STATUTORY RULES OF NORTHERN IRELAND

2017 No. 229

HEALTH AND SAFETY

The Ionising Radiations Regulations (Northern Ireland) 2017

Made - - - - 5th December 2017

Coming into operation 1st January 2018

The Department for the Economy [F1], being the Department concerned [F2], makes the following Regulations in exercise of the powers conferred by Articles 2(5), 17(1), (2), (3), (4), (5) and (6), 40(2) and (4), 54(1) and 55(2) of, and paragraphs 1(1) and (2), 2 to 10, 12, 13, 14(1), 15, 19 and 20(a) and (b) of Schedule 3 to the Health and Safety at Work (Northern Ireland) Order 1978 ("the 1978 Order") [F3].

The Regulations give effect without modifications to proposals submitted to the Department by the Health and Safety Executive for Northern Ireland under Article 13(1A) [F4] of the 1978 Order after the Executive had carried out consultations in accordance with Article 46(3) [F5].
It appears to the Department that—

(a) the modifications referred to in paragraphs 1, 2, 7 and 8 of Schedule 9 are expedient as set out in Article 54(1) of the 1978 Order; and

(b) it is not appropriate to consult bodies in respect of such modifications in accordance with Article 54(5) of that Order.

F1 Formerly the Department of Enterprise, Trade and Investment; see 2016 c.5, **section 1(3)**; that Department was formerly the Department of Economic Development; see S.I. 1999/283 (N.I. 1), Article 3(5); that Department was formerly the Department of Manpower Services, see S.I. 1982/846 (N.I. 11), Article 3

F2 See Article 2(2) of S.I. 1978/1039 (N.I. 9)

F3 S.I. 1978/1039 (N.I. 9): the general purposes of Part II referred to in Article 17(1) were extended by S.I. 1992/1728 (N.I. 17), **Articles 3(1)** and 4(1). Article 55(2) was amended by S.I. 1998/2795 (N.I. 18), **Article 6(1)** and Schedule 1, paragraph 19

F4 Article 13(1) was substituted by S.I. 1998/2795 (N.I. 18), **Article 4**

F5 Article 46(3) was amended by S.I. 1998/2795 (N.I. 18), **Article 6(1)** and Schedule 1, paragraphs 8 and 18

PART 1

PRELIMINARY

Citation and commencement

1. These Regulations may be cited as the Ionising Radiations Regulations (Northern Ireland) 2017 and shall come into operation on 1st January 2018.

Interpretation

2.—(1) In these Regulations—

"the 1978 Order" means The Health and Safety at Work (Northern Ireland) Order 1978;

"accelerator" means an apparatus or installation in which particles are accelerated and which emits ionising radiation with an energy higher than 1MeV;

"appointed doctor" means a registered medical practitioner who meets such recognition criteria as may from time to time be specified in writing by the Executive;

"approved" means approved for the time being in writing for the purposes of these Regulations by the Executive and published in such form as the Executive considers appropriate;

"approved dosimetry service" means a dosimetry service approved—

(a) in accordance with regulation 36; or

(b) by the Great Britain Executive under regulation 36 of the Great Britain Regulations;

"calendar year" means a period of 12 months beginning with the 1st January;

[F6"carers and comforters" means means individuals knowingly and willingly incurring an exposure to ionising radiation by helping, other than as part of their occupation, in the support and comfort of individuals undergoing or having undergone a medical exposure (other than as a carer and comforter);**]**

"classified outside worker" means a classified person who carries out services in the controlled area of any employer (other than the controlled area of their own employer);

"classified person" means—

(a) a person designated as such pursuant to regulation 21(1); and

(b) in the case of a classified outside worker employed by an undertaking in Great Britain or in **[**F7a member State**]**, a person who has been designated as a category A exposed worker within the meaning of Article 40 of the Directive;

"contamination" means the unintended or undesirable presence of radioactive substances on surfaces or within solids, liquids or gases or on the human body, and "contaminated" is to be construed accordingly;

"controlled area" means—

(a) in the case of an area situated in Northern Ireland, an area which has been so designated in accordance with regulation 17(1); and

(b) in the case of an area situated in Great Britain or in **[**F7a member State**]**, an area subject to special rules for the purposes of protection against ionising radiation and to which access is controlled as specified in Article 37 of the Directive;

"the Department" means the Department for the Economy;

"the Directive" means Council Directive 2013/59/ Euratom F8 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation,

and repealing Directives 89/618/Euratom [F9], 90/641/Euratom [F10], 96/29/Euratom [F11], 97/43/Euratom [F12] and 2003/122/Euratom [F13];

"dose" means, in relation to ionising radiation, any dose quantity or sum of dose quantities mentioned in Schedule 3;

"dose assessment" means the dose assessment made and recorded by an approved dosimetry service in accordance with regulation 22;

"dose constraint" means a constraint set on the prospective doses of individuals which may result from a given radiation source;

"dose limit" means, in relation to persons of a specified class, the limit on effective dose or equivalent dose specified in Schedule 3 in relation to a person of that class;

"dose rate" means, in relation to a place, the rate at which a person or part of a person would receive a dose of ionising radiation from external radiation if that person were at that place being a dose rate at that place averaged over one minute;

"dose record" means, in relation to a person, the record of the doses received by that person as a result of that person's exposure to ionising radiation, being the record made and maintained on behalf of their employer by the approved dosimetry service in accordance with regulation 22;

"employment medical adviser" means an employment medical adviser appointed under Article 48 of the 1978 Order;

"the Executive" means the Health and Safety Executive for Northern Ireland;

"external radiation" means, in relation to a person, ionising radiation coming from outside the body of that person;

"extremities" means a person's hands, forearms, feet and ankles;

"the Great Britain Executive" means the Health and Safety Executive established under section 10 of the Health and Safety at Work etc. Act 1974 [F14];

"the Great Britain Regulations" means the Ionising Radiations Regulations 2017 [F15];

"health record" means, in relation to an employee, the record of medical surveillance of that employee maintained by the employer in accordance with regulation 25(3);

"high-activity sealed source" means a sealed source for which the quantity of the radionuclide is equal to or exceeds the relevant quantity value set out in Part 4 of Schedule 7;

"industrial irradiation" means the use of ionising radiation to sterilise, process or alter the structure of products or materials;

"industrial radiography" means the use of ionising radiation for non-destructive testing purposes where an image of the item under test is formed (but excluding any such testing which is carried out in a cabinet which a person cannot enter);

"internal radiation" means, in relation to a person, ionising radiation coming from inside the body of that person;

"ionising radiation" means the transfer of energy in the form of particles or electromagnetic waves of a wavelength of 100 nanometres or less or a frequency of 3×10^{15} hertz or more capable of producing ions directly or indirectly;

"local rules" means rules made pursuant to regulation 18(1);

"maintained", where the reference is to maintaining plant, apparatus, equipment or facilities, means maintained in an efficient state, in efficient working order and good repair;

"medical exposure" means the exposure to ionising radiation of—

(a) patients and asymptomatic individuals as part of their own medical diagnosis or treatment;

(b) individuals as part of health screening programmes;

(c) patients or other persons voluntarily participating in medical or biomedical, diagnostic or therapeutic, research programmes;

(d) individuals undergoing non-medical imaging using medical radiological equipment;

(e) **[**[F16]carers and comforters;**]**

"member State" means a member State of the European Union;

"non-classified outside worker" means a person who is not a classified person who carries out services in the supervised or, pursuant to regulation 19(3)(c), controlled area of any employer (other than the supervised or controlled area of their own employer);

"outside worker" means a classified outside worker and a non-classified outside worker;

"overexposure" means any exposure of a person to ionising radiation to the extent that the dose received by that person causes a dose limit relevant to that person to be exceeded or, in relation to regulation 27(2), causes a proportion of a dose limit relevant to any employee to be exceeded;

"practice" means work involving—

(a) the production, processing, handling, disposal, use, storage, holding or transport of radioactive substances; or

(b) the operation of any electrical equipment emitting ionising radiation and containing components operating at a potential difference of more than 5kV,

which can increase the exposure of individuals to ionising radiation;

"radiation accident" means an accident where immediate action would be required to prevent or reduce the exposure to ionising radiation of employees or any other persons;

"radiation generator" means a device capable of generating ionising radiation such as x-rays, neutrons, electrons or other charged particles;

"radiation passbook" means—

(a) in the case of a classified outside worker employed by an employer in Northern Ireland—

(i) a passbook approved by the Executive for the purpose of these Regulations;

(ii) a passbook approved by the Great Britain Executive for the purposes of the Great Britain Regulations; or

(iii) a passbook to which paragraph 8 of Schedule 8 (Transitional Provisions) applies; and

(b) in the case of a classified outside worker employed by an employer in Great Britain or in **[**[F7]a member State**]**, a passbook authorised by the competent authority for Great Britain or that member State, as the case may be;

"radiation protection adviser" means an individual who, or a body which, meets such criteria of competence as may from time to time be specified in writing by—

(a) the Executive; or

(b) the Great Britain Executive;

"radioactive material" means material incorporating radioactive substances;

"radioactive source" means an entity incorporating a radioactive substance (or substances) for the purpose of utilising the radioactivity of that substance (or substances);

"radioactive substance" means any substance which contains one or more radionuclides whose activity cannot be disregarded for the purposes of radiation protection;

"relevant doctor" means an appointed doctor or an employment medical adviser;

"sealed source" means a radioactive source whose structure is such as to prevent, under normal conditions of use, any dispersion of radioactive substances into the environment, but it does not include any radioactive substance inside a nuclear reactor or any nuclear fuel element;

"supervised area" means an area which has been so designated by the employer in accordance with regulation 17(3);

"territorial sea" means the territorial sea of the United Kingdom adjacent to Northern Ireland and "within the territorial sea" includes on, over and under it;

"trainee" means a person aged 16 years or over (including a student) who is undergoing instruction or training which involves operations which would, in the case of an employee, be work with ionising radiation;

"transport" means, in relation to a radioactive substance, carriage of that substance on a road within the meaning of Article 2(2) of the Road Traffic (Northern Ireland) Order 1995 [F17] or through another public place (whether on a conveyance or not), or by rail, inland waterway, sea or air and, in the case of transport on a conveyance, a substance is deemed as being transported from the time that it is loaded onto the conveyance for the purpose of transporting it until it is unloaded from that conveyance, but a substance is not to be considered as being transported if—

(a) it is transported by means of a pipeline or similar means; or

(b) it forms an integral part of a conveyance and is used in connection with the operation of that conveyance;

"work with ionising radiation" means work to which these Regulations apply by virtue of regulation 3(1).

(2) In these Regulations any reference to—

(a) an employer includes a reference to a self-employed person and any duty imposed by these Regulations on an employer in respect of that employer's employee extends to a self-employed person in respect of themselves;

(b) an employee includes a reference to—

(i) a self-employed person, and

(ii) a trainee who but for the operation of this sub-paragraph and paragraph (3) would not be classed as an employee;

(c) exposure to ionising radiation is a reference to exposure to ionising radiation arising from work with ionising radiation;

(d) a person entering, remaining in or working in a controlled or supervised area includes a reference to any part of a person entering, remaining in or working in any such area.

(3) For the purposes of these Regulations and Part II of the 1978 Order—

(a) the word "work" is extended to include any instruction or training which a person undergoes as a trainee and the meaning of "at work" is extended accordingly; and

(b) a trainee, while undergoing instruction or training in respect of work with ionising radiation, is to be treated as the employee of the person whose undertaking (whether for profit or not) is providing that instruction or training and that person is to be treated as the employer of that trainee except that the duties to the trainee imposed upon the person providing instruction or training will only extend to matters under the control of that person.

(4) In these Regulations, where reference is made to a quantity or concentration specified in Schedule 7, that quantity or concentration is to be treated as being exceeded if—

(a) where only one radionuclide is involved—