

2003 No. 533

HEALTH AND SAFETY

**Packaging, Labelling and Carriage of Radioactive Material
by Rail Regulations (Northern Ireland) 2003**

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Coming into operation 27th February 2004

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The Department of Enterprise, Trade and Investment(a), being the Department concerned(b), in exercise of the powers conferred by Articles 2(5), 17(1) to (6), 40(2) and (4) and 55(2) of, and paragraphs 1(1) to (4), 2, 3(1), 4 to 14(1), 15, 19 and 20(a) and (b) of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978(c) and of every other power enabling it in that behalf and for the purpose of giving effect without modifications to proposals

(a) Formerly the Department of Economic Development; *see* S.I. 1982/846 (N.I. 11), Article 3 and S.I. 1999/283 (N.I. 1), Article 3(5)

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

(c) S.I. 1978/1039 (N.I. 9); Article 17(4) was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraph 8; Article 17(6) was amended by S.I. 1992/1728 (N.I. 17), Article 6(2); and Article 55(2) was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraph 19

submitted to it by the Health and Safety Executive for Northern Ireland under Article 13(1A)(a) of that Order after the carrying out by the said Executive of consultations in accordance with Article 46(1) and (3)(b) of that Order, and being a Department designated(c) for the purposes of section 2(2) of the European Communities Act 1972(d) both in relation to measures relating to informing the public about health protection measures to be taken in the event of a radiological emergency and in relation to measures relating to the basic safety standards for the protection of the general public and workers against the dangers of ionising radiation in exercise of the powers conferred by the said section 2(2) and of every other power enabling it in that behalf, hereby makes the following Regulations:

PART I INTRODUCTION

Citation and commencement

1. These Regulations may be cited as the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 2003 and shall come into operation on 27th February 2004.

Interpretation

2.—(1) In these Regulations –

“the 1978 Order” means the Health and Safety at Work (Northern Ireland) Order 1978;

“A₁” means the activity value of special form radioactive material which is listed in Table 2.2.7.7.2.1 in RID sub-paragraph 2.2.7.7.2 or derived in accordance with that sub-paragraph;

“A₂” means the activity value of radioactive material, other than special form radioactive material, which is listed in Table 2.2.7.7.2.1 in RID sub-paragraph 2.2.7.7.2 or derived in accordance with that sub-paragraph;

“authorised person” means the Secretary of State or an inspector appointed under Article 21 of the 1978 Order;

“body”, in relation to an intermediate bulk container, means the receptacle, including the openings and their closures, but does not include any service equipment;

“box” means a packaging with complete rectangular or polygonal faces –

- (a) which is made of metal, wood, plywood, reconstituted wood, fibreboard, plastics or other suitable material; and
- (b) whose integrity during carriage will not be compromised by any holes inserted for the purpose of –
 - (i) making handling or opening easier; or
 - (ii) meeting classification requirements;

“carriage” means the change of place of radioactive material, and includes –

- (a) stops made necessary by transport conditions;
- (b) any period spent by the radioactive material in wagons, tanks, and containers made necessary by traffic conditions before, during and after the change of place; and
- (c) the intermediate temporary storage of radioactive material in order to change the mode of transport provided that –

(a) Article 13(1A) was substituted by S.I. 1998/2795 (N.I. 18), Article 4
(b) Article 46(1) and (3) was amended by S.I. 1998/2795 (N.I. 18), Article 6(1) and Schedule 1, paragraphs 8 and 18
(c) S.I. 1991/2289
(d) 1972 c. 68

- (i) transport documents showing the place of dispatch and the place of reception are presented on request by an authorised person; and
- (ii) packages and tanks are not opened during the intermediate temporary storage, except to be checked by the Secretary of State;

“closure” means a device which closes an opening;

“competent authority” means –

- (a) the Secretary of State;
- (b) as regards a State other than the United Kingdom, the authority designated as the competent authority in that State for any purpose in connection with RID;

“consignee” means –

- (a) the person who is the consignee under the terms of the contract for the carriage in question;
- (b) the person who, in accordance with the contract for the carriage in question, is designated by the person referred to in (a) to act on his behalf; or
- (c) if there is no contract for carriage, the person who takes charge of the consignment in question when that consignment has arrived at its final destination;

“consignment” means a package or load of radioactive material, presented by a consignor of radioactive material for carriage;

“consignor of radioactive material” means –

- (a) a person who –
 - (i) has a place of business in Northern Ireland; and
 - (ii) consigns radioactive material for carriage, whether as principal or as an agent for another; or
- (b) as regards the radioactive material in question, if there is no such person as described in sub-paragraph (a), a person who has control over the carriage of that radioactive material in Northern Ireland;

“container” means an article of transport equipment which is –

- (a) of a permanent character and strong enough to be suitable for repeated use;
- (b) specially designed to facilitate the carriage of goods by one or more means of transport without breakage of load;
- (c) fitted with devices permitting its ready stowage and handling, particularly when being transferred from one means of transport to another; and
- (d) designed so as to be easy to fill and empty;

“contamination” means the presence of a radioactive material on a surface in quantities in excess of 0.4 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm² for all other alpha emitters;

“COTIF” means the Convention concerning International Carriage by Rail, as revised or re-issued from time to time^(a);

“COTIF Member State” means a country which is a party to COTIF;

“criticality safety index” means a number which is used to provide control over the accumulation of packages, overpacks or containers which contain fissile material;

“dangerous goods” means substances and articles the carriage of which is prohibited by RID, or authorised only in accordance with the conditions prescribed in RID;

“demountable tank” means a tank designed to fit the special apparatus of a wagon but which can only be removed from the wagon after dismantling the means of attachment;

“depleted uranium” means uranium which contains a lesser mass percentage of uranium-235 than in natural uranium and which also contains a very small mass percentage of uranium-234;

(a) Cmnd. 5897

“design”, in relation to special form radioactive material, low dispersible radioactive material, a package or packaging, means a description which –

- (a) enables the material, package or packaging in question to be fully identified; and
- (b) may include specifications, engineering drawings, reports demonstrating compliance with regulatory requirements and other relevant documentation;

“drum” means a flat-ended, or convex-ended cylindrical packaging made out of metal, fibreboard, plastic, plywood or other suitable material and includes packaging of other shapes such as round taper-necked packaging or pail-shaped packaging, but does not include a wooden barrel or a jerry can;

“emergency services” means the police, fire and ambulance services;

“factory” has the meaning assigned to it by section 175 of the Factories Act (Northern Ireland) 1965(a);

“fissile material” means uranium-233, uranium-235, plutonium-239, plutonium-241 or any combination of these radionuclides, but does not include natural uranium or depleted uranium which –

- (a) is unirradiated; or
- (b) has been irradiated only in thermal reactors;

“fixed contamination” means contamination other than non-fixed contamination;

“flexible intermediate bulk container” means a body made up of film, woven fabric or any other flexible material and, where necessary, an inner coating or liner together with any service equipment and handling devices;

“harbour area” has the meaning assigned to it by regulation 2(1) of the Dangerous Substances in Harbour Areas Regulations (Northern Ireland) 1991(b);

“infrastructure controller” means a person who controls railway infrastructure;

“intermediate bulk container” means a rigid or flexible portable packaging which –

- (a) has a capacity of not more than 3m³ for radioactive material;
- (b) is designed for mechanical handling; and
- (c) is resistant to the stresses produced in handling and transport as determined by the tests specified in RID Chapter 6.5;

“jerry can” means a metal or plastic packaging of rectangular or polygonal cross-section with one or more orifices;

“large container” means a container which is not a small container;

“light maintenance depot” means any land or other property which is normally used for or in connection with the provision of light maintenance services, whether or not it is also used for other purposes;

“light maintenance services” means services of any of the following descriptions, that is to say –

- (a) the refuelling, or the cleaning of the exterior, of locomotives or other rolling stock;
- (b) the carrying out to locomotives or other rolling stock of maintenance work of a kind which is normally carried out at regular intervals of twelve months or less to prepare the locomotive or other rolling stock for service;

“low dispersible radioactive material” means –

- (a) a solid radioactive material; or
- (b) a solid radioactive material in a sealed capsule,

which has limited dispersibility and is not in powder form;

“low specific activity material” means –

- (a) radioactive material which by its nature has a limited specific activity, or

(a) 1965 c. 20 (N.I.); section 175(2)(n) was amended by regulation 3(1) of, and Schedule 1 to, S.R. 1984 No. 283

(b) S.R. 1991 No. 509, to which there are amendments not relevant to these Regulations

- (b) radioactive material for which limits of estimated average specific activity, disregarding external shielding surrounding the radioactive material, apply;

“LSA-I” means low specific activity material comprising –

- (a) uranium and thorium ores and the concentrates of such ores, and other ores containing naturally occurring radionuclides which are intended to be processed for the use of those radionuclides;
- (b) solid unirradiated natural uranium or depleted uranium or natural thorium or their solid or liquid compounds or mixtures;
- (c) radioactive material for which the A_2 value is unlimited, excluding fissile material in quantities not excepted under RID paragraph 6.4.11.2; or
- (d) other radioactive material in which the activity is distributed throughout that radioactive material and the estimated average specific activity does not exceed 30 times the values for activity concentration specified in RID sub-paragraphs 2.2.7.7.2.1 to 2.2.7.7.2.6, excluding fissile material in quantities not excepted under RID paragraph 6.4.11.2;

“LSA-II” means low specific activity material comprising –

- (a) water with tritium concentration up to 0.8 TBq/l; or
- (b) other material in which the activity is distributed throughout and the estimated average specific activity does not exceed $10^{-4}A_2/g$ for solids and gases and $10^{-5}A_2/g$ for liquids;

“LSA-III” means low specific activity material comprising solids, such as consolidated wastes and activated materials, but excluding powders, in which –

- (a) the radioactive material is distributed throughout a solid or a collection of solid objects, or is essentially uniformly distributed in a solid compact binding agent such as concrete, bitumen or ceramic;
- (b) the radioactive material is relatively insoluble, or it is intrinsically contained in a relatively insoluble matrix, so that even under loss of packaging, the loss of radioactive material per package by leaching when placed in water for seven days would not exceed $0.1A_2$; and
- (c) the estimated average specific activity of the solid, excluding any shielding material, does not exceed $2 \times 10^{-3}A_2/g$;

“low toxicity alpha emitters” means thorium-228 and thorium-230 when contained in ores or physical or chemical concentrates, natural uranium, depleted uranium, natural thorium, uranium-235, uranium-238, thorium-232 or alpha emitters with a half life of less than ten days;

“military establishment” means an establishment intended for use for naval, military or air force purposes or for the purposes of the Department of the Secretary of State having responsibility for defence;

“mine” has the meaning given in Part I of Schedule 1;

“minerals” includes stone, slate, clay, gravel, sand and other natural deposits except peat;

“multilateral approval” means approval by the competent authority both of the State of origin of the design or shipment in question and of each State through or into which the consignment in question is to be carried;

“natural uranium” means chemically separated uranium containing the naturally occurring distribution of uranium isotopes;

“naturally occurring distribution of uranium isotopes” means approximately 99.28% uranium-238 and 0.72% uranium-235 by mass, but including a very small mass percentage of uranium-234;

“non-fixed contamination” means contamination which can be removed from a surface during routine conditions of carriage;

“overpack” means an enclosure used by a single consignor of radioactive material to contain one or more packages consolidated into a single unit in order to facilitate handling and stowing during carriage;

“owner”, in relation to a mine, has the meaning given in Part II of Schedule 1;

“package” means packaging with its radioactive contents as presented for carriage;

“packaging” means the assembly of components necessary to enclose radioactive contents completely which –

- (a) may be a box, drum or similar receptacle or a container, tank or intermediate bulk container; and
- (b) may, in particular, consist of –
 - (i) one or more receptacles;
 - (ii) absorbent materials;
 - (iii) spacing structures;
 - (iv) radiation shielding;
 - (v) service equipment for filling, emptying, venting and pressure relief;
 - (vi) devices for cooling, for absorbing mechanical shocks, for handling and tie-down and for thermal insulation;
 - (vii) service devices integral to the package;

“portable tank” means a multimodal tank having a capacity of more than 450 litres used for the carriage of radioactive material, together with a shell fitted with service equipment and structural equipment, which –

- (a) is capable of being filled and discharged without the removal of the structural equipment;
- (b) has stabilising members external to the shell;
- (c) is capable of being lifted when full;
- (d) is designed primarily to be lifted onto a transport vehicle or ship; and
- (e) is equipped with skids, mountings or accessories to facilitate mechanical handling,

but does not include an intermediate bulk container;

“quality assurance programme” means a systematic programme of controls and inspections applied by any person which is aimed at providing confidence that the safety requirements of these Regulations and RID are complied with;

“quarry” has the meaning assigned to it by Article 2(2) of the Quarries (Northern Ireland) Order 1983(a);

“radioactive contents” means radioactive material together with any contaminated or activated solids, liquids and gases within the packaging;

“radioactive material” means any material containing radionuclides where both the activity concentration and the total activity in the consignment in question exceed the values specified in RID sub-paragraphs 2.2.7.7.2.1 to 2.2.7.7.2.6;

“railway” means a system of transport employing parallel rails which provide support and guidance for vehicles carried on flanged wheels, except any such system which –

- (a) is a tramway, that is to say is a system of transport used wholly or mainly for the carriage of passengers and employing parallel rails and which are laid wholly or mainly along a street or in any place to which the public has access (including a place to which the public has access only on making a payment); or
- (b) is operated wholly within a factory, harbour area, military establishment, mine or quarry;

“railway company” means any persons authorised by a statutory provision to construct, work or carry on a railway;

(a) S.I. 1983/150 (N.I. 4)

“railway facility” means any track, station or light maintenance depot;

“railway infrastructure” means the track and the fixed equipment necessary for the movement of rail traffic and transport safety;

“receptacle” means a containment vessel for receiving and holding substances or articles and includes any closure, but does not include a shell;

“RID” means the Regulations, which came into effect on 1st July 2001, concerning the international carriage of dangerous goods by rail which –

- (a) form Annex I to Appendix B to COTIF; and
- (b) are contained in the Annex to Council Directive 96/49/EC on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail(a);

“road” means any highway and any other road to which the public has access and includes bridges over which a road passes;

“SCO-I” means a surface contaminated object on which –

- (a) the non-fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 4 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 0.4 Bq/cm² for all other alpha emitters;
- (b) the fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 4 × 10⁴ Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 4 × 10³ Bq/cm² for all other alpha emitters; and
- (c) the non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 4 × 10⁴ Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 4 × 10³ Bq/cm² for all other alpha emitters;

“SCO-II” means a surface contaminated object on which either the fixed or non-fixed contamination on the surface exceeds the applicable limits for SCO-I and on which –

- (a) the non-fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 400 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 40 Bq/cm² for all other alpha emitters;
- (b) the fixed contamination on the accessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 8 × 10⁵ Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 8 × 10⁴ Bq/cm² for all other alpha emitters; and
- (c) the non-fixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm² (or the area of the surface if less than 300 cm²) does not exceed 8 × 10⁵ Bq/cm² for beta and gamma emitters and low toxicity alpha emitters, or 8 × 10⁴ Bq/cm² for all other alpha emitters;

“service equipment” means –

- (a) in the case of a tank –
 - (i) safety devices;
 - (ii) devices for filling, emptying, venting, heating and insulating the tank; and
 - (iii) measuring instruments; and
- (b) in the case of an intermediate bulk container –
 - (i) safety devices;

(a) O.J. No. L235, 17.9.96, p. 25. Relevant amending directives are Directive 2000/62/EC of the European Parliament and the Council (O.J. No. L279, 1.11.2000, p. 44) and Commission Directive 2001/6/EC (O.J. No. L30, 1.2.2001, p. 42. A copy of RID, whose ISBN is 0 11 552265 4, may be obtained from The Stationery Office Bookshops, the Stationery Office's Accredited Agents and all good booksellers

- (ii) devices for filling, discharge, pressure relief, venting, heating and insulating;
and
- (iii) measuring instruments;

“shipment” means the specific movement of a consignment from origin to destination where that movement includes carriage in Northern Ireland;

“shaft”, in relation to a mine, means a shaft the top of which is, or is intended to be, at the surface;

“shell” means sheathing containing radioactive material, including the openings and their closures;

“small container” means a container any of whose overall outer dimensions are less than 1.5 metres or whose internal volume is not more than 3m³;

“special form radioactive material” means –

- (a) an indispersible solid radioactive material; or
- (b) a sealed capsule containing radioactive material, so manufactured that it can be opened only by destroying the capsule,

which meets the requirements of RID paragraph 2.2.7.4;

“specific activity”, in relation to a material, means the activity per unit mass or volume of the material in which the radionuclides are essentially uniformly distributed;

“station” means any land or other property which consists of premises used as, or for the purposes of, or otherwise in connection with, a railway passenger station or railway passenger terminal (including any approaches, forecourt, cycle store or car park), whether or not the land or other property is, or the premises are, also used for other purposes;

“structural equipment” means –

- (a) in the case of the tank of a tank wagon or the tank of a tank container, the external or internal reinforcing, fastening, protective or stabilising members of the shell;
- (b) in the case of the tank of a portable tank, the external reinforcing, fastening, protective or stabilising members of the shell;
- (c) in the case of an intermediate bulk container, other than a flexible intermediate bulk container, the reinforcing, fastening, handling, protective or stabilising members of the body;

“surface contaminated object” means a solid object which is not itself radioactive but which has radioactive material distributed on its surface;

“tank” means a shell including its service equipment and its structural equipment;

“tank container” means a container which –

- (a) comprises –
 - (i) a shell; and
 - (ii) items of equipment used for the carriage of a gas, a liquid, a powdery substance or a granular substance; and
- (b) has a capacity of more than 450 litres,

and in this definition, “items of equipment” includes equipment used to facilitate the movement of the container without significant change of attitude;

“tank wagon” means a wagon, including a wagon with a demountable tank, intended for the carriage of liquids, gases, powdery substances or granular substances, comprising –

- (a) a superstructure which consists of one or more shells; and
- (b) an underframe fitted with its own items of equipment,

and in this definition, “items of equipment” means running gear, suspension, buffing, traction, braking gear and inscriptions;

“track” means any land or other property comprising the permanent way of any railway, taken together with the ballast, sleepers and metals laid thereon, whether or not the land or

other property is also used for other purposes; and any reference to track includes a reference to –

- (a) any level crossings, bridges, viaducts, tunnels, culverts, retaining walls, or other structures used or to be used for the support of, or otherwise in connection with, track; and
- (b) any walls, fences or other structures bounding the railway or bounding any adjacent or adjoining property;

“train” means –

- (a) two or more items of rolling stock coupled together, at least one of which is a locomotive; or
- (b) a locomotive not coupled to any other rolling stock;

“train operator” means, in relation to a train, the person who has the management of that train for the time being;

“Type B(M) package” means a package which meets the requirements specified in RID Section 6.4.9;

“Type B(U) package” means a package which meets the requirements specified in RID Section 6.4.8;

“Type C package” means a package which meets the requirements specified in paragraphs 667 to 670 of the Regulations for the Safe Transport of Radioactive Material(a);

“unilateral approval”, in relation to a design, means approval of a design only by the competent authority of the country of origin of the design;

“wagon” means a vehicle which –

- (a) does not have its own means of propulsion;
- (b) runs on its own wheels on railway tracks; and
- (c) is used for the carriage of goods;

“wooden barrel” means a packaging made of natural wood, of round cross section, having convex walls, consisting of staves and heads and fitted with hoops.

(2) For the purposes of these Regulations –

- (a) where a design –
 - (i) is one which requires unilateral approval in accordance with RID; and
 - (ii) originates in a COTIF Member State,
that design shall be granted unilateral approval when it is approved by the competent authority of that COTIF Member State;
- (b) where a design of a package is one which requires unilateral approval in accordance with RID but does not originate in a COTIF Member State, the package may be carried in Northern Ireland without the design of that package having been granted unilateral approval if –
 - (i) a certificate is provided by the country in which the design originated confirming that the design in question satisfies the technical provisions of RID; and
 - (ii) that certificate is countersigned by the Secretary of State or the competent authority of a COTIF Member State;
- (c) where a design of a package is one which requires unilateral approval in accordance with RID and that design –
 - (i) originates in a COTIF Member State and no unilateral approval has been granted in respect of that design; or
 - (ii) originates in a country which is not a COTIF Member State and that country has not provided a certificate confirming that that design satisfies the technical provisions of RID,

(a) 1996 Revised Edition (ISBN 92 0 100500 8) published by the International Atomic Energy Agency, Wagramar Strasse 5, P.O. Box 100, A-1400 Vienna, Austria

the package in question may be carried in Northern Ireland if the design is approved by the Secretary of State or the competent authority of a COTIF Member State.

(3) For the purposes of these Regulations, the members of the crew of a train shall include the driver, conductor and any other person on board the train in question who has responsibilities related to the carriage of radioactive material on that train.

(4) For the purposes of these Regulations, a package shall be deemed to be engaged in the carriage of radioactive material from the applicable time until the time when the package –

- (a) is removed from the railway; or
- (b) has been unloaded and, where necessary, cleaned and decontaminated so that any of the radioactive material which remains in the package is not sufficient to create a risk to the health and safety of any person.

(5) In paragraph (4), “the applicable time” means –

- (a) in the case where the wagon, container, tank container, portable tank or tank wagon in question has been loaded with radioactive material before being brought onto the railway, the time when the wagon, container, tank container, portable tank or tank wagon, as the case may be, is brought onto the railway for the purpose of carrying the radioactive material; or
- (b) in the case where the wagon, container, tank container, portable tank or tank wagon in question has been brought onto the railway for the purpose of carrying radioactive material before the commencement of loading, the time when the loading of the wagon, container, tank container, portable tank or tank wagon, as the case may be, with radioactive material commences.

(6) For the purposes of these Regulations, a multilateral approval may be demonstrated by the validation by a competent authority, other than the competent authority of the State of origin of the design or shipment in question, of the original certificate of approval relating to such design or shipment.

(7) A validation referred to in paragraph (6) may be effected by means of –

- (a) an endorsement on the original certificate of approval; or
- (b) the issue of a separate endorsement, annex or supplement.

(8) A reference in these Regulations to the letters “RID” followed by a numbered Part, Chapter, Section, paragraph or sub-paragraph is a reference to the Part, Chapter, Section, paragraph or sub-paragraph in RID so numbered.

(9) In these Regulations, “facility owner” means any person –

- (a) who has an estate or interest in, or right over, a railway facility; and
- (b) whose permission to use that railway facility is needed by another before that other may use it,

but also includes a person before he becomes a facility owner.

(10) In these Regulations, any reference to a facility owner’s railway facility is a reference to the railway facility by reference to which he is a facility owner.

Meaning of “operator”

3.—(1) For the purposes of these Regulations, the operator of a wagon, a container, a tank container, a portable tank or a tank wagon used for the carriage of radioactive material shall be –

- (a) the person who –
 - (i) has a place of business in Northern Ireland; and
 - (ii) owns the wagon, the container, the tank container, the portable tank or the tank wagon in question; or
- (b) if there is no such person as described in sub-paragraph (a), the person who –
 - (i) has a place of business in Northern Ireland; and
 - (ii) acts as agent for the owner of the wagon, the container, the tank container, the portable tank or the tank wagon in question; or

- (c) if there is no such person as described in either sub-paragraph (a) or sub-paragraph (b), the operator of the train –
 - (i) on which the container, the tank container or the portable tank in question is carried; or
 - (ii) of which the wagon or the tank wagon in question forms part.

(2) Subject to paragraph (3), for the purposes of paragraph (1), a person to whom a wagon, a container, a tank container, a portable tank or a tank wagon is leased or hired shall be deemed to be the owner of that wagon, container, tank container, portable tank or tank wagon, as the case may be.

(3) Paragraph (2) shall not apply where the lessor, or as the case may be, the hirer of the wagon, the container, the tank container, the portable tank or the tank wagon has made a written agreement with the person to whom he has leased or hired the wagon, the container, the tank container, the portable tank or the tank wagon to the effect that the lessor or the hirer shall assume the responsibilities of the owner imposed by or under these Regulations.

Application

4.—(1) Subject to paragraphs (2) to (11), these Regulations apply to, and in relation to, the carriage of radioactive material by rail.

(2) Regulations 6 to 19 shall not apply to, or in relation to, the carriage of radioactive material where –

- (a) the carriage forms part of an international transport operation which is subject to a bilateral or a multilateral special 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 concerned;
- (b) the carriage forms part of an international transport operation within the meaning of COTIF and conforms in every respect with the provisions of RID; or
- (c) the carriage forms part of an international transport operation which is subject to a bilateral or a multilateral special agreement made under the terms of COTIF to which the United Kingdom is a signatory and conforms with any conditions attached to the agreement concerned.

(3) The provisions specified in paragraph (4) shall not apply to, or in relation to, the carriage of radioactive material where the carriage forms part of a transport operation which includes transport by road in Northern Ireland.

(4) The provisions referred to in paragraph (3) are –

- (a) regulations 6 to 9;
- (b) regulations 14 to 18;
- (c) paragraphs (1)(a) and (3) of regulation 19; and
- (d) paragraphs (2) and (4) of regulation 19, so far as those paragraphs apply to a person referred to in regulation 19(1)(a).

(5) These Regulations shall not apply to, or in relation to, the carriage of radioactive material where the radioactive material in question is –

- (a) an integral part of the means of transport;
- (b) incorporated into an individual or a live animal for the purposes of diagnosis or treatment;
- (c) radioactive material in consumer products which have received regulatory approval following their sale to the end user; or
- (d) moved only within an establishment in compliance with such regulations relating to safety as apply to that establishment and where such movement is not on a road or a railway.

(6) These Regulations shall not apply to, or in relation to, the carriage of any natural material or ore which contains a naturally occurring radionuclide where –

- (a) the natural material or ore will not be processed to enable the radionuclide to be used; and

(b) the activity concentration of the naturally occurring radionuclide does not exceed ten times the values specified in RID sub-paragraph 2.2.7.7.2.

(7) These Regulations shall not apply to, or in relation to, the carriage of radioactive material where –

(a) the carriage is by a person whose main activity is not the carriage of dangerous goods; and

(b) the carriage is –

(i) within the maximum total quantity per wagon or large container for Class 7 articles or substances specified in the table in RID paragraph 1.1.3.1; or

(ii) in respect of empty uncleaned packagings which have contained radioactive material except for Class 7 articles or substances classified in transport category O referred to in that table.

(8) These Regulations shall not apply to, or in relation to, the carriage of radioactive material –

(a) by, or under the supervision of the emergency services;

(b) 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 conducted safely.

(9) These Regulations shall not apply to the carriage of radioactive material –

(a) which is, or forms part of, an instrument of war; or

(b) which is required for research into, or the development or production of, any such instrument or part of any such instrument; or

(c) which is produced in the course of, or in connection with, such research, development or production,

when the carriage is undertaken on behalf of a Department of the Government of the United Kingdom or when the carriage is undertaken in connection with the execution of a contract with any such Department.

(10) These Regulations do not apply to, or in relation to –

(a) the carriage of a luminous device intended to be worn by a person;

(b) the carriage in any one railway vehicle of no more than 500 smoke detectors for domestic use with an individual activity not exceeding 40 kBq; or

(c) the carriage in any one railway vehicle of no more than five gaseous tritium light devices with an individual activity not exceeding 10 GBq.

(11) In this regulation –

(a) “ADR” means the European Agreement concerning the International Carriage of Dangerous Goods by Road signed at Geneva on 30th September 1957(a), as revised or re-issued from time to time; and

(b) “railway vehicle” means a conveyance which is used to carry radioactive material on a railway.

Revocations

5. Schedule 2 shall have effect.

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PART II

GENERAL

Determination of radioactive material

6.—(1) Before a consignor of radioactive material consigns the radioactive material for carriage, he shall determine whether the radioactive material is either –

- (a) LSA-I;
- (b) LSA-II;
- (c) LSA-III, applying the test specified in RID paragraph 2.2.7.3;
- (d) special form radioactive material, using the criteria contained in, and applying the tests and assessments specified in, RID paragraph 2.2.7.4;
- (e) SCO-I; or
- (f) SCO-II,

and, if it is, the consignor shall then determine which type of package shall be used in accordance with the provisions of RID Section 2.2.7 for the carriage of that radioactive material.

(2) If a consignor of radioactive material determines that the radioactive material for carriage –

- (a) is neither LSA-I, LSA-II nor LSA-III;
- (b) is not special form radioactive material; and
- (c) is neither SCO-I nor SCO-II,

then he shall ascertain the activity level of the radioactive material in accordance with the table, and other requirements specified, in RID sub-paragraph 2.2.7.7.2 in order to determine which type of package described in RID sub-paragraph 2.2.7.7.1 shall be used for the carriage of that radioactive material.

Determination of the transport index

7.—(1) Before a consignor of radioactive material consigns –

- (a) radioactive material contained in an overpack, a container, a wagon or a tank;
- (b) a package;
- (c) unpackaged LSA-I; or
- (d) unpackaged SCO-I,

he shall determine the transport index for the overpack, the container, the wagon, the tank, the package, the unpackaged LSA-I, the unpackaged SCO-I, as the case may be, in accordance with the procedure contained in RID sub-paragraph 2.2.7.6.1.

(2) In this regulation, “transport index” means a number which is –

- (a) used to provide control over radiation exposure; and
- (b) assigned to a package, an overpack, a wagon, a tank or a container, or unpackaged LSA-I or SCO-I.

Determination of the criticality safety index

8. Before a consignor of radioactive material consigns a consignment containing fissile material, he shall determine the criticality safety index for that consignment in accordance with RID sub-paragraph 2.2.7.6.2.

Duties of a consignor of radioactive material

9.—(1) A consignor shall ensure that the radioactive material is prepared for carriage in accordance with RID.

(2) A consignor shall ensure that the operator of the train which is used for the carriage of the radioactive material and the operator of any wagon, container, tank container, portable tank or tank wagon which is used for such carriage are furnished with –

- (a) information and data; and
- (b) the consignment notes and accompanying documents,

relating to the carriage and consignment in question, taking into account the requirements contained in RID Chapter 5.4 and the tables contained in RID Part 3.

(3) A consignor shall ensure that, in relation to the consignment in question, there are used only packagings –

- (a) the design of which has been approved in accordance with these Regulations and RID; and
- (b) which bear the appropriate markings in accordance with RID.

(4) A consignor shall ensure that, in relation to the consignment in question, the requirements specified in RID concerning –

- (a) the means of despatch; and
- (b) the restrictions on forwarding,

are complied with.

(5) A consignor shall ensure that a tank which is empty and uncleaned –

- (a) shall be closed; and
- (b) shall be as leakproof as it would be if the tank were full.

(6) A consignor shall ensure that –

- (a) no radioactive material is handed over for carriage unless that radioactive material is authorised for such carriage in accordance with the requirements of RID;
- (b) no package, nor empty packaging, which is not leakproof or otherwise damaged is handed over for carriage;
- (c) when the radioactive material is loaded in a wagon or a large container, the requirements of RID relating to loading and handling are complied with;
- (d) when radioactive material contained in a wagon or a large container is handed over for carriage, the requirements of RID relating to –
 - (i) the placarding of; or
 - (ii) the affixing of orange plates to,

that wagon or large container are complied with;

- (e) when packages are loaded, the mixed packing requirements of RID relating to the radioactive material are complied with.

(7) A consignor shall ensure that the requirements specified in RID relating to –

- (a) the packing of the radioactive material; and
- (b) the marking and labelling of the package in question,

are complied with.

(8) A consignor shall ensure that –

- (a) prior to the filling of a tank with radioactive material, that tank and its equipment are in a condition fit for carrying the radioactive material in question;
- (b) the amount of radioactive material which may be carried in the tank in question does not exceed the limits specified in RID;
- (c) once a tank has been filled with the radioactive material, the closing devices on that tank are leakproof;
- (d) no dangerous residues adhere to the outside of a tank after that tank has been filled with the radioactive material.

(9) Prior to handing over a package for carriage, a consignor shall ensure that the requirements specified in RID paragraph 4.1.9.1.2 relating to the permissible levels of non-fixed contamination on the external surfaces of a package are complied with.

(10) Without prejudice to the generality of paragraphs (1) to (8), a consignor shall ensure that the requirements contained in –

- (a) RID Section 1.7.5;
- (b) RID paragraph 2.1.3.5;
- (c) RID paragraphs 2.2.7.7 to 2.2.7.9;
- (d) RID Part 3;
- (e) RID Section 4.1.9; and
- (f) RID Chapters 5.1, 5.2 and 5.4,

so far as they relate to the radioactive material and the consignment in question, are complied with.

(11) In this regulation –

- (a) “consignor” means a consignor of radioactive material; and
- (b) “empty packaging” means a packaging which contained radioactive material but which –
 - (i) is empty; and
 - (ii) has not been cleaned in accordance with the requirements specified in RID since it contained radioactive material.

Duties of a train operator

10.—(1) A train operator shall not carry a consignment until he has ensured that –

- (a) the radioactive material has been accepted for carriage in accordance with RID;
- (b) the documentation prescribed in accordance with RID is attached to the consignment note;
- (c) the containers and wagons which carry the radioactive material have been inspected to ascertain that they have no obvious defects, leakages, cracks, missing equipment or other faults;
- (d) the containers and wagons which carry the radioactive material are not overloaded; and
- (e) the placards and markings prescribed in RID have been affixed to the containers and wagons.

(2) If, during the carriage of radioactive material, a train operator is of the opinion that there has been a breach of any of the provisions of these Regulations or RID such that the safety of the carriage has been, is or could be at risk, the train operator shall stop the carriage as soon as possible, taking account of –

- (a) the requirements of railway safety;
- (b) the safe immobilisation of the consignment; and
- (c) public safety.

(3) Where a train operator has stopped the carriage of radioactive material in accordance with paragraph (2), he may continue the carriage –

- (a) only when he is satisfied that the provisions of RID and these Regulations relating to the consignment have been complied with; or
- (b) where the Secretary of State authorises that the carriage may continue.

(4) A train operator shall ensure that –

- (a) the consignee of radioactive material; and
- (b) the infrastructure controller on whose railway the radioactive material is to be carried,

are furnished prior to the carriage with the information and data and consignment notes and accompanying documents relating to the carriage and consignment in question which are furnished to that train operator by the consignor of radioactive material in accordance with regulation 9(2).

(5) A train operator shall ensure that –

- (a) empty tanks;
- (b) empty wagons; and

(c) empty large and small containers,
which have not been cleaned are marked and placarded in accordance with the requirements specified in RID Chapter 5.3.

(6) Without prejudice to the generality of paragraphs (1) to (4), the operator of a train which carries radioactive material shall ensure that the requirements specified in RID paragraph 2.2.7.9 and RID Chapters 7.5 and 7.6 relating to the carriage in question are complied with.

Duties of a consignee

11.—(1) A consignee of radioactive material shall ensure that –

- (a) subject to paragraph (2), the acceptance of the radioactive material is not refused;
 - (b) the wagons and containers, in which the radioactive material in question was carried, are –
 - (i) cleaned and decontaminated in accordance with the requirements specified in paragraph (5.4) of entry CW33 in RID Section 7.5.11; and
 - (ii) not returned or re-used until such cleaning and decontamination have been carried out;
 - (c) such wagons and containers do not bear orange plates, labels or placards after they have been cleaned and decontaminated.
- (2) A person may refuse to accept a consignment if acceptance –
- (a) would create a danger to the health and safety of any person; or
 - (b) would be likely to harm the environment.

Duties of the operator of a wagon, a container, a tank container, a portable tank and a tank wagon

12.—(1) The operator of a wagon, a container, a tank container, a portable tank or a tank wagon which is used for the carriage of radioactive material shall ensure that –

- (a) the wagon, the container, the tank container, the portable tank or the tank wagon, as the case may be, is maintained so that, under normal operating conditions, it satisfies the requirements of RID; and
- (b) an inspection is carried out on the wagon, the container, the tank container, the portable tank or the tank wagon, as the case may be, if its integrity could have been impaired by reason of a repair, an alteration or an accident.

(2) Without prejudice to the generality of paragraph (1), the operator of a wagon which is used for the carriage of radioactive material shall ensure that the requirements contained in the RID provisions relating to that wagon are complied with.

(3) Without prejudice to the generality of paragraph (1), the operator of a container which is used for the carriage of radioactive material shall ensure that the requirements contained in the RID provisions relating to that container are complied with.

(4) Without prejudice to the generality of paragraph (1), the operator of a tank container which is used for the carriage of radioactive material shall ensure that the requirements contained in the RID provisions relating to that tank container are complied with.

(5) Without prejudice to the generality of paragraph (1), the operator of a portable tank which is used for the carriage of radioactive material shall ensure that the requirements contained in the RID provisions relating to that portable tank are complied with.

(6) Without prejudice to the generality of paragraph (1), the operator of a tank wagon which is used for the carriage of radioactive material shall ensure that the requirements contained in the RID provisions relating to that tank wagon are complied with.

(7) The operator of a wagon, a container, a tank container, a portable tank or a tank wagon shall ensure that orange plates, labels and placards are affixed on the wagon, the container, the tank container, the portable tank or the tank wagon, as the case may be, in accordance with RID Chapter 5.3.

(8) During the carriage of the radioactive material in question, the operator of the wagon, the container, the tank container, the portable tank or the tank wagon, as the case may be, which is used for the carriage of the radioactive material shall ensure that the requirements specified in RID sub-paragraph 4.1.9.1.2 and RID sub-paragraph 4.1.9.1.4 are complied with.

(9) In this regulation, “the RID provisions” means RID Sections 4.2.1, 4.2.4, 4.3.1, 4.3.2, 4.3.4 and 4.3.5 and RID Part 7, except RID Chapter 7.7.

Duties of the designers of packages and manufacturers of packagings

13. The designer of a package and the manufacturer of a packaging to be used in the carriage of radioactive material shall ensure that the requirements contained in RID Sections 6.4.2 to 6.4.21 relating to the design of the package, or, as the case may be, the manufacture of the packaging, are complied with.

PART III

APPROVALS AND NOTIFICATIONS

Approval of package designs

- 14.—**(1) A person shall not cause or permit the carriage of –
- (a) a package designed to contain 0.1 kilogram or more of uranium hexafluoride;
 - (b) a package designed to contain fissile material;
 - (c) a Type B(M) package;
 - (d) a Type B(U) package;
 - (e) a Type C package,

unless the design of the package in question has been approved in accordance with the requirements of RID Section 6.4.22 which relate to that package.

(2) Where an application for the approval of a design of a package referred to in paragraph (1) is made to the Secretary of State, the application shall be in writing and –

- (a) in the case of a package referred to in paragraph (1)(a), shall include the information referred to in RID paragraph 6.4.23.6;
- (b) in the case of a package referred to in paragraph (1)(b), shall include the information referred to in RID paragraph 6.4.23.7;
- (c) in the case of a package referred to in paragraph (1)(c), shall include the information referred to in RID paragraphs 6.4.23.4 and 6.4.23.5; and
- (d) in the case of a package referred to in paragraph (1)(d) or (1)(e), shall include the information referred to in RID paragraph 6.4.23.4.

(3) When granting an approval in respect of an application made pursuant to paragraph (2), the Secretary of State shall –

- (a) assign an identification mark which meets the requirements of RID paragraph 6.4.23.9 and 6.4.23.10; and
- (b) include in the approval the information referred to in RID paragraph 6.4.23.14.

Approval of design for special form radioactive material and for low dispersible radioactive material

15.—(1) A person shall not cause or permit the carriage of special form radioactive material unless the design for that special form radioactive material has been granted unilateral approval.

(2) A person shall not cause or permit the carriage of low dispersible radioactive material unless the design for that low dispersible radioactive material has been granted multilateral approval.

(3) Where an application for the approval of a design for special form radioactive material or for low dispersible radioactive material is made to the Secretary of State, the application –

- (a) shall be in writing; and
- (b) shall include the information referred to in RID paragraph 6.4.23.8.

(4) When granting an approval in respect of an application made pursuant to paragraph (3), the Secretary of State shall –

- (a) assign an identification mark which meets the requirements of RID paragraphs 6.4.23.9 and 6.4.23.10; and
- (b) include in the approval the information referred to in RID paragraph 6.4.23.11.

Shipment approvals other than approvals for shipments under special arrangement

16.—(1) Subject to paragraph (3), a person shall not cause or permit to be made a shipment of any of the packages specified in paragraph (2) without multilateral approval for the shipment.

- (2) The packages referred to in paragraph (1) are –
 - (a) a Type B(M) package which does not conform to the requirements of RID paragraph 6.4.7.5;
 - (b) a Type B(M) package which is designed to allow controlled intermittent venting;
 - (c) a Type B(M) package which contains radioactive material with an activity level greater than either –
 - (i) 3000 A₁ or 3000 A₂, as appropriate; or
 - (ii) 1000 TBq,whichever is the lower;
 - (d) a package containing fissile material if the sum of the criticality safety indices of the package exceeds 50.

(3) Paragraph (1) shall not apply as regards carriage in Northern Ireland where the Secretary of State has authorised in the design approval for the package in question that the package may be carried in Northern Ireland without an approval for its shipment.

(4) Where an application for a shipment approval referred to in paragraph (1) is made to the Secretary of State under this regulation, the application –

- (a) shall be in writing; and
- (b) shall include the information referred to in RID paragraph 6.4.23.2.

(5) When granting an approval in respect of an application made pursuant to paragraph (4), the Secretary of State shall –

- (a) assign an identification mark which meets the requirements of RID paragraphs 6.4.23.9 and 6.4.23.10; and
- (b) include in the approval the information referred to in RID paragraph 6.4.23.13.

(6) An approval granted by the Secretary of State under regulation 14 and this regulation may be combined into a single approval.

Approval of shipments under special arrangement

17.—(1) This regulation shall apply where it is impracticable for a consignment to comply with the requirements of RID and these Regulations which apply to that consignment.

(2) A person shall not cause or permit a shipment in the circumstances referred to in paragraph (1) except under special arrangement with the approval of the Secretary of State.

(3) The Secretary of State shall not approve a shipment under special arrangement unless he is satisfied that –

- (a) it is impracticable for the shipment to comply with the requirements of RID and these Regulations which apply to that shipment; and
- (b) the provisions for the shipment are such that the overall level of safety during the shipment is at least equivalent to that which would have been achieved if all the

requirements of RID and these Regulations which apply to the shipment had been complied with.

(4) An application for the approval by the Secretary of State of a shipment under special arrangement –

- (a) shall be in writing; and
- (b) shall include the information referred to in RID paragraph 6.4.23.3.

(5) When granting an approval in respect of an application made pursuant to paragraph (4), the Secretary of State shall –

- (a) assign an identification mark which meets the requirements of RID paragraphs 6.4.23.9 and 6.4.23.10; and
- (b) include in the approval the information referred to in RID paragraph 6.4.23.12.

Notification and registration of serial numbers

18.—(1) The manufacturer of a packaging manufactured to a design approved by the Secretary of State pursuant to these Regulations shall –

- (a) obtain from the Secretary of State a serial number which the Secretary of State has not previously issued;
- (b) allocate that serial number to that packaging; and
- (c) promptly notify the Secretary of State in writing of the serial number so allocated.

(2) The Secretary of State shall maintain a register of the serial numbers of which he is notified pursuant to paragraph (1).

PART IV

QUALITY ASSURANCE AND TRAINING

Quality assurance

19.—(1) Insofar as they are matters within his control, it shall be the duty of –

- (a) the designer, manufacturer and consignor of a package, packaging or relevant material, as the case may be;
- (b) the operator of a wagon, a container, a tank container, a tank wagon or a portable tank which is used for the carriage of a package, packaging or relevant material;
- (c) a train operator on whose train is carried a package, packaging or relevant material;
- (d) an infrastructure controller on whose railway is carried a package, packaging or relevant material,

to comply with the requirements contained in paragraph (2).

(2) The requirements referred to in paragraph (1) are to establish and maintain an adequate quality assurance programme in order to ensure that the provisions of these Regulations and RID relating to the design, manufacture, testing, documentation, use, maintenance, inspection and carriage of packages, packagings and relevant material are complied with.

(3) Where the Secretary of State is required to approve –

- (a) the design of a package;
- (b) the design for relevant material; or
- (c) a shipment,

under these Regulations, the Secretary of State shall not give his approval unless he is satisfied that the quality assurance programme for the design or the shipment is adequate.

(4) In relation to an approved package, and insofar as they are matters within his control, it shall be the duty of a person referred to in paragraph (1), when so requested to do so by the Secretary of State –

- (a) to provide the Secretary of State with facilities to inspect the packaging during its construction and use;
 - (b) to demonstrate to the Secretary of State that the construction methods and materials used for the construction of the packaging are in accordance with the approved design specifications;
 - (c) to demonstrate to the Secretary of State that all packagings and special form radioactive material built to an approved design are –
 - (i) periodically inspected; and
 - (ii) when necessary, repaired and maintained in good condition, so that they continue to comply with all the requirements of these Regulations and RID, even after repeated use; and
 - (d) where a design specification has been fully implemented, to produce to the Secretary of State a certificate to that effect.
- (5) In this regulation –
- (a) “approved package” means a package the design of which must be approved in accordance with these Regulations and RID; and
 - (b) “relevant material” means special form radioactive material or low dispersible radioactive material.

Training of persons involved in the carriage of radioactive material

20.—(1) A relevant employer shall ensure that each of his employees who has responsibilities relating to the carriage of radioactive material has received the information, instruction and training appropriate to those responsibilities to enable him to understand –

- (a) the nature of the dangers to which radioactive material being carried may give rise;
- (b) the precautions the employee should take to ensure that –
 - (i) his exposure to radiation; and
 - (ii) the exposure to radiation of other people who may be affected by the actions of the employee,are restricted;
- (c) the action the employee should take in an emergency involving radioactive material;
- (d) the requirements of these Regulations and RID relating to the carriage of radioactive material; and
- (e) the duties of the employee under these Regulations and Articles 8 and 9 of the 1978 Order.

(2) A relevant employer and each employee of that employer who has responsibilities relating to the carriage of radioactive material shall keep a record of the training received by that employee pursuant to paragraph (1) whilst in the employment of the relevant employer.

(3) Where a person has been employed by a relevant employer and that person is employed by another relevant employer, that other relevant employer –

- (a) at the commencement of the employment of that person, shall request that person to furnish him with a copy of the record of training maintained by that person in accordance with this regulation; and
- (b) shall verify the contents of that record.

(4) An employee who is requested, pursuant to paragraph (3), to provide a copy of the record of training maintained by him, shall provide such a copy within seven days of the day on which the request was made.

- (5) In this regulation, “relevant employer” means –
- (a) the operator of a train used for the carriage of radioactive material;
 - (b) a facility owner;

- (c) a consignor of radioactive material;
- (d) a consignee of radioactive material;
- (e) the operator of a wagon, a container, a tank container, a portable tank or a tank wagon used in the carriage of radioactive material;
- (f) an infrastructure controller whose railway is used in connection with the carriage of radioactive material;
- (g) any other person who, in the course of trade, business or other undertaking, carries out work relating to the carriage of radioactive material.

PART V

SECURITY MEASURES AND EMERGENCY ARRANGEMENTS

Security

21. Every person engaged in the carriage of radioactive material shall take all reasonable steps to ensure that unauthorised access to the radioactive material is prevented.

Emergencies

22.—(1) Subject to paragraph (2), where there is an immediate risk of injury to an individual arising out of the carriage of radioactive material, it shall be the duty of every person involved in the carriage of that radioactive material –

- (a) immediately to notify the emergency services; and
- (b) to provide the emergency services with such information as the emergency services may require.

(2) A person shall not be under the duty referred to in paragraph (1) where that person knows that the emergency services have been notified of the immediate risk in question.

Emergency plans

23.—(1) Every train operator whose train is used for the carriage of radioactive material shall draw up and, where appropriate, give effect to such safety systems and procedures as will adequately deal with any emergency involving radioactive material carried on that train.

(2) Every facility owner at whose railway facility is present radioactive material shall draw up and, where appropriate, give effect to such safety systems and procedures as will adequately deal with any emergency involving radioactive material present at that railway facility.

(3) Every infrastructure controller on whose railway track is carried radioactive material shall draw up and, where appropriate, give effect to such safety systems and procedures as will adequately deal with any emergency involving radioactive material carried on that railway track.

(4) All persons referred to in paragraphs (1), (2) and (3) shall co-operate with each other in order to ensure effective co-ordination of their respective safety systems and procedures.

Marshalling and formation of trains

24. The operator of a train which is being used for the carriage of radioactive material shall ensure that all necessary precautions are taken during the marshalling or formation of that train to prevent the creation of a significant risk or the significant increase of any existing risk to the health or safety of any person.

Prevention of fire, explosion and leakage

25. A person shall not cause or permit anything to be done which is liable to create a significant risk or significantly increase any existing risk of a fire, an explosion or a leakage whilst radioactive material is being carried by rail.

PART VI MISCELLANEOUS

Keeping of information

26.—(1) For a period of two years from the date of the commencement of the carriage in question, a consignor of radioactive material shall retain any information in his possession derived from measurements of contamination taken to ensure that he complies with the duty imposed on him by virtue of regulation 9(9).

(2) For a period of two years from the date of the commencement of the carriage in question, an operator of a wagon, a container, a tank container, a portable tank or a tank wagon which is used to carry the radioactive material shall retain any information in his possession derived from measurements of contamination taken to ensure that he complies with the duty imposed on him by virtue of regulation 12(8).

(3) For a period of two years from the date of the commencement of the carriage in question –

- (a) a consignor of radioactive material;
- (b) the infrastructure controller on whose railway is carried the radioactive material;
- (c) the operator of the train which carries the radioactive material; and
- (d) the operator of any wagon, container, tank container, portable tank or tank wagon which is used for such carriage,

shall each keep a record of the relevant information relating to the carriage and the consignment.

- (4) The designer, manufacturer and consignor of –
- (a) a packaging;
 - (b) a package; or
 - (c) special form radioactive material,

as the case may be, shall retain all information in their possession relating to the design, manufacture, testing and maintenance of the package, packaging or special form radioactive material in question, including (without prejudice to the generality of the foregoing) specifications, calculations, test results, quality assurance programmes and manufacturing records, for so long as the package, packaging or special form radioactive material in question is in use for the carriage of radioactive material.

- (5) In this regulation, “relevant information” means –
- (a) the information and data; and
 - (b) the consignment notes and accompanying documents,

referred to in regulation 9(2).

Exemption certificates

27.—(1) Subject to paragraph (2) and to any of the provisions imposed by the Community in respect of the free movement of radioactive materials by rail, the Executive may, by a certificate in writing, exempt –

- (a) any person or class of persons;
- (b) any radioactive material; or

- (c) any package, packaging, overpack, wagon, container, tank container, portable tank or tank wagon,

from all or any of the requirements or prohibitions imposed by these Regulations.

(2) The Executive shall not grant an exemption pursuant to paragraph (1) unless, having regard to the circumstances of the case, and in particular to –

- (a) any conditions which it proposes to attach to the exemption; and
- (b) any other requirements imposed by or under any statutory provisions which apply to the case,

it is satisfied that neither the health nor the safety of persons who are likely to be affected by the exemption nor the environment will be prejudiced in consequence of it.

(3) In the interests of national security, the Secretary of State for Defence may, by a certificate in writing, exempt any person from all or any of the requirements or prohibitions imposed by these Regulations.

(4) An exemption granted pursuant to paragraph (1) or paragraph (3) may be granted subject to conditions and to a limit of time.

- (5) An exemption granted pursuant to –
 - (a) paragraph (1) may be revoked by the Executive; and
 - (b) paragraph (3) may be revoked by the Secretary of State for Defence,

at any time by a further certificate in writing.

Defence

28.—(1) In any proceedings for an offence for a contravention of any of the provisions of these Regulations, it shall be a defence, subject to paragraphs (2) and (3), for the person charged to prove –

- (a) that the commission of the offence was due to the act or default of another person not being one of his employees (hereafter in this regulation called “the other person”); and
- (b) that he took all reasonable precautions and exercised all due diligence to avoid the commission of the offence.

(2) The person charged shall not be entitled, without leave of the court, to rely on the defence referred to in paragraph (1) unless, at least seven clear days before the hearing to determine the mode of trial, he has served on the prosecutor a notice in writing giving such information identifying, or assisting in the identification, of the other person as was then in his possession.

(3) Where a contravention of any of the provisions of these Regulations by any person is due to the act or default of the other person, the other person shall be guilty of the offence which would, but for any defence under this regulation available to the first-mentioned person, be constituted by the act or default.

Maritime or air carriage

29.—(1) This regulation applies to the carriage of radioactive material prior to or following maritime carriage or air carriage.

(2) Subject to paragraph (3), where any provision of regulations 6 to 19 applies to a matter to which the ICAO Technical Instructions or, as the case may be, the IMDG Code apply, the provisions of the regulation in question shall be deemed to be sufficiently complied with in relation to that matter, if –

- (a) the provisions of the ICAO Technical Instructions or, as the case may be, of the IMDG Code; and
- (b) such of the conditions specified in paragraph (4) as are relevant to the matter,

are satisfied in relation to that matter.

(3) Paragraph (2) shall not apply where the radioactive material in question is not considered to be dangerous goods in accordance with the provisions of the ICAO Technical Instructions or, as the case may be, the IMDG Code.

(4) The conditions referred to in paragraph (2) are –

- (a) if packages are not marked, placarded and labelled in accordance with RID, then they shall bear markings and danger labels in accordance with the ICAO Technical Instructions or, as the case may be, the IMDG Code;
- (b) the ICAO Technical Instructions or, as the case may be, the IMDG Code shall apply to mixed packing within a package;
- (c) containers, portable tanks, or tank containers and wagons containing a full load of packages shall be marked, placarded and labelled in accordance with Chapter 5.3 of the IMDG Code, unless they are marked, placarded and labelled in accordance with RID Chapter 5.3; and
- (d) portable tanks and tank containers which are empty and uncleaned shall be marked, placarded and labelled in accordance with Chapter 5.3 of the IMDG Code, unless they are marked, placarded and labelled in accordance with RID Chapter 5.3.

(5) In this regulation –

- (a) “the ICAO Technical Instructions” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air, as revised or re-issued from time to time by the International Civil Aviation Organisation^(a); and
- (b) “the IMDG Code” means the International Maritime Dangerous Goods Code for the Carriage of Dangerous Goods, as revised or re-issued from time to time by the International Maritime Organisation^(b).

Amendments to the Transport of Dangerous Goods (Safety Advisers) Regulations (Northern Ireland) 2000

30. For sub-paragraph (a) of paragraph 2 of Schedule 1 to the Transport of Dangerous Goods (Safety Advisers) Regulations (Northern Ireland) 2000^(c), there shall be substituted the following sub-paragraph –

“(a) excepted packages, and in this sub-paragraph –

- (i) “excepted package” means a package which satisfies the provisions of paragraph 2.2.7.9 of RID; and
- (ii) “package” and “RID” have the meanings assigned to them in regulation 2(1) of the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 2003;”.

Amendments to the Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2001

31. The Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2001^(d) shall be amended in accordance with Schedule 3.

Sealed with the Official Seal of the Department of Enterprise, Trade and Investment on 16th December 2003.

(L.S.)

Michael J. Bohill

A senior officer of the Department of Enterprise, Trade and Investment

(a) ICAO Doc 9284-AN/905 ISBN 92-9194-010-0. Copies may be purchased from Westward Documedia, 37 Windsor Street, Cheltenham, Gloucestershire GL52 2DG

(b) Current edition; ISBN 92 801 5090 1; supplement ISBN 92 801 5093 6

(c) S.R. 2000 No. 119

(d) S.R. 2001 No. 436

SCHEDULE 1

Regulation 2(1)

DEFINITIONS OF “MINE” AND “OWNER”

PART I

DEFINITION OF “MINE”

1. In these Regulations, the expression “mine” means an excavation or system of excavations, including all such excavations to which a common system of ventilation is provided, made for the purpose of, or in connection with, the getting, wholly or substantially by means involving the employment of persons below ground, of minerals (whether in their natural state or in solution or suspension) or products of minerals.

2. For the purposes of these Regulations, subject to paragraph 3, there shall be deemed to form part of a mine so much of the surface (including buildings, structures and works thereon) surrounding or adjacent to the shafts or outlets of the mine as is occupied together with the mine for the purpose of, or in connection with, the working of the mine, the treatment, preparation for sale, consumption or use, storage or removal from the mine of the minerals or products thereof gotten from the mine or the removal from the mine of the refuse thereof.

3. For the purposes of these Regulations, there shall not be deemed to form part of a mine premises in which a manufacturing process is carried on otherwise than for the purpose of the working of the mine or the preparation for sale of minerals gotten therefrom.

4. For the purposes of these Regulations, premises for the time being used for depositing refuse from a single mine, being premises exclusively occupied by the owner of that mine, shall be deemed to form part of that mine, and premises for the time being used for depositing refuse from two or more mines, being premises occupied by the owner of one of those mines (either exclusively or jointly with the owner of the other or any of the others) shall be deemed to form part of such one of those mines as the Executive may direct.

5. For the purposes of these Regulations, a railway line serving a single mine (not being a railway line falling within paragraph 2 or a railway line belonging to a railway company) shall be deemed to form part of that mine and a railway line jointly serving two or more mines (not being a railway line falling within paragraph 2 or a railway line belonging to a railway company) shall be deemed to form part of such one of them as the Executive may direct.

6. For the purposes of these Regulations, a conveyor or aerial ropeway provided for the removal from a mine of minerals gotten therefrom or refuse therefrom shall be deemed to form part of a mine.

PART II

MEANING OF “OWNER”

7. Subject to paragraph 8, in these Regulations, the expression “owner” means, in relation to a mine, the person for the time being entitled to work it.

8. Where the business of a person who, by virtue of paragraph 7 is, for the purposes of these Regulations, to be taken to be the owner of a mine is carried on by a liquidator, receiver or manager, or by some other person authorised to carry it on by an order of a court of competent jurisdiction, the liquidator, receiver, manager or other person shall be taken for the purposes of these Regulations to be an additional owner of the mine.

SCHEDULE 2

Regulation 5

REVOCATIONS

<i>Regulations revoked</i>	<i>References</i>	<i>Extent of revocation</i>
Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 1998	S.R. 1998 No. 132	The whole Regulations.
Ionising Radiations Regulations (Northern Ireland) 2000	S.R. 2000 No. 375	Paragraph 7 of Schedule 10.
Carriage of Dangerous Goods (Amendment) Regulations (Northern Ireland) 2002	S.R. 2002 No. 34	Regulation 8 and Schedule 7.

SCHEDULE 3

Regulation 31

AMENDMENTS TO THE RADIATION (EMERGENCY PREPAREDNESS AND PUBLIC INFORMATION) REGULATIONS (NORTHERN IRELAND) 2001

Interpretation

1. In this Schedule, “the principal Regulations” means the Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2001(a).

Amendment of the principal Regulations

2. The principal Regulations shall be amended in accordance with paragraphs 3 to 10 and any reference in those paragraphs to any specified provision shall be taken to be a reference to the provision so specified of the principal Regulations.

3. In regulation 2(1) –

- (a) the definition “the 1998 Regulations” shall be omitted; and
- (b) after the definition of “the 2000 Regulations” there shall be inserted the following definition –
 “ “the 2003 Regulations” means the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 2003;”.

4. In regulation 3 –

- (a) in paragraph (1), for the words “regulation 17” there shall be substituted the words “with the exception of regulation 17”;
- (b) in paragraph (4), except sub-paragraph (d), wherever they appear, for the words “1998 Regulations” there shall be substituted the words “2003 Regulations”;
- (c) for sub-paragraph (d) of paragraph (4) there shall be substituted the following sub-paragraph –
 “(d) any radioactive substance contained in a package which complies in every respect as to its design with the requirements for –
 (i) a Type B(M) package or a Type B(U) package within the meaning of the 2003 Regulations;
 or
 (ii) a Type C package within the meaning of the 2003 Regulations; or
 (iii) a consignment carried under special arrangement for the equivalent of a Type B(M) package, a Type B(U) package or a Type C package within the meaning of the 2003 Regulations,

and which, in each case, has been approved pursuant to those Regulations as complying with them or where the transport forms part of an international transport operation as is referred to in regulation 4(2) of the 2003 Regulations;”.

(a) S.R. 2001 No. 436

5. In regulation 18(3), for the words “to the extent that this regulation” there shall be substituted the words “in relation to Her Majesty’s Forces to the extent that compliance with those requirements”.

6. In regulation 19, for the words “regulations 17 and 21” there shall be substituted the words “regulation 17”.

7. Regulation 22 shall be revoked.

8. In Note 3 to Part I of Schedule 4, for the symbol “O₃” there shall be substituted the symbol “UO₃” and for the symbol “UCL₄” there shall be substituted the symbol “UCl₄”.

EXPLANATORY NOTE

(This note is not part of the Regulations.)

1. These Regulations implement, as respects Northern Ireland, Council Directive 96/49/EC (O.J. No. L235, 17.9.1996, p. 25) on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail (as amended by Directive 2000/62/EC of the European Parliament and the Council (O.J. No. L279, 1.11.2000, p. 44) and by Commission Directive 2001/6/EC (O.J. No. L30, 1.2.2001, p. 42)) insofar as it relates to radioactive material and make provision for the carriage of radioactive material by rail.

2. The terms and expressions used in these Regulations are defined in regulations 2 and 3 and Schedule 1. Provisions relating to the scope of the Regulations are contained in regulation 4. These Regulations revoke the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 1998 (S.R. 1998 No. 132) and other provisions (*regulation 5 and Schedule 2*).

3. Before a consignor consigns radioactive material by rail, he must determine the type of radioactive material to be consigned, the transport index and the criticality safety index by reference to certain of the provisions contained in the Regulations (RID), which came into force on 1st July 2001, concerning the international carriage of dangerous goods by rail, and which are contained in the Annex to Council Directive 96/49, as amended (*regulations 6, 7 and 8*).

4. In connection with the carriage of radioactive material by rail, certain duties are imposed on consignors, train operators, the operators of wagons, containers, tank containers, portable tanks and tank wagons, the designers of packages and the manufacturers of packagings (*regulations 9 to 13*).

5. A person shall not cause or permit the carriage by rail of certain packages containing radioactive material unless the design has been approved in accordance with RID. Application for such approval may be made to the Secretary of State (*regulation 14*).

6. A person shall not cause or permit the carriage by rail of special form radioactive material, unless the design thereof has been granted unilateral approval, or low dispersible radioactive material, unless the design thereof has been granted multilateral approval. Application for such approval may be made to the Secretary of State (*regulation 15*).

7. A person shall not cause or permit the shipment of certain packages without multilateral approval (*regulation 16*).

8. Provision is made for shipment under special arrangements for a consignment of radioactive material where it is impracticable for the consignment to comply with the requirements of RID (*regulation 17*).

9. Manufacturers of packagings are required to obtain from the Secretary of State, and allocate to packagings, serial numbers (*regulation 18*).

10. Consignors of radioactive material, train operators, the operators of wagons, containers, tank containers, portable tanks and tank wagons, the designers of packages and the manufacturers of packagings and infrastructure controllers must each establish and maintain an adequate quality assurance programme. Before the Secretary of State gives his approval for the design of a package, the design of special form radioactive material, the design of low dispersible radioactive material or a shipment, he must be satisfied that the quality assurance programme for the design in question or the shipment, as the case may be, is adequate (*regulation 19*).

11. Provision is made for the training of persons involved in the carriage of radioactive material by rail (*regulation 20*).

12. Every person involved in the carriage of radioactive material by rail is under a duty to notify, and provide information to, the emergency services in the event of an immediate risk of injury to an individual (*regulation 22*).

13. Provision is made regarding security (*regulation 21*), the preparation of safety systems and procedures to deal with any emergency involving the carriage of radioactive material by rail (*regulation 23*), the marshalling and formation of trains (*regulation 24*) and the prevention of fire and other risks (*regulation 25*).

14. Provision is also made for the keeping of certain information (*regulation 26*).

15. The Health and Safety Executive for Northern Ireland and the Secretary of State for Defence may grant exemptions from all or any of the requirements or prohibitions imposed by these Regulations (*regulation 27*).

16. These Regulations provide a defence in certain circumstances in respect of any proceedings for an offence for a contravention of any of the provisions of these Regulations (*regulation 28*).

17. These Regulations permit alternative compliance with specified international provisions (*regulation 29*) and make certain amendments to other Regulations (*regulations 30 and 31 and Schedule 3*).

18. In Great Britain, the corresponding Regulations are the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations 2002 (S.I. 2002/2099). Copies of the Regulatory Impact Assessment relating to those Regulations together with a Northern Ireland Supplement are held at the offices of the Health and Safety Executive for Northern Ireland at 83 Ladas Drive, Belfast BT6 9FR from where copies may be obtained on request.

19. A person who contravenes these Regulations or any requirement or prohibition imposed thereunder, 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 the statutory maximum (currently £5,000) or, on conviction on indictment, to a fine.

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