STATUTORY RULES OF NORTHERN IRELAND

2019 No. 185

HEALTH AND SAFETY

The Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2019

Made - - - -	*26th September 2019*
Coming into operation	*1st November 2019*

The Department for the Economy(**1**), being the Department concerned(**2**), makes these Regulations in exercise of the powers conferred by Articles 17(1) to (5), 20(2), 40(2) and (4), 54(1) and 55(2) of, and paragraphs 12, 14, 15, 17 and 19 of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978 ("the 1978 Order")(**3**).

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)(**4**) of the 1978 Order after the Executive had carried out consultations in accordance with Article 46(3)(**5**).

It appears to the Department that—

a) the modifications referred to in paragraphs 1 to 4 and 6 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.

Citation and commencement

1. These Regulations may be cited as the Radiation (Emergency Preparedness and Public Information) Regulations (Northern Ireland) 2019 and come into operation on 1st November 2019.

Interpretation

2.—(1) In these Regulations, unless the context otherwise requires—

(**1**) 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

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

(**3**) 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

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

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

"the 2017 Regulations" means the Ionising Radiations Regulations (Northern Ireland) 2017(**6**);

"approved dosimetry service" means an approved dosimetry service within the meaning of the 2017 Regulations and which is approved for the purpose of regulation 22 of those Regulations;

"consequences report" has the meaning set out in regulation 7(1);

"detailed emergency planning zone" means a zone determined in accordance with regulation 8 and covered by the Executive's off-site emergency plan;

"dose" means, in relation to ionising radiation, any dose or sum of dose quantities to which an individual is exposed as a result of a radiation emergency;

"dose assessment" means the dose assessment made and recorded by an approved dosimetry service in accordance with regulation 22 of the 2017 Regulations;

"dose record" means the record made and maintained in respect of an employee by the approved dosimetry service in accordance with regulation 22 of the 2017 Regulations;

"emergency exposure" means an exposure of an employee engaged in an activity of or associated with the response to a radiation emergency or potential radiation emergency in order to bring help to endangered persons, prevent exposure of other persons or save a valuable installation or goods, whereby one of the individual dose limits referred to in paragraphs 1 and 2 of Part 1 of Schedule 3 to the 2017 Regulations could be exceeded;

"emergency services" means—

(a) those police, fire and ambulance services who are likely to be required to respond to a radiation emergency which has occurred at the premises of an operator, and

(b) where appropriate, the Maritime and Coastguard Agency;

"emergency worker" means any person who has a defined responding role in an operator's emergency plan or an off-site emergency plan arranged by the Executive and who might be exposed to radiation as a result of a potential or actual radiation emergency;

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

"existing exposure situation" means an exposure situation which does not call or no longer calls for the implementation of any protective action from an emergency plan;

"health authority" means the Regional Health and Social Care Board established under section 7 of the Health and Social Care (Reform) Act (Northern Ireland) 2009(**7**);

"installation" means a unit in which the radioactive substances present are, or are intended to be, produced, used, handled or stored, and it includes—

(a) equipment, structures, pipework, machinery and tools, and

(b) docks, unloading quays, jetties, warehouses or similar structures, whether floating or not;

"ionising radiation" means the energy transferred 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;

"licensed site" means a site in respect of which a nuclear site licence has been granted and is in force;

"medical surveillance" means medical surveillance carried out in accordance with the 2017 Regulations;

"non-dispersible source" means a sealed source or a radioactive substance which, in either case, it is determined that, by virtue of its physical and chemical form, it cannot cause a radiation

(**6**) S.R. 2017 No. 229
(**7**) 2009 c. 1 (N.I.)

emergency but does not include any radioactive substance that is or has been a component of a nuclear reactor;

"nuclear site licence" has the meaning assigned to it by section 1(1) of the Nuclear Installations Act 1965(**8**);

"off-site emergency plan" is to be interpreted in accordance with regulation 11;

"operator" has the meaning set out in paragraph (2);

"operator's emergency plan" is to be interpreted in accordance with regulation 10;

"outline planning zone" means a zone determined in accordance with regulation 9 and covered by the off-site emergency plan arranged by the Executive;

"premises" means—

(a) the whole of an area under the control of an operator where radioactive substances are present in one or more installations, and for this purpose two or more areas under the control of the operator and separated only by a road, railway or inland waterway shall be treated as one whole area, or

(b) where radioactive substances are present on a licensed site, that licensed site, or

(c) where a radioactive substance forms an integral part of a vessel and is used in connection with the operation of that vessel, includes when that vessel is at fixed point moorings or alongside berths, save that such a vessel is to be deemed separate premises only where such moorings or berths do not form part of a licensed site or part of premises under the control of the Secretary of State for Defence;

"protective action" means an action or actions taken in order to prevent or reduce the exposure of emergency workers, members of the public, the environment or the contamination of property from ionising radiation in the event of a radiation emergency, and includes the provision of appropriate information to the public in accordance with regulations 20 and 21;

"radiation emergency" means a non-routine situation or event arising from work with ionising radiation that necessitates prompt action to mitigate the serious consequences—

(a) of a hazard resulting from that situation or event;

(b) of a perceived risk arising from such a hazard; or

(c) to any one or more of—

  (i) human life;

  (ii) health and safety;

  (iii) quality of life;

  (iv) property;

  (v) the environment;

"radiation protection adviser" means a radiation protection adviser within the meaning of the 2017 Regulations and who is recognised as such for the purpose of regulation 14 of those Regulations;

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

"reference level" is to be interpreted in accordance with regulation 19;

"sealed source" means a source containing any radioactive substance whose structure is such as to prevent dispersion of radioactive substances into the environment;

(**8**) 1965 c. 57. Section 1 was substituted by paragraph 17 of Part 2 of Schedule 12 to the Energy Act 2013

"work with ionising radiation" means work involving the production, processing, handling, use, holding, storage or disposal of radioactive substances which can increase the exposure of persons to radiation from an artificial source, or from a radioactive substance containing naturally occurring radionuclides which are processed for their radioactive, fissile or fertile properties.

(2) In these Regulations, any reference to an operator is a reference to—

(a) in relation to any premises other than a licensed site, the person who is, in the course of a trade or business or other undertaking carried on by that person, in control of the operation of premises, and

(b) in relation to a licensed site, a person to whom a nuclear site licence has been granted,

and any duty imposed by these Regulations on the operator extends only in relation to those premises.

(3) In these Regulations—

(a) any reference to an effective dose means the sum of the effective dose to the whole body from external ionising radiation and the committed effective dose from internal ionising radiation; and

(b) any reference to equivalent dose to a human tissue or organ includes the committed equivalent dose to that tissue or organ from internal ionising radiation.

(4) In these Regulations, unless the context otherwise requires, 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 its employee extends to a self-employed person in respect of that self-employed person,

(b) exposure to ionising radiation is a reference to exposure to ionising radiation arising from work with ionising radiation.

Application

3.—(1) Subject to paragraphs (2) and (5) and with the exception of regulation 21, these Regulations apply to any work with ionising radiation which involves having on any premises, or providing for there to be on any premises, a radioactive substance containing more than the quantity specified in relation to that radionuclide in Schedule 1 or, in the case of fissile material, more than the mass of that material specified in Schedule 2.

(2) These Regulations do not apply to work falling within paragraph (1) where the operator can demonstrate that the quantity present on the premises would not allow, in a radiation emergency situation, an annual effective dose to persons off-site of greater than 1 mSv.

(3) Where a radionuclide is not specified in Schedule 1—

(a) an operator shall carry out an assessment to determine whether the quantity present on the premises allows an annual effective dose greater than that specified in paragraph (2); and

(b) if that assessment demonstrates that an annual effective dose greater than that specified in paragraph (2) is allowable, then these Regulations apply.

(4) For the purposes of paragraph (1), a quantity specified in Schedule 1 is to be treated as being exceeded if—

(a) where only one radionuclide is involved, the quantity of that radionuclide exceeds the quantity specified in the appropriate entry in Part 1 of Schedule 1; or

(b) where more than one radionuclide is involved, the quantity ratio calculated in accordance with Part 2 of Schedule 1 exceeds one.

(5) These Regulations do not apply in respect of—

(a) any non-dispersible source;

(b) any radioactive substance which has an activity concentration of not more than $100Bqg^{-1}$;

(c) any radioactive substance conforming to the specifications for special form radioactive material set out in sub-section 2.7.2.3.3. of the UN Model Recommendations on the Transport of Dangerous Goods: Model Regulations ("UN Model Regulations")(**9**), as revised or reissued from time to time;

(d) any radioactive substance which is in a package which complies with the requirements for a Type B(U) package, a Type B(M) package or a Type C package as set out in subsections 6.4.8, 6.4.9 or 6.4.10 of the UN Model Regulations respectively.

Hazard evaluation

4.—(1) The operator of any premises to which these Regulations apply shall make a written evaluation before any work with ionising radiation is carried out for the first time at those premises.

(2) The evaluation required under paragraph (1) shall be sufficient to identify all hazards arising from the work undertaken which have the potential to cause a radiation emergency.

(3) Where the evaluation required under paragraph (1) does not reveal any hazards having the potential to cause a radiation emergency, reasons for such a conclusion should be set out in that evaluation.

(4) Where the evaluation required under paragraph (1) does reveal the potential for a radiation emergency to occur, the operator shall take all reasonably practicable steps to—

(a) prevent the occurrence of a radiation emergency; and

(b) limit the consequences of any such emergency which does occur.

(5) The evaluation required by paragraph (1) also applies to the continuation of any work with ionising radiation carried out by an operator after the coming into operation of these Regulations.

(6) The requirements of this regulation are without prejudice to the requirements of regulation 3 (risk assessment) of the Management of Health and Safety at Work Regulations (Northern Ireland) 2000(**10**) and to regulation 8 of the 2017 Regulations.

(7) The operator shall provide the Executive with details of the evaluation made under paragraph (1) within 28 days of the date on which it is made.

Consequences assessment

5.—(1) Where the evaluation undertaken under regulation 4 reveals the potential for a radiation emergency to occur, the operator shall make an assessment, in accordance with Schedule 3, to consider and evaluate a full range of possible consequences of the identified radiation emergencies, both on the premises and outside the premises, including the geographical extent of those consequences and any variable factors which have the potential to affect the severity of those consequences.

(2) The assessment required by this regulation shall be completed within two months after the day on which the hazard evaluation required by regulation 4 is completed.

Review of hazard evaluation and consequences assessment

6.—(1) Where the operator proposes a material change, or where a material change occurs, in the work with ionising radiation to which an operator was required to make an evaluation pursuant to regulation 4(1), the operator shall make a further assessment to take account of that change.

(**9**) The Model Recommendations can be found at https://www.unece.org/trans/danger/publi/unrec/rev19/19files_e.html or can be inspected at the offices of the Department of Business, Energy and Industrial Strategy at 1 Victoria Street, London, SW1H 0ET.
(**10**) S.R. 2000 No. 388. Regulation 3 was amended by S.R. 2001 No. 348 and S.R. 2015 No. 265