1992 No. 261

HEALTH AND SAFETY

Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations (Northern Ireland) 1992

Made..9th June 1992Coming into operation.6th July 1992

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THE SCHEDULE—

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PART II

Criteria for allocation of substances which have been classified as toxic or harmful substances in accordance with regulation 6(4) of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985 into packing groups.

PART III

Table of flash points and kinematic viscosity ranges of substances which have been classified as flammable liquids in accordance with regulation 6(4) of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985, contain not more than 20% of nitrocellulose and do not in any case have a flash point exceeding 21°C.

Department of Agriculture, the Department of Economic Development, the Department of Health and Social Services and the Department of the Environment acting jointly as the Department concerned(a) in exercise of the powers conferred by Articles 17(1), (2), (4), (5) and (6) of, and paragraphs 1(1) to (3), 2, 5(2), 11, 13, 14(1) and 15 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978(b) and of every other power enabling them in that behalf, after consultation in accordance with Article 46(1) of that Order with the Health and Safety Agency for Northern Ireland and such other bodies as appeared to them to be appropriate, hereby make the following Regulations:—

Citation and commencement

1. These Regulations may be cited as the Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations (Northern Ireland) 1992 and shall come into operation on 6th July 1992.

Interpretation

- 2.—(1) In these Regulations—
- "the Order of 1978" means the Health and Safety at Work (Northern Ireland) Order 1978;
- "the 1985 Regulations" means the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985(**c**);
- "the 1992 Regulations" means the Road Traffic (Carriage of Dangerous Substances in Road Tankers and Tank Containers) Regulations (Northern Ireland) 1992(d);

⁽a) See Article 2(2) of S.I. 1978/1039 (N.I. 9)(b) S.I. 1978/1039 (N.I. 9)

⁽c) S.R. 1985 No. 81, as amended by S.R. 1988 No. 288, S.R. 1989 No. 182, S.R. 1990 No. 120 and

S.R. 1990 No. 303 (d) S.R. 1992 No. 260

- "agriculture" includes horticulture, fruit growing, seed growing, dairy farming, livestock breeding and keeping, forestry, the use of land as grazing land, meadow land, osier land or nursery grounds or for market gardening and the preparation of land for agricultural purposes;
- "approved list" has the same meaning as in regulation 4 of the 1985 Regulations:
- "carriage" means carriage arising out of or in connection with work and shall be construed in accordance with regulations 2(2)(a)(ii) and 3(3); and related words shall be construed accordingly:
- "carrying tank" means a tank which is referred to thus in the 1992 Regulations by virtue of the definition of "road tanker" contained in regulation 2(1) thereof;
- "computer" means a computer system including its software;
- "the consignor" of a dangerous substance shall be regarded as—
 - (a) the person who, having a place of business in Northern Ireland. consigns (whether as principal or as agent for another) that dangerous substance for carriage; or
 - (b) if no person satisfies the requirements of sub-paragraph (a), the consignee of that dangerous substance;
- "dangerous substance" (whether or not a preparation or other mixture) means-
 - (a) any substance listed as dangerous for conveyance by road in Column 1 of Part IA2 of the approved list, other than when the substance has been so diluted or treated that it no longer has any of the characteristic properties specified in Column 1 of Part I of Schedule 2 to the 1985 Regulations;
 - (b) any substance which falls within one of the groups of substances listed as dangerous for conveyance by road in Column 1 of Part IB of the approved list, other than when the substance has been so diluted or treated that it no longer has any of the characteristic properties specified in Column 1 of Part I of Schedule 2 to the 1985 Regulations:
 - (c) any substance classified as a flammable gas, a toxic gas or an organic peroxide in accordance with regulation 6(4) of the 1985 Regulations:
 - (d) any controlled waste (as defined by Article 36(1) of the Pollution Control and Local Government (Northern Ireland) Order 1978(a)) consisting of or containing asbestos not falling with sub-paragraph (a) of this definition which is designated as "special waste" by regulation 3(1)(a)(i) of the Pollution Control (Special Waste) Regulations (Northern Ireland) 1981(b); or

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⁽a) S.I. 1978/1049 (N.I. 19) (b) S.R. 1981 No. 252

- (e) any other substance which is classified as dangerous for conveyance in accordance with regulation 6(4) of the 1985 Regulations and possesses the properties relevant to the classification concerned which are specified in Column 1 of Part I of the Schedule hereto;
- "the Department" means the Department of Economic Development;
- "flammable gas" means a gas so classified in accordance with paragraph (2) or (4) of regulation 6 of the 1985 Regulations;
- "flammable solid" means a solid so classified in accordance with paragraph (2) or (4) of regulation 6 of the 1985 Regulations:
- "flash point" has the same meaning as in regulation 2(1) of the 1985 Regulations;
- "freight container" means a container as defined in regulation 2 of the Freight Containers (Safety Convention) Regulations (Northern Ireland) 1992(a);
- "inspector of vehicles" means a person appointed by the Department of the Environment as an inspector of vehicles for the purposes of any provision of the Road Traffic (Northern Ireland) Order 1981(b);
- "motor vehicle" has the same meaning as in Article 2(2) of the Road Traffic (Northern Ireland) Order 1981:
- "operator" shall be construed in accordance with regulation 4:
- "organic peroxide" means a substance so classified in accordance with regulation 6(4) of the 1985 Regulations;
- "receptacle" means—
 - (a) a vessel (other than a carrying tank, tank container, freight container, transformer or capacitor); or
 - (b) the innermost layer of packagings,
 - which is in contact with a dangerous substance and which is liable to be individually handled when the substance is used or disposed of;
- "road" means a road within the meaning of Article 2(2) of the Road Traffic (Northern Ireland) Order 1981;
- "road tanker" has the same meaning as in regulation 2(1) of the 1992 Regulations;
- "semi-trailer" has the same meaning as in regulation 2(1) of the Motor Vehicles (Construction and Use) Regulations (Northern Ireland) 1989(c);
- "tank" has the same meaning as in regulation 2(1) of the 1992 Regulations:
- "tank container" has the same meaning as in regulation 2(1) of the 1992 Regulations;

⁽a) S.R. 1992 No. 2
(b) S.R. 1981/154 (N.I. 1) to which there are amendments not relevant to these Regulations
(c) S.R. 1989 No. 299

- "toxic gas" means a gas so classified in accordance with paragraph (2) or (4) of regulation 6 of the 1985 Regulations;
- "trailer" means a vehicle drawn by a motor vehicle but does not include a semi-trailer.
- (2) For the purposes of these Regulations—
- (a) a combination of a motor vehicle and one or more trailers or semi-trailers shall be deemed to be a single vehicle for so long as the constitutent parts of that combination remain attached; and
 - (i) dangerous substances contained in different parts of such a vehicle shall accordingly be considered to be contained in the same vehicle, and
 - (ii) without prejudice to the generality of regulation 3(3), a trailer or semi-trailer containing any dangerous substance shall not be considered to be engaged in any carriage to which these Regulations apply unless it forms part of such a combination;
- (b) any reference to the carriage of a dangerous substance in bulk shall include a reference to the unconfined carriage of that substance in a freight container, but shall exclude a reference to the carriage of that substance—
 - (i) in a receptacle (whether or not the receptacle is carried in a freight container),
 - (ii) in a road tanker,
 - (iii) in a tank container, or
 - (iv) in a transformer or capacitor; and
- (c) a vehicle will be deemed to be registered in the United Kingdom where the relevant motor vehicle is registered under the Vehicles (Excise) Act 1971(a) or any enactment replaced thereby.
- (3) Any reference in these Regulations to-
- (a) the "packing group" of a dangerous substance shall be construed—
 - (i) in the case of a dangerous substance listed as dangerous for conveyance by road in Column 1 of Part IA2 of the approved list or which falls within one of the groups of substances listed as dangerous for conveyance by road in Column 1 of Part 1B of the approved list, as a reference to the packing group (if any) which is specified in the corresponding entry in Column 7 of the Part in which it is listed or grouped as aforesaid,
 - (ii) in the case of a dangerous substance not listed or grouped as aforesaid but which is classified as dangerous for conveyance in accordance with regulation 6(4) of the 1985 Regulations and possesses the properties relevant to the classification concerned (which classification is that neither of a toxic nor a harmful substance) which are specified in Column 1 of Part I of the Schedule hereto, as a reference to the packing group listed in Column 2 of that Part which corresponds with the properties thus specified, or

- (iii) in the case of a dangerous substance not listed or grouped as aforesaid but which is classified as dangerous for conveyance in accordance with regulation 6(4) of the 1985 Regulations and possesses the properties relevant to the classification concerned (which classification is that of a toxic or a harmful substance) which are specified in Column 1 of Part I of the Schedule hereto, as a reference to the relevant packing group referred to in the properties thus specified; and
- (b) the colour orange shall be construed as a reference to a shade of orange which, so far as is practicable, matches the colour No. 557 Light Orange identified in Table 1 to the British Standard BS 381C:1988.

Application of these Regulations

- 3.—(1) Subject to paragraph (2)—
- (a) regulation 15(2) shall apply to the carriage on a vehicle—
 - (i) (in a receptacle with a capacity of less than 5 litres) of any dangerous substance such as is specified in sub-paragraph (c)(iv) to (vi), or
 - (ii) (in a receptacle with a capacity of less than 200 litres) of any dangerous substance such as is specified in sub-paragraph (c)(vii);
- (b) regulation 16 shall apply to the carriage in or, as the case may be, on a vehicle of any dangerous substance such as is specified in paragraph (1) thereof in bulk or in a receptacle (regardless of the capacity of that receptacle); and
- (c) the remainder of these Regulations shall apply to or, where appropriate, in relation to the carriage in or, as the case may be, on a vehicle—
 - (i) of any dangerous substance in bulk,
 - (ii) (in a receptacle, regardless of its capacity) of any organic peroxide which is subject to regulation 11(2),
 - (iii) (in a receptacle, regardless of its capacity) of any flammable solid which is subject to regulation 11(3),
 - (iv) (in a receptacle with a capacity of 5 litres or more) of any organic peroxide (other than one which is subject to regulation 11(2)), any flammable or toxic gas or any other dangerous substance being within packing group I,
 - (v) (in a receptacle with a capacity of 5 litres or more) of any asbestos falling within sub-paragraph (a) of the definition of "dangerous substance" in regulation 2(1) or any substance such as is specified in sub-paragraph (d) of that definition,
 - (vi) (in a receptacle with a capacity of 5 litres or more) of any dangerous substance both listed in Column 1 of the approved list as "hazardous waste" and designated as "special waste" by regulation 3(1)(a)(i) of the Pollution Control (Special Waste) Regulations (Northern Ireland) 1981.
 - (vii) (in a receptacle with a capacity of 200 litres or more) of any dangerous substance not specified in heads (ii) to (vi), or

- (viii) (in a transformer or capacitor, regardless of its capacity), of any dangerous substance not specified in heads (ii) to (v).
- (2) These Regulations shall not apply to the carriage of a dangerous substance-
 - (a) insofar as the dangerous substance being carried is being used solely in connection with the operation of a vehicle;
 - (b) where the dangerous substance being carried is a radioactive substance within the meaning of regulation 2(1) of the Ionising Radiations Regulations (Northern Ireland) 1985(a);
 - (c) where the dangerous substance being carried is a substance to which the Explosives Acts (Northern Ireland) 1875 to 1970(b) or the Explosives (Northern Ireland) Order 1972(c) applies;
 - (d) (other than for the purposes of regulations 7 and 8) where-
 - (i) the vehicle which is being used for the carriage of the dangerous substance is engaged in an international transport operation within the meaning of the Convention concerning International Carriage by Rail(d), as revised or re-issued from time to time ("COTIF"),
 - (ii) such carriage conforms in every respect with the provisions of the Regulations concerning the International Carriage of Dangerous Goods by Rail which are specified in Annex I to the Uniform Rules concerning the Contract for International Carriage of Goods by Rail, which Rules form Appendix B to the above Convention;
 - (e) where—
 - (i) the vehicle which is being used for the carriage of the dangerous substance is engaged in international transport within the meaning of article 1(c) of the European Agreement concerning the International Carriage of Dangerous Goods by Road signed at Geneva on 30th September 1957, as revised or re-issued from time to time ("ADR"), and
 - (ii) such carriage conforms in every respect with the provisions of ADR;
 - (f) where the transport of the dangerous substance concerned is subject to a special bilateral or multilateral agreement made under the terms of article 4.3 of ADR to which the United Kingdom is a signatory and conforms with any conditions attached to the agreement;
 - (g) where the vehicle which is being used for the carriage of the dangerous substance is not, for the time being, subject to the provisions of ADR by reason only that it is a vehicle belonging to or under the orders of. the armed forces of a country which is a signatory to ADR;

⁽a) S.R. 1985 No. 273 (b) 1875 c, 17; 1924 c. 5 (N.I.); 1970 c. 10 (N.I.) (c) S.I. 1972/730 (N.I. 3)

⁽d) Cmnd. 8535

- (h) where the vehicle which is being used for the carriage of the dangerous substance is delivering that substance—
 - (i) between private premises and another vehicle situated in the immediate vicinity of those premises, or
 - (ii) between one part of private premises and another part of those premises situated in the immediate vicinity of that first part;
- (i) where the vehicle which is being used for the carriage of the dangerous substance is passing from one part of an agricultural unit to another part of that unit and the dangerous substance is diluted ready for use or is otherwise in a condition ready for use; and in this head "agricultural unit" means a self-contained parcel of land which is occupied (whether or not by a single occupier) for agriculture;
- (j) where the dangerous substance being carried is specified in sub-paragraphs (d) to (j) of regulation 3(1) of the 1985 Regulations(a);
- (k) where the dangerous substance being carried is commercial butane, commercial propane or any mixture thereof in a cylinder and—
 - (i) the vehicle concerned has been designed for a purpose which includes the use of any such substance and the substance concerned is being carried in connection with the operation of the vehicle, or
 - (ii) the cylinder is part of equipment carried on the vehicle concerned, provided that the number of cylinders carried thus (including any spare cylinder) does not exceed two.
- (3) For the purposes of these Regulations, a vehicle shall be deemed to be engaged in the carriage of a dangerous substance throughout the period—
 - (a) in the case of a vehicle carrying a dangerous substance in bulk other than in a freight container, from the commencement of loading the relevant vehicle with the dangerous substance concerned for the purpose of carrying that substance on a road until the vehicle has been unloaded (and where necessary cleaned or purged) so that any of the substance or its vapour which remains in the vehicle is not sufficient to create a risk to the health or safety of any person; or
 - (b) in the case of a vehicle carrying a dangerous substance in a freight container, receptacle, transformer or capacitor—
 - (i) (if the relevant freight container, receptacle, transformer or capacitor has been loaded with the dangerous substance concerned before being placed on the vehicle) from the time when the freight container, receptacle, transformer or capacitor is placed on the vehicle for the purpose of carrying the dangerous substance on a road, or
 - (ii) (if the relevant freight container, receptacle, transformer or capacitor has been placed on the vehicle before the commencement of loading) from the commencement of loading

the freight container, receptacle, transformer or capacitor with the dangerous substance concerned for the purpose of carrying it by road,

until either-

- (aa) the freight container, receptacle, transformer or capacitor is removed from the vehicle; or
- (bb) the freight container, receptacle, transformer or capacitor (and, where necessary, the vehicle carrying same) have been emptied (and where necessary cleaned or purged) so that any of the substance or its vapour which remains therein is not sufficient to create a risk to the health or safety of any person;

and, in either case, whether or not the vehicle is on a road at the material time.

Meaning of operator

- **4.**—(1) For the purposes of these Regulations, the operator of a vehicle shall be—
 - (a) any person who holds a road freight vehicle licence under section 17 of the Transport Act (Northern Ireland) 1967(a) for the use of that vehicle on a road to carry goods for reward other than a person described in sub-section (1)(b) or (c) of that section; or
 - (b) where sub-paragraph (a) does not apply—
 - (i) (in the case of a vehicle which is not registered in the United Kingdom) the driver of the vehicle, or
 - (ii) (in the case of any other vehicle, but subject to paragraph (2)) the keeper of the vehicle; and, for this purpose, where the vehicle is on hire or lease to any person, that person shall be treated as its keeper.
- (2) Where an employee who would otherwise be the operator of a vehicle in accordance with sub-paragraph (b)(ii) of paragraph (1) uses that vehicle for the carriage of any dangerous substance on behalf of his employer, that employer shall (notwithstanding that paragraph) be regarded as the operator of the vehicle for the purposes of these Regulations.

Construction of vehicles and freight containers

- 5. The operator of any vehicle which is being used for the carriage of a dangerous substance shall ensure that—
 - (a) that vehicle and (in the case where the dangerous substance is contained in a freight container which is carried on the vehicle) that freight container—
 - (i) are properly designed, of adequate strength, of good construction from sound and suitable materials and adequately maintained,
 - (ii) are suitable for the purpose for which they are being used, having regard to—

- (aa) the nature and circumstances of the journey being undertaken, and
- (bb) the characteristic properties and quantity of both the dangerous substance and any other substance being carried; and
- (b) (in the case where the dangerous substance is being carried in bulk) any parts of the vehicle or freight container containing the substance, and any fittings attached thereto, which are likely to come into contact with that substance are made of materials which are liable neither to be affected by the substance nor, in conjunction with it, to form any other substance which creates a hazard to the health or safety of any person.

Information relating to dangerous substances to be received by operators

- **6.**—(1) The consignor of a dangerous substance shall ensure that the operator of the vehicle which is to carry it is provided with such information as will enable that operator—
 - (a) to comply with his duties under these Regulations; and
 - (b) to be aware of the hazards created by the substance to the health or safety of any person.
- (2) An operator shall not use a vehicle for the carriage of a dangerous substance unless he is in possession of the information referred to in paragraph (1).
- (3) The consignor shall ensure that the information referred to in paragraph (1) is—
 - (a) so far as is reasonably practicable, provided in written form;
 - (b) accurate; and
 - (c) sufficient for the purpose specified in that paragraph.
- (4) The operator shall keep the information referred to in paragraph (1) for a period of at least two weeks after the completion of the relevant journey, either in written form or in a computer under his control.
- (5) Information may only be kept in a computer in accordance with paragraph (4) where the information concerned—
 - (a) has been entered in the relevant computer by a competent person;
 - (b) is capable of being reproduced in written form when required;
 - (c) is secure from unauthorised interference; and
 - (d) can be authenticated only by the person who entered it.

Information in writing about dangerous substances to be given to drivers

- 7.—(1) The operator of any vehicle which is being used for the carriage of a dangerous substance shall ensure that the driver of the vehicle has received adequate information in writing about—
 - (a) the identity of the substance;
 - (b) the quantity to be carried; and
 - (c) the nature of the hazards created by the substance and the action to be taken in an emergency concerning it.

- (2) The driver of any vehicle which is being used for the carriage of a dangerous substance shall ensure that—
 - (a) the information in writing relating to that substance received by him in accordance with paragraph (1) is (subject to paragraphs (4) and (5) and regulation 15(1)) both kept on the vehicle and readily available at all times while the substance is being carried; and
 - (b) (subject to paragraph (3)) any information in writing in his possession received by him in accordance with paragraph (1) and which relates to any dangerous substance which is not being carried is destroyed, removed from the vehicle, or placed in a securely closed container clearly marked to show that the information does not relate to a dangerous substance which is being carried.
- (3) Nothing in paragraph (2)(b) shall require the destruction, removal or placing in a securely closed container of information in writing received by a driver in accordance with paragraph (1) which relates to any dangerous substance which is not being carried where that information in writing relates also to a dangerous substance which is being carried, and the nature of the hazards created by those dangerous substances is such that the action to be taken in an emergency concerning them is identical.
- (4) Notwithstanding paragraph (2)(a), where the tractor unit of any articulated vehicle which is being used for the carriage of a dangerous substance is detached from the trailer of that vehicle on a road or in premises, the driver of the vehicle shall attach the information in writing relating to that substance received by him in accordance with paragraph (1) to the trailer in a readily visible position or (in the case where the tractor unit is detached as aforesaid in premises) give that information to the occupier of the premises; and in such a case, the occupier shall ensure that said information is readily available at the premises.
- (5) Notwithstanding paragraph (2)(a), the driver of any vehicle which is being used for the carriage of a dangerous substance shall, when so requested by any police constable or any member of the fire or ambulance services in an emergency, produce the information in writing relating to that substance received by him in accordance with paragraph (1) to that constable or other person.

Instruction and training for drivers

- 8.—(1) Subject to paragraph (3), the operator of any vehicle which is being used for the carriage of a dangerous substance shall ensure that the driver of the vehicle has received adequate instruction and training to enable him to understand—
 - (a) the nature of the hazards created by the substance being carried and the action to be taken in an emergency; and
 - (b) his duties under these Regulations and Articles 8 and 9 of the Order of 1978.
 - (2) The operator of any vehicle which is being used-
 - (a) for any carriage to which this regulation applies by virtue of regulation 3(1)(c)(i), (iv), (v), (vi), (vii) or (viii) in circumstances where the total mass of dangerous substances being carried is at least 3 tonnes; or

- (b) for any carriage to which this regulation applies by virtue of regulation 3(1)(c)(ii) or (iii),
- shall keep a record of any training received by the driver of the vehicle pursuant to paragraph (1) whilst in his employment, and shall make a copy of that record available to the driver.
- (3) Nothing in paragraph (1) shall apply to the operator of any vehicle used for the carriage of a dangerous substance which—
 - (a) is being towed or otherwise moved by a break-down or recovery vehicle, insofar as—
 - (i) both vehicles are being escorted by a vehicle used for police or fire brigade purposes, and
 - (ii) the vehicle being towed or otherwise moved as aforesaid is being driven to the nearest suitable safe place or depot with a view to it (or any receptacle or other vessel which it is carrying) being repaired, cleaned or purged prior to its safe removal;
 - (b) is being towed or otherwise moved by a break-down or recovery vehicle, insofar as the driver of the break-down or recovery vehicle is accompanied by—
 - (i) the driver of the vehicle which is being towed or otherwise moved as aforesaid, or
 - (ii) some other person who has received—
 - (aa) such training as is referred to in paragraph (1)(a), and
 - (bb) adequate training to enable him to understand a driver's duties under these Regulations and his own duties under Articles 8 and 9 of the Order of 1978;
 - (c) is being driven by a person undergoing training under the supervision of an instructor and the instructor has received—
 - (i) such training as is referred to in paragraph (1)(a), and
 - (ii) adequate training to enable him to understand a driver's duties under these Regulations and his own duties under Articles 8 and 9 of the Order of 1978;
 - (d) is being driven for the purposes of testing the vehicle by a fitter, vehicle tester or other similar person, and that fitter, vehicle tester or other person—
 - (i) has received—
 - (aa) such instruction as is referred to in paragraph (1)(a), and
 - (bb) adequate instruction to enable him to understand his duties under Articles 8 and 9 of the Order of 1978, or
 - (ii) is accompanied by a person who has received-
 - (aa) such instruction as is referred to in paragraph (1)(a), and
 - (bb) adequate instruction to enable him to understand his duties under Articles 8 and 9 of the Order of 1978; or
 - (e) is being driven by a police constable in an emergency, and that constable has received such instruction as is referred to in paragraph (1)(a).

(4) In this regulation, "break-down vehicle" has the same meaning as in regulation 2(1) of the Goods Vehicles (Certification) Regulations (Northern Ireland) 1990(a)

Loading, stowage and unloading of dangerous substances

9. The operator of any vehicle which is being used for the carriage of a dangerous substance and every person engaged in that carriage shall take such steps as it is reasonable for them respectively to take to ensure that nothing in the manner in which the dangerous substance is loaded onto, stowed on or unloaded from the vehicle is liable to create a hazard to the health or safety of any person.

Precautions against fire or explosion

- 10.—(1) The operator of any vehicle which is being used for the carriage of a dangerous substance shall ensure that that vehicle also carries adequate fire-fighting equipment.
- (2) Every driver of, and every person repairing, maintaining, examining, inspecting, loading, unloading or otherwise dealing with, a vehicle which is being used for the carriage of a dangerous substance shall observe all the precautions necessary for preventing fire or explosion.

Limitation on the carriage of certain dangerous substances

- 11.—(1) The operator of any vehicle which is being used for the carriage of a dangerous substance in respect of which a maximum concentration or other condition is specified in Column 1 of the approved list shall ensure that during the whole of the carriage that concentration is not exceeded or, as the case may be, that condition is satisfied.
- (2) Subject to paragraph (4), the operator and driver of any vehicle which is being used for the carriage of an organic peroxide which has a self-accelerating decomposition temperature of 50°C or below as packaged shall ensure that during the whole of the carriage the organic peroxide concerned is kept at a temperature which does not exceed its control temperature.
- (3) The operator and driver of any vehicle which is being used for the carriage of a flammable solid which has a self-accelerating decomposition temperature of 55°C or below as packaged shall ensure that during the whole of the carriage the flammable solid concerned is kept at a temperature which does not exceed its control temperature.
- (4) Nothing in paragraph (2) shall apply to any organic peroxide which has a self-accelerating decomposition temperature of greater than 45°C as packaged and which shows no effect or a negligible effect when heated under confinement.
- (5) For the purposes of paragraphs (2) to (4), the self-accelerating decomposition temperature of an organic peroxide or, as the case may be, of a flammable solid is the lowest temperature at which self-accelerating decomposition may occur in the package during carriage.

⁽a) S.R. 1990 No. 224, to which there are amendments not relevant to these Regulations

(6) For the purposes of paragraphs (2) and (3), the control temperature of an organic peroxide or, as the case may be, of a flammable solid is (where its self-accelerating decomposition temperature is 20°C or less) 20°C less than that self-accelerating decomposition temperature; (where its self-accelerating decomposition temperature is greater than 20°C but less than or equal to 35°C) 15°C less than that self-accelerating decomposition temperature; and (where its self-accelerating decomposition temperature is greater than 35°C) 10°C less than that self-accelerating decomposition temperature.

Marking of vehicles carrying dangerous substances

- 12.—(1) The operator of any vehicle which is being used for the carriage of at least 500 kilograms of one or more dangerous substances shall ensure that the vehicle displays two rectangular reflectorised orange-coloured plates of 400 millimetres base and 300 millimetres high in conformity with the conditions specified in paragraph (3).
- (2) Nothing in paragraph (1) shall prevent the operator of any vehicle which is being used for the carriage of less than 500 kilograms of one or more dangerous substances from displaying on the vehicle the orange-coloured plates referred to in that paragraph; but where this occurs, the operator concerned shall ensure that the vehicle displays those plates in conformity with the conditions specified in paragraph (3).
 - (3) The orange-coloured plates referred to in paragraph (1) shall—
 - (a) have a black border not more than 15 millimetres wide;
 - (b) be affixed one at the front and the other at the rear of the vehicle in a substantially vertical plane; and
 - (c) be kept clean, clearly visible and free from obstruction (except that the rear plate need not be kept clearly visible and free from obstruction when the vehicle is being loaded or unloaded).
- (4) It shall be the duty of the driver of any vehicle being used for the carriage of a dangerous substance which is displaying the orange-coloured plates referred to in paragraph (1) to ensure that they are displayed in conformity with the conditions specified in sub-paragraphs (b) and (c) of paragraph (3).
- (5) When any vehicle displaying the orange-coloured plates referred to in paragraph (1) is emptied of all the dangerous substances being carried by it, the operator and driver of the vehicle shall ensure that those plates are completely covered or completely removed from the vehicle.
 - (6) Paragraphs (1) to (5) shall not apply—
 - (a) to the carriage of a dangerous substance to a port for carriage by sea, or from a port to which it has been carried by sea, if the vehicle or (in the case where the dangerous substance is contained in a freight container which is carried on the vehicle) the freight container is placarded in accordance with the appropriate provisions of the International Maritime Dangerous Goods Code issued by the International Maritime Organisation as revised or re-issued from time to time; or
 - (b) where the vehicle is being used solely for the carriage of a dangerous substance from—

- (i) another road vehicle which has been damaged as the result of an accident on a road or has broken down on a road, or
- (ii) a rail vehicle which has been damaged or derailed or has broken down on a railway other than a siding on which it was loaded.
- (7) Paragraphs (1) to (5) shall not apply to the carriage of a dangerous substance in a vehicle which is in the service of home forces (as defined by regulation 3(1) of the Road Vehicles Lighting Regulations (Northern Ireland) 1969(a) ("the 1969 Regulations")) or of a visiting force (having the same meaning in this paragraph as it does for the purposes of any provision of Part I of the Visiting Forces Act 1952(b)) insofar as the vehicle concerned is being used in connection with training—
 - (a) which has been certified in writing for the purposes of regulation 46(a) of the 1969 Regulations by the appropriate authority within the meaning of those Regulations to be training on a special occasion, and
 - (b) of which not less than 48 hours' notice has been given by that authority to the Chief Constable of the Royal Ulster Constabulary and to the the Chief Fire Officer of the Fire Authority for Northern Ireland.
- (8) Where a trailer or semi-trailer which is carrying at least 500 kilograms of one or more dangerous substances has become separated from the vehicle to which it was attached, the persons who were for the purposes of these Regulations respectively regarded as the operator and driver of the combination of motor vehicle and one or more trailers or semi-trailers of which it formed part shall ensure that—
 - (a) a single reflectorised orange-coloured plate of 400 millimetres base and 300 millimetres high and having a black border not more than 15 millimetres wide is affixed in a substantially vertical plane to the rear of the trailer or semi-trailer which has become separated as aforesaid; and
 - (b) nothing is displayed on that trailer or semi-trailer which would be likely to confuse the emergency services when read in conjunction with that plate.

Prohibition on provision and display of orange-cloured plates and additional information

- 13.—(1) The operator and driver of any vehicle which is not being used for the carriage of a dangerous substance shall ensure that it does not at any time display the orange-coloured plates referred to in regulation 12(1).
- (2) The operator and driver of any vehicle which is displaying the orange-coloured plates referred to in regulation 12(1) shall ensure that nothing is displayed on that vehicle which would be likely to confuse the emergency services when read in conjunction with those plates.

⁽a) S.R. & O. 1969 No. 214, to which there are amendments not relevant to these Regulations (b) 1952 c. 67

Supervision of vehicles containing dangerous substances

- 14. The driver of any vehicle which is being used—
- (a) for any carriage to which this regulation applies by virtue of regulation 3(1)(c)(i), (iv), (v), (vi), (vii) or (viii) in circumstances where the total mass of dangerous substances being carried is at least three tonnes; or
- (b) for any carriage to which this regulation applies by virtue of regulation 3(1)(c)(ii) or (iii),

shall ensure that the vehicle is parked in a safe place when it is not being driven, except—

- (c) when supervised at all times by him or by a competent person over the age of 18 years; or
- (d) (in circumstances where no such competent person is present) when the vehicle has been damaged or has broken down on a road and the driver has left the vehicle to seek assistance.

Information to be produced to police constables and inspectors of vehicles

- 15.—(1) The driver of any vehicle which is being used for the carriage of a dangerous substance shall (notwithstanding regulation 7(2)(a)) produce on request to any police constable or inspector of vehicles the information in writing relating to that substance received by him in accordance with regulation 7(1).
- (2) The driver of any vehicle which is being used for the carriage of a dangerous substance shall produce on request to any police constable or inspector of vehicles any information in his possession which will enable that constable or inspector to know the identity and quantity of the dangerous substance being carried.

Restrictions on the carriage of toxic or harmful substances in the same vehicle as food

- 16.—(1) The operator and driver of any vehicle which is being used for the carriage of a toxic or a harmful substance shall ensure that no food is carried in that vehicle unless the food is carried in a part of the vehicle effectively separated from that containing the substance or is otherwise adequately protected from the risk of contamination.
 - (2) In this regulation—
 - (a) "food" means food within the meaning of Article 2(2) of the Food Safety (Northern Ireland) Order 1991(a);
 - (b) "toxic substance" means a substance so classified in accordance with paragraph (2) or (4) of regulation 6 of the 1985 Regulations;
 - (c) "harmful substance" means a substance so classified in accordance with paragraph (2) or (4) of regulation 6 of the 1985 Regulations.

Defence in proceedings for contravening these Regulations

17. In any proceedings for an offence consisting of a contravention of these Regulations, it shall be a defence for any person to prove that he took all reasonable precautions and exercised all due diligence to avoid the commission of that offence.

Exemption certificates

- 18.—(1) Subject to paragraph (2), the Department may, by a certificate in writing, exempt any person or class of persons or any dangerous substance or class of dangerous substances from all or any of the requirements or prohibitions imposed by these Regulations and any such exemption may be granted subject to conditions and to a limit of time and may be revoked at any time by a certificate in writing.
- (2) The Department shall not grant any such exemption unless, having regard to the circumstances of the case, and in particular to—
 - (a) the conditions, if any, which it proposes to attach to the exemption;
 - (b) any other requirements imposed by or under any statutory provision which applies to the case,

it is satisfied that the health or safety of persons who are likely to be affected by the exemption will not be prejudiced in consequence of it.

Revocations

19. The Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations (Northern Ireland) 1988(a) and the Road Traffic (Carriage of Dangerous Substances in Packages etc.) (Amendment) Regulations (Northern Ireland) 1990(b) are hereby revoked.

Sealed with the Official Seal of the Department of Agriculture on 9th June 1992.

(L.S.)

I. C. Henderson

Assistant Secretary

Sealed with the Official Seal of the Department of Economic Development on 8th June 1992.

(L.S.)

Suzanna Cooper

Assistant Secretary

Sealed with the Official Seal of the Department of the Environment on 8th. June 1992.

(L.S.)

Trevor Pearson

Assistant Secretary

⁽a) S.R. 1988 No. 415 (b) S.R. 1990 No. 32

Sealed with the Official Seal of the Department of Health and Social Services on 9th June 1992.

(L.S.)

J. Scott

Assistant Secretary

Health and Safety THE SCHEDULE

Regulation 2(1)

Part I

Properties relevant to, and packing groups of, substances which have been classified as dangerous for conveyance in accordance with regulation 6(4) of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985

Column 1	Column 2 Packing
Relevant properties	Group
1. The properties relevant to a substance which has been classified as a <i>flammable liquid</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
(a) (in the case of a liquid containing not more than 20% of nitrocellulose and having a flash point not exceeding 21°C)—	
(i) less than 3% of it shall separate out into a clear solvent layer following a suitable solvent separate test,	
(ii) the flash point of it shall be specified in Column 1 of the Table set out in Part III, and	•
(iii) the kinematic viscosity of it shall be within the range specified in Column 2 of the Table set out in Part III which is opposite to the flash point of that liquid referred to in head (ii); or	III
(b) (in the case of any other liquid) its flash point shall be not greater than 55°C and it shall have—	
(i) an initial boiling point of not greater than 35°C,	I
(ii) an initial boiling point above 35°C and a flash point of less than 21°C, or	II
(iii) an initial boiling point above 35°C and a flash point of 21°C or above.	III
2. The properties relevant to a substance which has been classified as a <i>flammable solid</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it shall be readily combustible under conditions encountered in carriage in packages, etc., or it may cause or contribute to fire through friction and it shall—	
(a) be water-wetted and (when in a dry state) be required to be classified (as defined by regulation 2(1) of the Classification and Labelling of Explosives Regulations (Northern Ireland) 1991(a) in pursuance of regulation 3(2)(a) of those Regulations;	I
(b) be a self-reactive substance which, when ignited, burns very vigorously or intensely and is difficult to extinguish; or	II
(c) when ignited, burn vigorously or intensely.	Ш

Column 1	Column 2 Packing
Relevant properties	Group
3. The properties relevant to a substance which has been classified as a <i>spontaneously combustible substance</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it shall be liable either to spontaneous heating under conditions encountered in carriage or to heating in contact with air (being in either case then liable to catch fire) and it shall be—	
(a) a pyrophoric substance which ignites instantly on contact with air;	I
(b) liable to ignite on contact with air within a short space of time, particularly under conditions of spillage; or	II
(c) any other substance which is liable to ignite on contact with air.	III
4. The properties relevant to a substance which has been classified as a <i>substance which in contact with water emits flammable gas</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
in contact with water it shall be liable to become spontaneously combustible or to give off a flammable gas and it shall—	
(a) either react vigorously with water at ambient temperatures and demonstrate generally a tendency for the gas produced to ignite spontaneously or shall react readily with water at ambient temperatures so that the rate of evolution of flammable gas is equal to or greater than 10 litres per kilogram of substance over any period of one minute;	I
(b) react readily with water at ambient temperatures so that the maximum rate of evolution of flammable gas is equal to or greater than 20 litres per kilogram of substance per hour; or	II
(c) react slowly with water at ambient temperatures so that the maximum rate of evolution of flammable gas is greater than 1 litre per kilogram of substance per hour.	III
5. The properties relevant to a substance which has been classified as an <i>oxidizing substance</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it may (although not itself necessarily combustible), by yielding oxygen or by a similar process, cause or contribute to the combustion of other material and it shall exhibit oxidizing properties to a degree—	
(a) greater than potassium bromate;	I
(b) equal to or greater than potassium perchlorate; or	II
(c) equal to or greater than ammonium persulphate.	III
6. The properties relevant to a substance which has been classified as a <i>toxic substance</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it shall cause, or it may cause, a serious hazard to human health during carriage, and it shall have been allocated to packing group I or II in accordance with the criteria set out in Part II.	

Column 1	Column 2 Packing
Relevant properties	Group
7. The properties relevant to a substance which has been classified as a <i>harmful substance</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it shall cause, or it may cause, ill-health to people, but it shall be less likely to represent a serious hazard to health during carriage than does a toxic substance, and it shall have been allocated to packing group III in accordance with the criteria set out in Part II.	_
8. The properties relevant to a substance which has been classified as a <i>corrosive substance</i> in accordance with regulation 6(4) of the 1985 Regulations are:	
it shall by chemical action—	
(a) cause severe damage when in contact with living tissue; or	
(b) materially damage other freight or equipment if leakage occurs;	
and shall—	
(c) cause visible necrosis of the skin tissue at the site of contact when tested on the intact skin of an animal for a period of—	
(i) up to 3 minutes,	I
(ii) more than 3 minutes and up to 60 minutes, or	II
(iii) more than 60 minutes and up to 4 hours, or	III
(d) cause corrosion in steel or aluminium surfaces at a rate exceeding 6.25mm a year at a test temperature of 55°C.	III

Criteria for allocation of substances which have been classified as toxic or harmful substances in accordance with regulation 6(4) of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985 into packing groups

- 1. Account should be taken of the physico-chemical properties of a substance, as well as reports of accidental poisonings in people and acute toxicity tests in animals. In the absence of adequate human experience, allocation should be based on data obtained from animal experiments. Acute toxicity testing in animals should be conducted using internationally-agreed protocols, such as the current edition of the Organisation for Economic Co-operation and Development's Guidelines for Testing of Chemicals, and in accordance with appropriate animal welfare provisions.
- 2. When a substance exhibits a different order of toxicity by two or more of the following routes of administration, namely oral, dermal or inhalation, the highest degree of danger indicated by the tests shall be considered when allocating the substance.
- 3. Subject to paragraphs 1 and 2, toxic and harmful substances shall be allocated into packing groups I, II or III in accordance with the criteria given in the Table below:

Classification	Packing Group	Oral toxicity LD ₅₀ (mg/kg)	Dermal toxicity LD ₅₀ (mg/kg)	Inhalation toxicity of dust or mists LC ₅₀ (mg/L)	Inhalation toxicity of vapours where V is the saturated vapour concentration produced by the substance at 20°C expressed by reference to LC_{50} (ml/m³)
Toxic Substance	I	≤5	≤40	≤0.5	$V \ge 10.LC_{50}$ and $LC_{50} \le 1000$
	II	>5 to ≤50	>40 to ≤200	>0.5 to ≤2	$V \ge LC_{50}$ and $LC_{50} \le 3000$ but not placed in packing group I
Harmful Substance	III	solids: >50 to ≥200 liquids: >50 to ≤500	>200 to ≤1000	>2 to ≤10	V≥0.2LC ₅₀ and LC ₅₀ ≤5000 but not placed in either packing group I or II

The above criteria are based on LC_{50} data relating to one hour exposure and where such information is available it should be used. However, where only LC_{50} data relating to 4 hour exposures is available then:

 LC_{50} (4 hr) × 4 shall be considered equivalent to LC ₅₀ (1 hr) for dusts or mists, and

 LC_{50} (4 hr) imes 2 shall be considered equivalent to LC_{50} (1 hr) for vapours.

Table of flash points and kinematic viscosity ranges of substances which have been classified as flammable liquids in accordance with regulation 6(4) of the Classification, Packaging and Labelling of Dangerous Substances Regulations (Northern Ireland) 1985, contain not more than 20% of nitrocellulose and do not in any case have a flash point exceeding 21°C

Column 1 Flash point	Column 2 Kinematic viscosity γ (extrapolated) (at near-zero shear rate) mm²/s at 23°C
Above 17°C	$20 < \gamma \le 80$
Above 10°C	$80 < \gamma \le 135$
Above 5°C	$135 < \gamma \le 220$
Above -1°C	$220 < \gamma \le 300$
Above -5°C	$300 < \gamma \le 700$
-5°C and below	$700 < \gamma$

EXPLANATORY NOTE.

(This note is not part of the Regulations.)

These Regulations ("the Regulations") revoke and replace the Road Traffic (Carriage of Dangerous Substances in Packages etc.) Regulations (Northern Ireland) 1988 (S.R. 1988 No. 415) which were amended by the Road Traffic (Carriage of Dangerous Substances in Packages etc.) (Amendment) Regulations (Northern Ireland) 1990 (S.R. 1990 No. 32), also revoked by these Regulations.

The Regulations impose a series of requirements and a prohibition in relation to the carriage of dangerous substances in or, as the case may be, on vehicles in receptacles, in bulk, or in transformers or capacitors.

Regulation 2(1) defines what is meant by the phrase "dangerous substance" as used in the Regulations, as well as defining certain other words and phrases used therein. Regulation 2(2)(a) provides that for the purposes of the Regulations a combination of a motor vehicle and one or more trailers or semi-trailers is to be regarded as a single vehicle for so long as they remain attached and regulation 2(2)(a)(i) provides in particular that dangerous substances contained in different parts of such a vehicle will be considered to be contained in the same vehicle. Regulation 2(2)(b) specifies what is meant by "carriage in bulk". Regulation 2(3) sets out the means for identifying the packing group of a dangerous substance.

Regulation 3 specifies the circumstances in which the Regulations apply and (together with regulation 2(2)(a)(ii)) indicates when a vehicle is to be considered as engaged in the carriage of a dangerous substance.

The bulk of the Regulations impose duties on the operators of vehicles or otherwise apply in relation to them and regulation 4 specifies who are to be regarded as such persons.

Regulation 5 imposes requirements with respect to the design and construction of vehicles carrying dangerous substances, and freight containers carrying dangerous substances whilst being transported on vehicles, to be observed by the operators of the vehicles concerned.

Regulation 6 imposes requirements with respect to the provision of health and safety information to the operators of vehicles which are to carry dangerous substances (to be observed by the consignors of those dangerous substances) and imposes a requirement and a prohibition (to be observed by the operators concerned) with respect to the information thus provided:

Regulation 7 imposes a requirement with respect to the provision of information about dangerous substances being carried in or on vehicles to the drivers of those vehicles (to be observed by the operators of the vehicles concerned); and imposes requirements with respect to the information thus provided (to be observed by the drivers concerned and, in certain cases, by the occupiers of premises).

Regulation 8 imposes requirements with respect to the provision of instruction and training to the drivers of vehicles carrying dangerous substances, to be observed by the operators of the vehicles concerned.

Regulation 9 imposes requirements with respect to the loading, stowage and unloading of dangerous substances onto, on or as the case may be from vehicles, to be observed by the operators of the vehicles concerned and any other person engaged in the carriage of the dangerous substances in question.

Regulation 10 imposes requirements with respect to the provision of fire-fighting equipment to vehicles carrying dangerous substances (to be observed by the operators of the vehicles concerned); and the prevention of fire and explosion as regards vehicles carrying dangerous substances, to be observed by the drivers of the vehicles concerned and persons working on or in respect of them.

Regulation 11 imposes limitations on the carriage of the dangerous substances specified therein, to be observed by the operators and drivers of the vehicles concerned.

Regulation 12 lays down provisions with respect to the display of orange-coloured plates on vehicles carrying dangerous substances, to be observed by the operators and drivers of the vehicles concerned.

Regulation 13 imposes limitations with respect to the display of orange-coloured plates on vehicles, to be observed by the operators and drivers of the vehicles concerned.

Regulation 14 imposes requirements with respect to the parking of vehicles carrying certain dangerous substances in bulk or in receptacles, to be observed by the drivers of the vehicles concerned.

Regulation 15 imposes requirements with respect to the production to police constables and inspectors of vehicles of information relating to dangerous substances being carried on vehicles, to be observed by the drivers of the vehicles concerned.

Regulation 16 imposes restrictions with respect to the carriage of food on vehicles which are carrying toxic or harmful substances, to be met by the operators and drivers of the vehicles concerned.

Regulation 17 provides a defence in proceedings for an offence under the Regulations where the defendant can prove that he took all reasonable steps and exercised all due diligence to avoid the commission of the offence.

Regulation 18 enables the Department of Economic Development to grant exemptions from the Regulations.

Regulation 19 makes the revocations referred to in the first paragraph of this note.

A person who contravenes the Regulations is guilty of an offence under Article 31 of the Health and Safety at Work (Northern Ireland) Order 1978 and is liable, on summary conviction, to a fine not exceeding £2,000, or on conviction on indictment to a fine.

Copies of the documents referred to in the Regulations may be obtained as follows:—

- (a) the current editions of "the approved list" (ISBN 0 11 885542 5), the European Agreement concerning the International Carriage of Dangerous Goods by Road ("ADR") (ISBN 0 11 550901 1), the Organisation for Economic Co-operation and Development's Guidelines for Testing of Chemicals (ISBN 926 412900 6) and the Regulations concerning the International Carriage of Dangerous Goods by Rail (ISBN 0 11 550814 7), from Her Majesty's Stationery Office, 16 Arthur Street, Belfast, BT1 4GD.
- (b) British Standard BS 381C: 1988 (by personal callers) from the British Standards Institution, 2 Park St., London W1A 2BS or (by post) from the British Standards Institution, Linford Wood, Milton Keynes, MK14 6LE; and
- (c) the current edition of the International Maritime Dangerous Goods Code (Volumes I to IV ISBN 92 801 1055 1, Volume V ISBN 92 801 1125 6), from the International Maritime Organisation, 4 Albert Embankment, London SE1 7SR.