
STATUTORY RULES OF NORTHERN IRELAND

2017 No. 229

The Ionising Radiations Regulations (Northern Ireland) 2017

PART 2

GENERAL PRINCIPLES AND PROCEDURES

Notification of certain work

5.—(1) This regulation applies to work with ionising radiation except—

- (a) work arising from the carrying out of a registrable practice under regulation 6 or a specified practice requiring consent under regulation 7 ;
- (b) work specified in Schedule 1; and
- (c) work carried on at a site licensed under section 1 of the Nuclear Installations Act 1965.

(2) Subject to paragraph 3 of Schedule 8 (which relates to transitional provisions), an employer shall not carry out work with ionising radiation to which this regulation applies unless before the first occasion of commencing such work since the coming into operation of this regulation the employer has notified that work to the Executive in accordance with the notification procedure approved by the Executive from time to time.

(3) Where an employer has notified work in accordance with paragraph (2), the Executive may, by notice in writing require that employer to provide such additional particulars of that work as the Executive may reasonably require in connection with the notification, and in such a case the employer shall provide those particulars by such time as is specified in the notice or by such other time as the Executive may subsequently agree.

(4) A notice under paragraph (3) may require the employer to notify the Executive of any of those additional particulars before each occasion on which the employer commences work with ionising radiation.

(5) Where an employer has notified work in accordance with this regulation and subsequently ceases that work, or makes a material change in the work which would affect the particulars provided to the Executive in connection with the notification, the employer shall immediately notify the Executive of that cessation or material change.

Registration of certain practices

6.—(1) For the purposes of this regulation, all practices are registrable practices except those listed in paragraph (2).

(2) The following practices are not registrable practices—

- (a) a practice solely involving work with ionising radiation to which Schedule 1 applies;
- (b) a specified practice (within the meaning of regulation 7(1));
- (c) the operation or decommissioning of any nuclear installation;

- (d) the operation, decommissioning or closure of any facility for the long term storage or disposal of radioactive waste (including facilities managing radioactive waste for this purpose) where such facility is situated on a site licensed under section 1 of the Nuclear Installations Act 1965;
 - (e) any practice involving radioactive material where the amount of the radioactive material does not exceed 1,000kg and the activity concentration value of the radioactive substance in that material does not exceed the value specified in column 4 of Part 1 of Schedule 7 (for artificial radionuclides and naturally occurring radionuclides which are processed for their radioactive, fissile or fertile properties) or column 4 of Part 2 of Schedule 7 (for naturally occurring radionuclides which are not processed for their radioactive, fissile or fertile properties);
 - (f) any practice involving radioactive material where the amount of the radioactive material exceeds 1,000kg and the activity concentration value of the radioactive substance in that material does not exceed the value in column 2 of Part 1 of Schedule 7 (for artificial radionuclides and naturally occurring radionuclides which are processed for their radioactive, fissile or fertile properties) or column 2 of Part 2 of Schedule 7 (for naturally occurring radionuclides which are not processed for their radioactive, fissile or fertile properties).
- (3) Subject to paragraph 4 of Schedule 8 (which relates to transitional provisions), an employer shall not carry out a registrable practice unless that employer has applied for, and has been issued with, a registration in connection with the practice by the Executive.
- (4) An employer applying for a registration under paragraph (3) must provide—
- (a) such information regarding the practice as is required by the registration procedure approved by the Executive from time to time; and
 - (b) upon notice in writing by the Executive, such other information relating to the practice as the Executive may reasonably require in connection with the registration.
- (5) A registration under paragraph (3) may be issued subject to conditions (which may include a limit of time) and may be revoked in writing at any time.
- (6) Where an employer has registered a practice in accordance with this regulation and subsequently ceases to carry out that practice, or makes a material change to the practice which would affect the particulars provided to the Executive in connection with the registration, the employer shall immediately notify the Executive of that cessation or material change.
- (7) An employer who is aggrieved by—
- (a) a decision of the Executive refusing to issue a registration under paragraph (3) or revoking a registration under paragraph (5); or
 - (b) the terms of any conditions attached to a registration under paragraph (5),
- may appeal to the Department.
- (8) Chapter I of the Schedule to the Deregulation (Model Appeal Provisions) Order (Northern Ireland) 1997⁽¹⁾ shall apply to any appeal made under paragraph (7).
- (9) In this regulation “nuclear installation” has the meaning given by regulation 26(1) of the Nuclear Installations Act 1965.

Consent to carry out specified practices

- 7.—(1) In this regulation a “specified practice” means any of the following practices—

(1) S.R. 1997 No. 269

- (a) the deliberate administration of radioactive substances to persons and, in so far as the radiation protection of persons is concerned, animals for the purpose of medical or veterinary diagnosis, treatment or research;
- (b) the exploitation and closure of uranium mines;
- (c) the deliberate addition of radioactive substances in the production or manufacture of consumer products or other products, including medicinal products;
- (d) the operation of an accelerator (except when operated as part of a practice within subparagraph (e) or (f) below and except an electron microscope);
- (e) industrial radiography;
- (f) industrial irradiation;
- (g) any practice involving a high-activity sealed source (other than one within subparagraph (e) or (f) above);
- (h) the operation, decommissioning or closure of any facility for the long term storage or disposal of radioactive waste (including facilities managing radioactive waste for this purpose) but not any such facility situated on a site licensed under section 1 of the Nuclear Installations Act 1965;
- (i) practices discharging significant amounts of radioactive material with airborne or liquid effluent into the environment.

(2) Subject to paragraph 5 of Schedule 8 (which relates to transitional provisions), an employer shall not carry out a specified practice unless that employer has applied for, and has been granted, a consent to carry out the practice by the Executive.

(3) An employer applying for a consent under paragraph (2) shall provide—

- (a) such of the information set out in Schedule 2 as the Executive may specify from time to time as necessary to determine an application for consent; and
- (b) upon notice in writing by the Executive, such other information relating to the practice as the Executive may reasonably require in connection with the application for consent.

(4) A consent granted under paragraph (2) may be granted subject to conditions (which may include a limit of time) and may be revoked in writing at any time.

(5) Where an employer has been granted consent under this regulation to carry out a practice and subsequently ceases to carry out that practice, or makes a material change to the practice which would affect the particulars provided to the Executive in connection with the application for consent, the employer shall immediately notify the Executive of that cessation or material change.

(6) An employer who is aggrieved by—

- (a) a decision of the Executive refusing to grant a consent under paragraph (2) or revoking a consent under paragraph (4); or
- (b) the terms of any conditions attached to a consent under paragraph (4),

may appeal to the Department.

(7) Chapter I of the Schedule to the Deregulation (Model Appeal Provisions) Order (Northern Ireland) 1997 shall apply to any appeal made under paragraph (6).

Radiation risk assessments

8.—(1) An employer, before commencing a new activity involving work with ionising radiation in respect of which no risk assessment has been made by that employer, shall make a suitable and sufficient assessment of the risk to any employee and other person for the purpose of identifying

the measures the employer needs to take to restrict the exposure of that employee or other person to ionising radiation.

(2) Without prejudice to paragraph (1), an employer shall not carry out work with ionising radiation unless it has made an assessment sufficient to demonstrate that—

- (a) all hazards with the potential to cause a radiation accident have been identified; and
- (b) the nature and magnitude of the risks to employees and other persons arising from those hazards have been evaluated.

(3) Where the assessment made for the purposes of this regulation shows that a radiation risk to employees or other persons exists from an identifiable radiation accident, the employer who is subject to the obligation in paragraph (1) to make the risk assessment shall take all reasonably practicable steps to—

- (a) prevent any such accident;
- (b) limit the consequences of any accident which does occur; and
- (c) provide employees with the information, instruction, training and equipment necessary to restrict their exposure to ionising radiation.

(4) 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(2).

Restriction of exposure

9.—(1) Every employer shall, in relation to any work with ionising radiation that it undertakes, take all necessary steps to restrict so far as is reasonably practicable the extent to which its employees and other persons are exposed to ionising radiation.

(2) Without prejudice to the generality of paragraph (1), an employer in relation to any work with ionising radiation that it undertakes shall—

- (a) so far as is reasonably practicable achieve the restriction of exposure to ionising radiation required under paragraph (1) by means of engineering controls, design features and by the provision and use of safety features and warning devices;
- (b) provide such systems of work as will, so far as is reasonably practicable, restrict the exposure to ionising radiation of employees and other persons; and
- (c) where it is reasonably practicable to further restrict exposure to ionising radiation by means of personal protective equipment, provide employees or other persons with adequate and suitable personal protective equipment (including respiratory protective equipment) unless the use of personal protective equipment of a particular kind is not appropriate having regard to the nature of the work or the circumstances of the particular case.

(3) An employer who provides any system of work or personal protective equipment pursuant to this regulation shall take all reasonable steps to ensure that it is properly used or applied as the case may be.

(4) Where it is appropriate to do so at the planning stage of radiation protection, an employer, in relation to any work with ionising radiation that it undertakes, shall use dose constraints in restricting exposure to ionising radiation pursuant to paragraph (1).

(5) An employer shall establish the dose constraints referred to in paragraph (4) in terms of the effective or equivalent dose received by an individual over an appropriate period of time.

(6) Without prejudice to paragraph (1), an employer who undertakes work with ionising radiation shall ensure that—

(2) [S.R. 2000 No. 388](#); relevant amending rules are [S.R. 2001 No.348](#), [S.R. 2003 No. 454](#) and [S.R. 2015 No. 265](#)

- (a) in relation to an employee who is pregnant, the conditions of exposure are such that, after the employee's employer has been notified of the pregnancy, the equivalent dose to the foetus is as low as is reasonably practicable and is unlikely to exceed 1 mSv during the remainder of the pregnancy; and
- (b) in relation to an employee who is breastfeeding, that employee shall not be engaged in any work involving a significant risk of intake of radionuclides or of bodily contamination.

(7) Nothing in paragraph (6) requires the employer who undertakes work with ionising radiation to take any action in relation to an employee until that employee's employer has been notified in writing by the employee of the pregnancy or that the employee is breastfeeding and the employer who is undertaking the work with ionising radiation has been made aware, or should reasonably have been expected to be aware, of that notification.

(8) Every employer shall, for the purpose of determining whether the requirements of paragraph (1) are being met, ensure that an investigation is carried out without delay when the effective dose of ionising radiation received by any of its employees for the first time in any calendar year exceeds 15 mSv or such other lower effective dose as the employer may specify, which dose shall be specified in writing in local rules made pursuant to regulation 18(1) or, where local rules are not required, by other suitable means.

Personal protective equipment

10.—(1) Any personal protective equipment provided by an employer pursuant to regulation 9 shall be suitable for its purpose and

- (a) comply with any provision of the Personal Protective Equipment Regulations 2002(3) which is applicable to that item of personal protective equipment; or
- (b) in the case of respiratory protective equipment where no provision referred to in subparagraph (a) applies, be of a type approved or conform to a standard approved, in either case, by-
 - (i) the Executive; or
 - (ii) the Great Britain Executive under regulation 10 (1) (b) of the Great Britain Regulations.

(2) Every employer who provides personal protective equipment pursuant to regulation 9 shall ensure that adequate facilities are provided for the storage of that equipment.

Maintenance and examination of engineering controls etc and personal protective equipment

11.—(1) An employer who provides any engineering control, design feature, safety feature or warning device to meet the requirements of regulation 9(2)(a) shall ensure—

- (a) that any such control, feature or device is properly maintained; and
- (b) where appropriate, that thorough examinations and tests of such controls, features or devices are carried out at suitable intervals.

(2) Every employer shall ensure that—

- (a) all personal protective equipment provided pursuant to regulation 9 is, where appropriate, thoroughly examined at suitable intervals and is properly maintained; and
- (b) in the case of respiratory protective equipment, a suitable record of that examination is made and kept for at least 2 years from the date on which the examination was made and that the record includes a statement of the condition of the equipment at the time of the examination.

Dose limitation

12.—(1) Subject to paragraph (2), every employer shall ensure that its employees and other persons within a class specified in Schedule 3 are not exposed to ionising radiation to an extent that any dose limit specified in Part 1 of that Schedule for such class of person is exceeded in any calendar year.

(2) Where an employer is able to demonstrate to the Executive that, in respect of an employee, the dose limit specified in paragraph 1 of Part I of Schedule 3 is impracticable having regard to the nature of the work undertaken by that employee, the Executive may in respect of that employee authorise the employer to apply the dose limits set out in paragraphs 8 or 9 of Schedule 3 and in such case the provisions of Part 2 of that Schedule will have effect.

(3) The steps taken by a relevant employer to comply with paragraph (1) in respect of members of the public shall include an estimation of doses to members of the public from the relevant practice or practices carried out by the relevant employer in accordance with requirements regarding the estimation of doses as approved by the Executive from time to time.

(4) In this regulation—

“relevant employer” means an employer who is carrying out, or who intends to carry out, a relevant practice;

“relevant practice” means a practice to which regulation 6 or 7 applies.

Contingency plans

13.—(1) Where an assessment made in accordance with regulation 8 shows that a radiation accident is reasonably foreseeable (having regard to the steps taken by the employer under paragraph (3) of that regulation), the employer shall prepare a contingency plan designed to secure, so far as is reasonably practicable, the restriction of exposure to ionising radiation and the health and safety of persons who may be affected by such accident.

(2) An employer shall ensure that—

(a) where local rules are required for the purposes of regulation 18, a copy of the contingency plan made in pursuance of paragraph (1) is identified in those rules and incorporated into them by way of summary or reference;

(b) any employee under the employer’s control who may be involved with or affected by arrangements in the plan has been given suitable and sufficient instructions and where appropriate issued with suitable dosimeters or other devices;

(c) where appropriate, rehearsals of the arrangements in the plan are carried out at suitable intervals; and

(d) if circumstances arise where it is necessary for some or all of the arrangements in the plan to be carried out—

(i) the cause of those circumstances is analysed to determine, so far as is reasonably practicable, the measures, if any, required to prevent a recurrence of such circumstances;

(ii) a record of such analysis is made and kept for at least 2 years from the date on which it was made; and

(iii) any exposure which occurs due to the above circumstances is noted on any relevant dose record.