTIOUS SUBSTANCES, disinfected, and
  - (iii) any wooden parts of the container or wagon which have come into contact with UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS or INFECTIOUS SUBSTANCES of risk group 3 or 4 are removed and burnt."
- 12. After regulation 24, there shall be inserted the following regulation—

# "Prohibition on carriage of uninhibited sulphur trioxide

- 24A. A person shall not cause or permit to be carried in a tank UN 1829 SULPHUR TRIOXIDE, at least 99.95% pure, without inhibitor.".
- 13. In regulation 25(2), for the words from "it is satisfied" to the end of the paragraph there shall be substituted the words "it is satisfied that neither the health and safety of persons who are likely to be affected by the exemption nor the environment will be prejudiced in consequence of it.".
- 14. In regulation 27(2)(c), for the word "Organisation" there shall be substituted the word "Organization".
  - 15. In paragraph 1 of Schedule 1—

- (a) at the start of sub-paragraph (1)(c), there shall be inserted the words "subject to sub-paragraph (7A),";
- (b) in sub-paragraph (2), for the words "sub-paragraph (3)" there shall be substituted the words "sub-paragraphs (3) and (7A)"; and
- (c) following sub-paragraph (7) there shall be inserted the following sub-paragraph—
  - "(7A) Notwithstanding sub-paragraphs (1)(c) and (2), the train operator or the operator of a tank container or tank wagon may carry by rail uncleaned tank containers and tank wagons in respect of which the relevant certificate has expired for the sole purpose of undergoing the examination and tests with a view to renewing that certificate."

#### 16. In Schedule 2—

- (a) for sub-paragraph (2) of paragraph 1, there shall be substituted the following sub-paragraph—
  - "(2) Carriage in bulk of the goods UN 3175 SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. shall be in—
    - (a) sheeted, open—
      - (i) large containers, or
      - (ii) wagons,

with adequate ventilation; or

(b) moveable-roof wagons,

and suitable measures shall be taken to ensure that those goods cannot escape.";

- (b) in paragraph 2(c), for the word "other" there shall be substituted the words "sheeted, open";
- (c) in paragraph 3(1), for the list of goods, there shall be substituted the following list—

"UN 1394 ALUMINIUM CARBIDE

UN 1398 ALUMINIUM SILICON POWDER, UNCOATED

UN 1402 CALCIUM CARBIDE

UN 1405 CALCIUM SILICIDE, of packing group III (other than in pieces)

**UN 1435 ZINC ASHES** 

UN 1436 ZINC POWDER or ZINC DUST

UN 2813 WATER-REACTIVE SOLID, N.O.S.

UN 2844 CALCIUM MANGANESE SILICON (other than in pieces)

UN 2950 MAGNESIUM GRANULES, COATED

UN 2968 MANEB, STABILIZED and MANEB PREPARATION, STABILIZED

UN 3208 METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.

UN 3209 METALLIC SUBSTANCE, WATER-REACTIVE, SELF-HEATING, N.O.S. of packing group III";

- (d) in paragraph 3(2), after the words "RE-MELTING BY-PRODUCTS" there shall be inserted the words "of packing group II";
- (e) after paragraph 3(2), there shall be inserted the following sub-paragraphs—
  - "(3) Carriage in bulk of any of the following goods—

UN 1405 CALCIUM SILICIDE, in pieces, of packing group II or III

UN 2844 CALCIUM MANGANESE SILICON, in pieces

# UN 3170 ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM RE-MELTING BY-PRODUCTS, of packing group III,

#### shall be in-

- (a) large containers or wagons designed and constructed so that the openings for loading and unloading can be closed hermetically; or
- (b) moveable-roof wagons, sheeted, open wagons, or sheeted, open large containers.
- (4) Carriage in bulk of UN 1408 FERROSILICON with 30% or more but less than 90% silicon by mass shall be in moveable-roof wagons, sheeted, open wagons, or sheeted, open large containers.";
- (f) in paragraph 4(2), for the word "incombustible" there shall be substituted the word "non-combustible";
- (g) after paragraph 4(2), there shall be inserted the following sub-paragraph—
  - "(3) Carriage in bulk of OXIDIZING SUBSTANCES shall be in-
    - (a) open—
      - (i) wagons, or
      - (ii) large containers,

covered with an impermeable and non-combustible sheet; or

- (b) moveable-roof wagons.";
- (h) paragraph 5 shall become sub-paragraph (1) of paragraph 5, and at the end there shall be inserted the words ", for example, by the provision of a sufficiently stout inner lining" and the following sub-paragraph—
  - "(2) Carriage in bulk of solids which are TOXIC SUBSTANCES of packing group III and UN 3243 SOLIDS CONTAINING TOXIC LIQUID, N.O.S. shall be in—
    - (a) sheeted open—
      - (i) wagons, or
      - (ii) large containers; or
    - (b) moveable-roof wagons.";
    - (i) paragraph 7 shall become sub-paragraph (1) of paragraph 7, and at the end there shall be inserted the words ", for example, by the provision of a sufficiently stout inner lining" and the following sub-paragraphs—
      - "(2) Carriage in bulk of solids which are CORROSIVE SUBSTANCES of packing group III, UN 1974 LEAD SULPHATE, UN 2506 AMMONIUM HYDROGEN SULPHATE, UN 2509 POTASSIUM HYDROGEN SULPHATE or UN 3244 SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S. shall be in—
        - (a) sheeted, open—
          - (i) wagons, or
          - (ii) large containers; or
        - (b) moveable-roof wagons.
        - (3) Carriage in bulk of any of the following goods—

UN 2794 BATTERIES, WET, FILLED WITH ACID UN 2795 BATTERIES, WET, FILLED WITH ALKALI UN 2800 BATTERIES, WET, NON-SPILLABLE

# UN 3028 BATTERIES, DRY, CONTAINING POTASSIUM HYDROXIDE SOLID,

where those goods have been used, shall be in wagons or large containers—

- (a) with a load compartment or load compartments made of steel—
  - (i) exhibiting a rate of progressive reduction of 0·1mm or less per year under the effects of the corrosive substances contained in those goods, or
  - (ii) exhibiting a rate of progressive reduction of more than 0·1mm per year under the effects of the corrosive substances contained in those goods, provided that the load compartments have walls of a thickness sufficient to resist, or a plastic lining or layer resistant to, those substances:
- (b) designed to take account of any residual currents and impact from those goods;
- (c) constructed so as to prevent leakage of corrosive substances from its load compartments during carriage;
- (d) with any open load compartments covered by a cover resistant to the corrosive substances contained in those goods;
- (e) without damaged load compartments;
- (f) not loaded above the top of the walls of its load compartments; and
- (g) with outer surfaces free of the corrosive substances contained in those goods,

and in this sub-paragraph "load compartments" means those parts of the wagon or large container in which goods are, or are to be, carried."; and

- (j) for paragraph 8, there shall be substituted the following paragraph—
  - "8.—(1) Carriage in bulk of any of the following goods—

UN 1841 ACETALDEHYDE AMMONIA

**UN 1931 ZINC DITHIONITE** 

UN 2969 CASTOR BEANS, MEAL, POMACE or FLAKE

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., shall be in—

- (a) sheeted, open—
  - (i) wagons, or
  - (ii) large containers; or
- (b) moveable-roof wagons.
- (2) Carriage in bulk of UN 2211 POLYMERIC BEADS, EXPANDABLE shall be in—
  - (a) sheeted, open—
    - (i) wagons, or
    - (ii) large containers; or
  - (b) moveable-roof wagons, with adequate ventilation.
- (3) Carriage in bulk of UN 3257 ELEVATED TEMPERATURE LIQUID N.O.S. or UN 3258 ELEVATED TEMPERATURE SOLID N.O.S. shall be in a wagon or large container

which conforms to a design approved for the time being in writing by the Executive for the carriage of such goods.".

#### 17. In Schedule 3—

- (a) in paragraph 1, for the words from "the following" to "AIR" there shall be substituted the words "refrigerated liquefied gases.";
- (b) in paragraph 3(1), the words ", provided the packages are not fragile packages" shall be omitted;
- (c) in the list of dangerous goods in paragraph 5(2), after the words "UN 3170 ALUMINIUM SMELTING BY-PRODUCTS OR ALUMINIUM RE-MELTING BY-PRODUCTS" there shall be inserted the words "UN 3208 METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.";
- (d) for sub-paragraph (1) of paragraph 6, there shall be substituted the following sub-paragraph—
  - "(1) The carriage of packages containing OXIDIZING SUBSTANCES (other than UN 1510 TETRANITROMETHANE, or UN 2015 HYDROGEN PEROXIDE, STABILIZED OR AQUEOUS SOLUTION STABILIZED) in small containers is permitted.";
- (e) in paragraph 7—
  - (i) for the words "UN 3102 ORGANIC PEROXIDE TYPE B, LIQUID" there shall be substituted the words "UN 3102 ORGANIC PEROXIDE TYPE B, SOLID", and
  - (ii) the words ", provided the packages are not fragile packages" shall be omitted;
- (f) for sub-paragraph (2) of paragraph 8, there shall be substituted the following sub-paragraph—
  - "(2) The carriage in bulk in small containers of solid TOXIC SUBSTANCES of packing group III is permitted provided the containers are of the closed type with complete walls.";
- (g) for sub-paragraph (3) of paragraph 8, there shall be substituted the following sub-paragraph—
  - "(3) The carriage in bulk in small containers of UN 3243 SOLIDS CONTAINING TOXIC LIQUID, N.O.S. is permitted provided the containers are of the closed type with complete walls and are leak-proof or made leak-proof, for example by the provision of a sufficiently stout inner lining.";
- (h) paragraph 9(2) shall be omitted; and
- (i) in paragraph 10—
  - (i) in sub-paragraph (1), the words from "provided" to "lining" shall be omitted, and
  - (ii) for sub-paragraph (2), there shall be substituted the following sub-paragraphs—
    - "(2) The carriage in bulk in small containers of any of the following goods—solid CORROSIVE SUBSTANCES of packing group III

UN 1794 LEAD SULPHATE with more than 3% free acid UN 2506 AMMONIUM HYDROGEN SULPHATE UN 2509 POTASSIUM HYDROGEN SULPHATE,

is permitted provided the containers are of the closed type with complete walls and a suitable lining.

(3) The carriage in bulk in small containers of UN 3244 SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S. is permitted provided the containers are of the closed

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type with complete walls and are leak-proof or made leak-proof, for example by the provision of a sufficiently stout inner lining.

(4) A small container used for the carriage of the following goods in bulk—

UN 2794 BATTERIES, WET, FILLED WITH ACID

UN 2795 BATTERIES, WET, FILLED WITH ALKALI

UN 2800 BATTERIES, WET, NON-SPILLABLE

UN 3028 BATTERIES, DRY, CONTAINING POTASSIUM HYDROXIDE SOLID.

where those goods have been used, shall—

- (a) have load compartments made of—
  - (i) steel exhibiting a rate of progressive reduction of 0·1mm or less per year under the effects of the corrosive substances contained in those goods,
  - (ii) steel exhibiting a rate of progressive reduction of more than 0·1mm per year under the effects of the corrosive substances contained in those goods, provided that the load compartments have walls of a thickness sufficient to resist, or a plastic lining or layer resistant to, those substances, or
  - (iii) plastic capable when fully loaded of withstanding a drop onto its bottom surface from a height of 0.8m onto a hard surface without breakage, when both the container and its contents are at -18°C;
- (b) be designed to take account of any residual currents and impact from those goods;
- (c) be constructed so as to prevent leakage of corrosive substances from its load compartments during carriage;
- (d) have any open load compartments covered by a cover resistant to the corrosive substances contained in those goods;
- (e) not have damaged load compartments;
- (f) not be loaded above the top of the walls of its load compartments; and
- (g) have outer surfaces free of the corrosive substances contained in those goods,

and in this sub-paragraph "load compartments" means those parts of the small container in which goods are, or are to be, carried.".

18. After Schedule 3, there shall be inserted the following Schedule—

## "SCHEDULE 3A

Regulation 8(9)

# **Suitability of Large Containers**

- 1. Large containers used for the carriage of dangerous goods shall be structurally serviceable and free from unacceptable deterioration in any component.
  - 2. In this Schedule—

"major defects" means—

- (a) dents or bends, greater than 19mm in depth but regardless of length, in structural members;
- (b) cracks or breaks in structural members;

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- (c) more than one splice or an improper splice, such as a lapped splice, in top or bottom end rails or door headers;
- (d) more than two splices in any one top or bottom side rail;
- (e) any splice in a door sill or corner post;
- (f) door hinges and hardware that are seized, twisted, broken, missing or otherwise inoperative;
- (g) non-closing gaskets and seals;
- (h) any distortion of the overall configuration sufficient to prevent proper alignment of handling equipment, mounting and securing on a chassis or wagon;

"structurally serviceable" means free from major defects in its structural components including top and bottom side rails, top and bottom end rails, door sill and header, floor cross members, corner posts and corner fittings; and

"unacceptable deterioration in any component" includes rusted metal in sidewalls or disintegrated fibreglass, regardless of the material of construction, but does not include normal wear (including oxidisation (rust), slight dents, scratches, and other damage that does not affect serviceability or weather-tightness)."

## 19. In Schedule 5—

- (a) paragraph 5 shall become sub-paragraph (1) of paragraph 5, and at the end there shall be inserted the following sub-paragraph—
  - "(2) Nothing in paragraphs 1 to 7 shall require a danger sign for a particular classification or a subsidiary hazard sign for a particular subsidiary hazard to be displayed more than once on the side of any container, tank container, tank wagon or wagon.";
- (b) after paragraph 5 there shall be inserted the following paragraph—

## "Elevated temperature substances

5A. A container, tank container, tank wagon or wagon carrying either of the following dangerous goods—

UN 3257 ELEVATED TEMPERATURE LIQUID, N.O.S.

UN 3258 ELEVATED TEMPERATURE SOLID, N.O.S.,

shall display on each side a sign conforming to figure 3, with sides of at least 250 millimetres.";

- (c) in paragraph 9, for the number "18" there shall be substituted the number "17"; and
- (d) at the end, there shall be added the following figure—

"Figure 3
Elevated temperature substances



The background colour of the sign shall be white, and the colour of the border and the thermometer symbol shall be red.".

- 20. For paragraphs 1 and 2 of, and the Table in, Schedule 6 there shall be substituted the following paragraphs—
  - "1. Explosives (except those in Division 1.4 and Compatibility Group S) shall not be loaded in the same container or wagon together with any package or small container labelled as containing dangerous goods (except explosives).
  - 2. Explosives in Division 1.4 and Compatibility Group S shall not be loaded in the same container or wagon together with any package or small container labelled as containing—
    - (a) flammable solids: or
    - (b) organic peroxides,

and displaying the subsidiary hazard sign "liable to explosion".

- 3. Any package or small container displaying the subsidiary hazard sign "liable to explosion" shall not be loaded in the same container or wagon together with any package or small container labelled as containing any other dangerous goods.
- 4. In this Schedule, "labelled" means required to display a danger sign or subsidiary hazard sign in accordance with the CDGCPL Regulations.".
- 21. For Schedule 7, there shall be substituted the following Schedule—

## "SCHEDULE 7

Regulation 18

Requirements for the Loading, Stowage, Unloading and Cleaning of Large Containers and Wagons Carrying Certain Dangerous Goods

# Part I

# **Packages**

## **General requirements**

- 1.—(1) Packages labelled as containing dangerous goods may be loaded—
  - (a) in unsheeted, open large containers;
  - (b) in sheeted, open large containers;

- (c) in closed large containers;
- (d) in unsheeted, open wagons;
- (e) in sheeted, open wagons; or
- (f) in closed wagons.
- (2) Packages labelled as containing dangerous goods whose packagings are made of materials sensitive to moisture shall be loaded in sheeted, open large containers, sheeted, open wagons, closed large containers or closed wagons.
- (3) Packages labelled as containing dangerous goods shall be protected against damage that may be caused by other packages.
- (4) Packages labelled as containing dangerous goods shall be loaded into large containers or wagons so that they cannot shift dangerously, tip over or fall.
- (5) Packages labelled as containing dangerous goods shall not be thrown or subjected to impact.
- (6) Packages labelled as containing dangerous goods with a classification code of 4.1 (other than SELF-REACTIVE SUBSTANCES), 4.2, 4.3, 6.2 or 9 shall be loaded in sheeted, open large containers, sheeted, open wagons, closed wagons or closed large containers.
- (7) Packages labelled as containing SELF-REACTIVE SUBSTANCES or dangerous goods with a classification code of 5.2 shall be loaded in closed large containers or closed wagons with adequate ventilation.

#### Gases: compressed, liquefied or dissolved under pressure (classification code 2)

- 2.—(1) Receptacles labelled as containing GASES: COMPRESSED, LIQUEFIED OR DISSOLVED UNDER PRESSURE shall be stowed in large containers or wagons in compliance with the following requirements—
  - (a) cylinders with a capacity not exceeding 150 litres shall be laid parallel to or at right angles to the longitudinal axis of the large container or wagon, except that those situated near the end walls shall be laid at right angles to the said axis;
  - (b) short cylinders of diameter 30 centimetres or over may be stowed longitudinally with their valve protective devices directed towards the middle of the large container or wagon;
  - (c) cylinders which are sufficiently stable or which are carried in suitable devices which prevent them from overturning may be placed upright;
  - (d) cylinders which are laid flat shall be so wedged, made fast or otherwise suitably and securely fixed that they cannot shift;
  - (e) receptacles labelled as containing refrigerated liquefied gases shall always be placed in the position for which they were designed and protected against any possibility of being damaged by other packages; and
  - (f) receptacles designed to be rolled shall be laid with their longitudinal axis parallel to that of the large container or wagon and shall be secured against any lateral movement.
  - (2) Where pallets loaded with—
    - (a) UN 1590 AEROSOLS, made of metal; or
    - (b) UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES),

(grouped together in units on trays and sealed with a suitable plastic wrapping) are stacked, each tier of pallets shall be evenly distributed over the lower tier, if necessary by the interposition of a material of adequate strength.

## Flammable solids (classification code 4.1)

3.—(1) Packages labelled as containing any of the following goods shall be loaded in large containers or wagons which are closely and adequately ventilated—

UN 3221 SELF-REACTIVE LIQUID TYPE B

UN 3222 SELF-REACTIVE SOLID TYPE B

UN 3223 SELF-REACTIVE LIQUID TYPE C

UN 3224 SELF-REACTIVE SOLID TYPE C

UN 3225 SELF-REACTIVE LIQUID TYPE D

UN 3226 SELF-REACTIVE SOLID TYPE D

UN 3227 SELF-REACTIVE LIQUID TYPE E

UN 3228 SELF-REACTIVE SOLID TYPE E

UN 3229 SELF-REACTIVE LIQUID TYPE F

UN 3230 SELF-REACTIVE SOLID TYPE F.

- (2) Large containers and wagons shall be thoroughly cleaned before they are loaded with packages labelled as containing FLAMMABLE SOLIDS.
- (3) Packages labelled as containing FLAMMABLE SOLIDS, other than those listed in subparagraph (1) shall be loaded in—
  - (a) sheeted, open large containers;
  - (b) sheeted, open wagons;
  - (c) closed large containers; or
  - (d) closed wagons.
- (4) Packages labelled as containing FLAMMABLE SOLIDS and displaying the subsidiary hazard sign "liable to explosion" shall be loaded so that a free circulation of air within the loading space provides a uniform temperature for the load.
- (5) Where the contents of a large container or wagon exceed 5000 kg of packages labelled as containing FLAMMABLE SOLIDS and the packages display the subsidiary hazard sign "liable to explosion", the load shall be divided into stacks of not more than 5000 kg separated by air spaces of at least 0.05m.
- (6) Sub-paragraphs (7) and (8) shall only apply to wagons constructed after 31st December 1996.
- (7) Packages labelled as containing FLAMMABLE SOLIDS and displaying the subsidiary hazard sign "liable to explosion", whether or not loaded in large containers, shall only be carried in wagons which have been fitted with regulation sheet steel spark-guards.
- (8) The regulation sheet steel spark-guards referred to in sub-paragraph (7) shall not be fixed directly to the floor of the wagon concerned where that floor is combustible.

# Substances which, in contact with water, emit flammable gases (classification code 4.3)

4. Where packages, labelled as containing substances which, in contact with water, emit flammable gases, are being carried in a large container or wagon, measures shall be taken to ensure that those packages do not come into contact with water.

## Oxidizing substances (classification code 5.1)

- 5.—(1) Large containers and wagons shall be thoroughly cleaned and in particular be free of any combustible debris before they are loaded with packages labelled as containing OXIDIZING SUBSTANCES.
- (2) The use of straw or any other readily combustible material for stowing packages labelled as containing OXIDIZING SUBSTANCES is prohibited.
- (3) Where flexible intermediate bulk containers are used for the carriage of any of the following goods—
  - UN 1442 AMMONIUM PERCHLORATE
  - UN 1450 BROMATES, INORGANIC, N.O.S. of packing group II
  - UN 1452 CALCIUM CHLORATE
  - UN 1455 CALCIUM PERCHLORATE
  - UN 1458 CHLORATE AND BORATE MIXTURES
  - UN 1459 CHLORATE AND MAGNESIUM CHLORIDE MIXTURE
  - UN 1461 CHLORATES, INORGANIC, N.O.S.
  - UN 1473 MAGNESIUM BROMATE
  - UN 1475 MAGNESIUM PERCHLORATE
  - UN 1481 PERCHLORATES, INORGANIC, N.O.S.
  - UN 1484 POTASSIUM BROMATE
  - UN 1485 POTASSIUM CHLORATE
  - UN 1489 POTASSIUM PERCHLORATE
  - **UN 1494 SODIUM BROMATE**
  - UN 1495 SODIUM CHLORATE
  - UN 1502 SODIUM PERCHLORATE
  - UN 1506 STRONTIUM CHLORATE
  - UN 1508 STRONTIUM PERCHLORATE
  - **UN 1513 ZINC CHLORATE**
  - UN 2427 POTASSIUM CHLORATE, AQUEOUS SOLUTION
  - UN 2428 SODIUM CHLORATE, AQUEOUS SOLUTION
  - UN 2429 CALCIUM CHLORATE, AQUEOUS SOLUTION
  - UN 2721 COPPER CHLORATE
  - UN 2723 MAGNESIUM CHLORATE
  - UN 3210 CHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.
  - UN 3211 PERCHLORATES, INORGANIC, AQUEOUS SOLUTION, N.O.S.
  - UN 3213 BROMATES, INORGANIC, AQUEOUS SOLUTION, N.O.S. of packing group II,
  - (a) they shall be carried in—
    - (i) a closed large container,
    - (ii) an open large container covered with an impermeable and non-combustible sheet,
    - (iii) a closed wagon,
    - (iv) a moveable-roof wagon, or

- (v) an open wagon covered with an impermeable and non-combustible sheet; and
- (b) measures shall be taken to ensure that the goods cannot, in the event of a leak, come into contact with wood or any other combustible material.
- (4) Composite intermediate bulk containers containing any of the following goods, where those goods are in solid form, shall be carried in a closed wagon or a closed large container—

UN 1479 OXIDIZING SOLID, N.O.S. of packing group I

UN 1491 POTASSIUM PEROXIDE

**UN 1504 SODIUM PEROXIDE** 

UN 2466 POTASSIUM SUPEROXIDE

UN 2547 SODIUM SUPEROXIDE.

## **Organic peroxides (classification code 5.2)**

- 6.—(1) Large containers and wagons shall be thoroughly cleaned before they are loaded with packages labelled as containing ORGANIC PEROXIDES.
- (2) Packages labelled as containing ORGANIC PEROXIDES shall be so loaded that a free circulation of air within the loading space ensures the uniform temperature of the load.
- (3) Where the contents of a large container or wagon exceed 5000 kg of packages labelled as containing ORGANIC PEROXIDES, the load shall be divided into stacks of not more than 5000 kg separated by air spaces of at least 0.05 m.
- (4) The use of readily combustible material for stowing packages labelled as containing ORGANIC PEROXIDES in wagons or large containers is prohibited.
- (5) Sub-paragraphs (6) and (7) shall only apply to wagons constructed after 31st December 1996.
- (6) Packages labelled as containing ORGANIC PEROXIDES and displaying the subsidiary hazard sign "liable to explosion", whether or not loaded in large containers, shall only be carried in wagons which have been fitted with regulation sheet steel spark-guards.
- (7) The regulation sheet steel spark-guards referred to in sub-paragraph (6) shall not be fixed directly to the floor of the wagon concerned where that floor is combustible.

# Toxic substances (classification code 6.1)

7.—(1) Composite or wooden intermediate bulk containers containing any of the following goods, where those goods are in solid form and of packing group I, shall be carried in a closed wagon or a closed large container—

UN 1544 ALKALOIDS, SOLID, N.O.S., or ALKALOID SALTS, SOLID, N.O.S.

UN 1557 ARSENIC COMPOUND, SOLID, N.O.S.

**UN 1570 BRUCINE** 

UN 1601 DISINFECTANT, SOLID, TOXIC, N.O.S.

UN 1655 NICOTINE COMPOUND, SOLID, N.O.S. or NICOTINE PREPARATION, SOLID, N.O.S.

UN 1692 STRYCHNINE or STRYCHNINE SALTS

UN 1693 TEAR GAS SUBSTANCE, SOLID, N.O.S.

UN 1699 DIPHENYLCHLOROARSINE

UN 2025 MERCURY COMPOUND, SOLID, N.O.S.

UN 2026 PHENYLMERCURIC COMPOUND, N.O.S.

UN 2570 CADMIUM COMPOUND

**UN 2630 SELENATES or SELENITES** 

UN 2811 TOXIC SOLID, ORGANIC, N.O.S.

UN 3143 DYE, SOLID, TOXIC, N.O.S.

UN 3146 ORGANOTIN COMPOUND, SOLID, N.O.S.

UN 3172 TOXINS EXTRACTED FROM LIVING SOURCES, N.O.S.

UN 3276 NITRILES, TOXIC, N.O.S.

UN 3278 ORGANOPHOSPHORUS COMPOUND, TOXIC, N.O.S.

UN 3280 ORGANIC ARSENIC COMPOUND, N.O.S.

UN 3281 METAL CARBONYLS, N.O.S.

UN 3282 ORGANOMETALLIC COMPOUND, TOXIC, N.O.S.

UN 3283 SELENIUM COMPOUND, N.O.S.

UN 3288 TOXIC SOLID, INORGANIC, N.O.S.

Halogenated substances, with a flashpoint above 61°C, with the exception of UN 1694 BROMOBENZYL CYANIDES

Inorganic cyanides

Pesticides, solid, toxic.

(2) Composite intermediate bulk containers containing the goods UN 2930 TOXIC SOLID, FLAMMABLE, ORGANIC, N.O.S. of packing group I shall be carried in a closed wagon or a closed large container.

## Infectious substances (classification code 6.2)

8. Packages labelled as containing INFECTIOUS SUBSTANCES shall be stowed in such a way as to be easily accessible.

## **Corrosive substances (classification code 8)**

9.—(1) Large containers and wagons shall be thoroughly cleaned and in particular be free of all combustible debris before they are loaded with packages labelled as containing any of the following goods—

UN 1796 NITRATING ACID MIXTURE with more than 50% nitric acid

UN 1802 PERCHLORIC ACID

UN 1826 NITRATING ACID MIXTURE, SPENT with more than 50% nitric acid

UN 2032 NITRIC ACID, RED FUMING

UN 3084 CORROSIVE SOLID, OXIDIZING, N.O.S.

UN 3093 CORROSIVE LIQUID, OXIDIZING, N.O.S.

- (2) The use of combustible materials for stowing packages labelled as containing any of the goods listed in sub-paragraph (1) is prohibited.
- (3) Composite or wooden intermediate bulk containers containing any of the following goods, where those goods are in solid form and of packing group I, shall be carried in a closed wagon or a closed large container—

UN 1759 CORROSIVE SOLID, N.O.S.

**UN 1905 SELENIC ACID** 

UN 2430 ALKYLPHENOLS, SOLID, N.O.S.

UN 2923 CORROSIVE SOLID, TOXIC, N.O.S.

UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. or POLYAMINES, SOLID, CORROSIVE, N.O.S.

UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.

UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

(4) Composite intermediate bulk containers containing the goods UN 2921 CORROSIVE SOLIDS, FLAMMABLE, N.O.S. of packing group I shall be carried in a closed wagon or a closed large container.

## Miscellaneous dangerous substances and articles (classification code 9)

10. Packages labelled as containing the goods UN 3245 GENETICALLY MODIFIED MICRO-ORGANISMS shall be stowed in such a way as to be readily accessible.

# Part II

# **Empty, Uncleaned Packagings**

# Flammable solids (classification code 4.1)

11.—(1) Empty, uncleaned packagings (including intermediate bulk containers), which contain the residues of any of the following goods shall not be accepted for carriage unless those residues are so packed that the content of water or other phlegmatizers added to render them inert cannot diminish—

UN 0154 TRINITROPHENOL (PICRIC ACID), wetted with not less than 10% (mass) water

UN 0155 TRINITROCHLOROBENZENE (PICRYL CHLORIDE), wetted with not less than 10% (mass) water

UN 0209 TRINITROTOLUENE (TNT), wetted with not less than 10% (mass) water

UN 0214 TRINITROBENZENE, wetted with not less than 10% (mass) water

UN 0215 TRINITROBENZOIC ACID, wetted with not less than 30% (mass) water

UN 0220 UREA NITRATE, wetted with not less than 10% (mass) water

UN 0234 SODIUM DINITRO-o-CRESOLATE, wetted with not less than 10% (mass) water

UN 1310 AMMONIUM PICRATE, WETTED with not less than 10% (mass) water

UN 1320 DINITROPHENOL, WETTED with not less than 15% (mass) water

UN 1321 DINITROPHENOLATES, WETTED with not less than 15% (mass) water

UN 1322 DINITRORESORCINOL, WETTED with not less than 15% (mass) water

UN 1326 HAFNIUM POWDER, WETTED with not less than 25% (mass) water

UN 1336 NITROGUANIDINE (PICRITE) WETTED with not less than 20% (mass) water

UN 1337 NITROSTARCH, WETTED with not less than 20% (mass) water

UN 1344 TRINITROPHENOL, WETTED with not less than 30% (mass) water

UN 1347 SILVER PICRATE, WETTED with not less than 30% (mass) water

UN 1348 SODIUM DINITRO-o-CRESOLATE, WETTED with not less than 15% (mass) water

UN 1349 SODIUM PICRAMATE, WETTED with not less than 20% (mass) water

UN 1352 TITANIUM POWDER, WETTED with not less than 25% (mass) water

UN 1354 TRINITROBENZENE, WETTED with not less than 30% (mass) water

UN 1355 TRINITROBENZOIC ACID, WETTED with not less than 30% (mass) water

UN 1356 TRINITROTOLUENE, WETTED with not less than 30% (mass) water

UN 1357 UREA NITRATE, WETTED with not less than 20% (mass) water

UN 1358 ZIRCONIUM POWDER, WETTED with not less than 25% (mass) water (a visible excess of water must be present) (a) mechanically produced, particle size less than 53 microns; (b) chemically produced, particle size less than 840 microns

UN 1517 ZIRCONIUM PICRAMATE, WETTED with not less than 20% (mass) water

UN 1571 BARIUM AZIDE, WETTED with not less than 50% (mass) water

UN 2555 NITROCELLULOSE WITH WATER with not less than 25% (mass) water

UN 2556 NITROCELLULOSE WITH ALCOHOL, with not less than 25% (mass) alcohol and not more than 12.6% nitrogen by dry mass

UN 2557 NITROCELLULOSE, with not more than 12·6% nitrogen by dry mass, MIXTURE WITH or WITHOUT PLASTICIZER, WITH or WITHOUT PIGMENT

UN 2852 DIPICRYL SULPHIDE. WETTED with not less than 10% (mass) water

UN 2907 ISOSORBIDE DINITRATE MIXTURE, with not less than 60% lactose, mannose, starch or calcium hydrogen phosphate or with other phlegmatizers, provided that such phlegmatizers have inerting properties which are at least as effective

UN 3317 2-AMINO-4,6-DINITROPHENOL, WETTED with not less than 20% (mass) water.

(2) Empty, uncleaned packagings which contain the residues of any of the following goods shall not be accepted for carriage unless steps have been taken to prevent their dangerous decomposition—

UN 3221 SELF-REACTIVE LIQUID TYPE B

UN 3222 SELF-REACTIVE SOLID TYPE B

UN 3223 SELF-REACTIVE LIQUID TYPE C

UN 3224 SELF-REACTIVE SOLID TYPE C

UN 3225 SELF-REACTIVE LIQUID TYPE D

UN 3226 SELF-REACTIVE SOLID TYPE D

UN 3227 SELF-REACTIVE LIQUID TYPE E

UN 3228 SELF-REACTIVE SOLID TYPE E

UN 3229 SELF-REACTIVE LIQUID TYPE F

UN 3230 SELF-REACTIVE SOLID TYPE F.

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

# Toxic substances (classification code 6.1)

12. Empty, uncleaned packagings (comprising bags or flexible intermediate bulk containers), which contain the residues of any TOXIC SUBSTANCES shall be placed in boxes or waterproof bags to prevent any leakage of those residues during carriage.

# Miscellaneous dangerous substances and articles (classification code 9)

13. Empty, uncleaned packagings (comprising bags) which contain the residues of any MISCELLANEOUS DANGEROUS SUBSTANCES or ARTICLES shall be placed in boxes or waterproof bags to prevent any leakage of those residues during carriage.

## Interpretation

14. In this Schedule, "labelled", in relation to packages or receptacles, means required to display a danger sign or subsidiary hazard sign in accordance with the CDGCPL Regulations.".