STATUTORY RULES OF NORTHERN IRELAND

1998 No. 132

HEALTH AND SAFETY

Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 1998

Made - - - -	*31st March 1998*
Coming into operation	*1st June 1998*

The Department of Economic Development, being the Department concerned(**1**), in exercise of the powers conferred on it by Articles 17(1), (2), (4), (5)(*b*) and (6)(*b*), and 55(2) of, and paragraphs 1(1) to (4), 2, 3(1), 4, 7(2) and 11 to 15 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978(**2**) and of every other power enabling it in that behalf, after consultation in accordance with Articles 46(1) and 54(5) of that Order with the Health and Safety Agency for Northern Ireland and such other bodies as appeared to the Department to be appropriate, hereby makes the following Regulations:

Part I

Interpretation and Application

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations (Northern Ireland) 1998 and shall come into operation on 1st June 1998.

(2) In these Regulations—

"A_1" means the maximum activity of special form radioactive material permitted in a Type A package, calculated in accordance with paragraph 15 of the Approved Document;

"A_2" means the maximum activity of radioactive material other than special form radioactive material permitted in a Type A package, calculated in accordance with paragraph 15 of the Approved Document;

"ADR" has the meaning assigned to it in regulation 2(1) of the CDGCPL Regulations;

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

(**2**) S.I. 1978/1039 (N.I. 9); Article 3(1)(*c*) was modified by the Health and Safety at Work Order (Application to Environmentally Hazardous Substances) Regulations (Northern Ireland) 1996 (S.R. 1996 No. 525)

"Approved Document" means the document entitled "Approved Requirements for the Packaging, Labelling and Carriage of Radioactive Material by Rail" published by the Health and Safety Commission and approved by the Department in accordance with regulation 3(1), as revised in accordance with regulation 3(2);

"carriage" means carriage by rail and shall be construed in accordance with paragraph (7);

"Carriage Information" means the information referred to in regulation 35 and described in Schedule 14;

"category" in relation to packages and overpacks means one of the categories referred to in the Tables IX and X of paragraph 19 of the Approved Document and any reference to category I-WHITE, category II-YELLOW or category III-YELLOW shall be construed accordingly;

"the CDGCPL Regulations" means the Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations (Northern Ireland) 1997(**3**);

"competent authority" means the Secretary of State or any national authority of a state other than the United Kingdom or any international authority which is for the time being designated or otherwise recognised as a competent authority for any purpose in connection with the International Safety Regulations as they apply to rail transport;

"competent authority identification mark" means a mark assigned by a competent authority in accordance with Schedule 1;

"computer" means a computer system including its software;

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

"consignor" shall be regarded as—

(a) the person who, having a place of business in Northern Ireland, consigns, whether as principal or agent for another, radioactive material for carriage; or

(b) if no person satisfies the requirements of sub-paragraph (*a*), the consignee of radioactive material insofar as that person has control over the carriage of that material in Northern Ireland;

"consignor's declaration" means the declaration specified in Schedule 14;

"containment system" means the assembly of components of the packaging specified by the designer as intended to retain the radioactive material during carriage;

"contamination" means the contamination of any surface by any radioactive material in quantities in excess of 0·4 Bq/cm^2 for beta and gamma emitters and low toxicity alpha emitters or 0·04 Bq/cm^2 for all other alpha emitters;

"COTIF" means the Convention concerning International Carriage by Rail(**4**) as revised or re-issued from time to time;

"dangerous goods" has the meaning assigned to it in regulation 2(1) of the CDGCPL Regulations;

"danger sign" means the sign for radioactive material ascertained in accordance with Schedule 13;

"the Department" means the Department of Economic Development;

"depleted uranium" means uranium containing a lesser mass percentage of uranium-235 than in natural uranium;

(**3**) S.R. 1997 No. 247 as amended by S.R. 1997 No. 360
(**4**) Cmnd 5897

"design" means, in relation to any package, packaging or special form radioactive material, a description which enables that package, packaging or special form radioactive material to be fully identified and which may include specifications, engineering drawings, reports demonstrating compliance with regulatory requirements, and other relevant documentation;

"excepted package" means a package which meets the requirements of sub-paragraphs 1 to 9 and 12 of paragraph 1 of the Approved Document and—

(a) is a package containing radioactive material of limited activity which meets the requirements of paragraph 2 of the Approved Document;

(b) is a package containing instruments or manufactured articles which meets the requirements of paragraph 3 of the Approved Document; or

(c) is an empty packaging which meets the requirements of paragraph 4 of the Approved Document;

"exclusive use" means the sole use, by a single consignor, of a large freight container or a wagon in respect of which all initial, intermediate, and final loading and unloading is carried out in accordance with the directions of the consignor or consignee;

"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;

and 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;

"factory" has the meaning assigned to it by section 175 of the Factories Act (Northern Ireland) 1965(**5**);

"fissile material" means uranium-233, uranium-235, plutonium-238, plutonium-239, plutonium-241, or any combination thereof, and does not include unirradiated natural uranium, unirradiated depleted uranium, or natural uranium or depleted uranium which has been irradiated in thermal reactors only;

"fissile package" means a package which meets the requirements of paragraph 6 of the Approved Document;

"fixed contamination" means contamination other than non-fixed contamination;

"freight container" means an article of transport equipment designed to facilitate the transport of goods, either packaged or unpackaged, by one or more modes of transport without intermediate reloading, which is of a permanent enclosed character, rigid and strong enough for repeated use, and fitted with devices facilitating its handling, particularly in transfer between conveyances and from one mode of transport to another;

"harbour area" has the meaning assigned to it in regulation 2(1) of the Dangerous Substances in Harbour Areas Regulations (Northern Ireland) 1991(**6**);

"hazardous properties" has the meaning assigned to it in regulation 2(1) of the CDGCPL Regulations;

"the Health and Safety Commission" means the Health and Safety Commission established under section 10 of the Health and Safety at Work etc. Act 1974(**7**);

"IMDG Code" means the International Maritime Dangerous Goods Code, as revised or re-issued from time to time by the International Maritime Organisation(**8**);

(**5**) 1965 c. 20 (N.I.)
(**6**) S.R. 1991 No. 509
(**7**) 1974 c. 37
(**8**) Current edition: Volumes I to IV ISBN 92 801 1314 3; Supplement ISBN 92 801 1316 X

"industrial package" means an industrial package Type 1, an industrial package Type 2 or an industrial package Type 3 ;

"industrial package Type 1" means a package meeting the requirements of sub-paragraph 1 of paragraph 8 of the Approved Document;

"industrial package Type 2" means a package meeting the requirements of sub-paragraph 2 of paragraph 8 of the Approved Document;

"industrial package Type 3" means a package meeting the requirements of sub-paragraph 3 of paragraph 8 of the Approved Document;

"infrastructure controller" means a person who controls railway infrastructure;

"the International Safety Regulations" means the Regulations for the Safe Transport of Radioactive Material(**9**);

"the ISO classification document" means the International Organisation for Standardisation document, "Sealed Radioactive Sources—Classification"(**10**);

"the ISO freight containers document" means the International Organisation for Standardisation document, "Series 1 Freight Containers—Specifications and Testing—Part 1: General Cargo Containers"(**11**);

"the ISO leak test document" means the International Organisation for Standardisation document, "Sealed Radioactive Sources—Leak Test Methods"(**12**);

"large freight container" means a freight container with a minimum length of 6 metres;

"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 locomotives or other rolling stock for service;

"locomotive" means any railway vehicle which has the capacity for self-propulsion (whether or not the power by which it operates is derived from a source external to the vehicle);

"LSA material" means low specific activity material;

"LSA-I" means LSA material comprising—

(a) ores containing naturally occurring radionuclides, such as uranium and thorium, and uranium or thorium concentrates of such ores;

(b) solid unirradiated natural uranium or depleted uranium or natural thorium or their solid compounds or their mixtures; or

(c) radioactive material, other than fissile material, for which the A_2 value is unlimited;

"LSA-II" means LSA material comprising—

(a) water with tritium concentrated up to 0·8 TBq/L; or

(**9**) 1985 Edition (as amended 1990) published by the International Atomic Energy Agency, Vienna 1990, Safety Series No. 6 (ISBN 92 0 123890 8)
(**10**) Reference No. ISO 2919-1980 (E)
(**11**) Reference No. ISO 1496/1-1978
(**12**) Reference No. ISO/TR 4826-1979 (E)

(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 LSA material comprising solids, such as consolidated wastes and activated materials, 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 is intrinsically contained in a relatively insoluble matrix, which is of such a nature that if the entire contents of a package containing the material were subjected to the test specified in sub-paragraph 1 of paragraph 14 of the Approved Document the activity in the water used in the test would not, at the end of the test, exceed 0·1 A_2; and

(c) the estimated average specific activity of the solid, excluding any shielding material, does not exceed 2×10^{-3} A_2/g;

"low specific activity material" means radioactive material which by its nature has a limited specific activity, or for which limits of estimated average specific activity, disregarding external shielding materials surrounding the radioactive material, apply;

"low toxicity alpha emitter" means thorium-228 in ores or physical or chemical concentrates, thorium-230 in ores or physical or chemical concentrates, natural uranium, depleted uranium, natural thorium, uranium-235, uranium-238, thorium-232, or an alpha emitter with a half life of less than 10 days;

"maximum normal operating pressure" means the maximum pressure above atmospheric pressure at mean sea level that would develop in the containment system in a period of one year under the conditions of temperature and solar radiation corresponding to environmental conditions of transport in the absence of venting, external cooling by an ancillary system, or operational controls during carriage;

"military establishment" means an establishment intended for use for naval, military or air force purposes or the purposes of the department of the Secretary of State having responsibility for Defence;

"mine" has the meaning assigned to it by section 156 of the Mines Act (Northern Ireland) 1969(**13**);

"multilateral approval" means approval by the competent authority both of the state of origin of the design or shipment and of each state through or into (but not by air over) which the consignment is to be carried;

"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;

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

"non-fixed contamination" means contamination that can be removed from a surface during normal handling;

"orange-coloured panel" means a non-reflectorised panel having the same colour and luminance properties as those specified in relation to orange-coloured plates in marginal

(**13**) 1969 c. 6 (N.I.)