
STATUTORY RULES OF NORTHERN IRELAND

2017 No. 229

The Ionising Radiations Regulations (Northern Ireland) 2017

PART 4

DESIGNATED AREAS

Designation of controlled or supervised areas

17.—(1) Every employer shall designate as a controlled area any area under its control which has been identified by an assessment made by that employer (whether pursuant to regulation 8 or otherwise) as an area in which—

- (a) it is necessary for any person who enters or works in the area to follow special procedures designed to restrict significant exposure to ionising radiation in that area or prevent or limit the probability and magnitude of radiation accidents or their effects; or
- (b) any person working in the area is likely to receive an effective dose greater than 6 mSv a year or an equivalent dose greater than 15 mSv a year for the lens of the eye or greater than 150 mSv a year for the skin or the extremities.

(2) An employer shall not intentionally create in any area conditions which would require that area to be designated as a controlled area unless that area is for the time being under the control of that employer.

(3) An employer shall designate as a supervised area any area under its control, not being an area designated as a controlled area—

- (a) where it is necessary to keep the conditions of the area under review to determine whether the area should be designated as a controlled area; or
- (b) in which any person is likely to receive an effective dose greater than 1 mSv a year or an equivalent dose greater than 5 mSv a year for the lens of the eye or greater than 50 mSv a year for the skin or the extremities.

Local rules and radiation protection supervisors

18.—(1) For the purposes of enabling work with ionising radiation to be carried on in accordance with the requirements of these Regulations, every employer engaged in work with ionising radiation shall, in respect of any controlled area or, where appropriate having regard to the nature of the work carried out there, any supervised area, make and set down in writing such local rules as are appropriate to the radiation risk and the nature of the operations undertaken in that area.

(2) Local rules shall identify the main working instructions intended to restrict any exposure in that controlled or supervised area.

(3) An employer shall take all reasonable steps to ensure that any local rules which are relevant to the work being carried out are observed.

(4) An employer shall ensure that any relevant local rules are brought to the attention of those employees and other persons who may be affected by them.

- (5) An employer shall—
- (a) appoint one or more suitable radiation protection supervisors for the purpose of securing compliance with these Regulations in respect of work carried out in any area made subject to local rules;
 - (b) set down in the local rules the names of such radiation protection supervisors; and
 - (c) provide the means necessary for such radiation protection supervisors to perform their role.

Additional requirements for designated areas

19.—(1) Every employer who designates any area as a controlled or supervised area shall ensure that any such designated area—

- (a) is adequately described in local rules; and
- (b) has suitable and sufficient signs displayed in suitable positions warning that the area has been so designated and indicating the nature of the radiation sources and the risks arising from such sources.

(2) A controlled area shall be physically demarcated or, where this is not reasonably practicable, delineated by some other suitable means.

(3) The employer who has designated an area as a controlled area shall not permit any person to enter or remain in that area unless they—

- (a) are a classified person who is not a classified outside worker;
- (b) are a classified outside worker in respect of whom that employer has taken all reasonable steps to ensure that the person—
 - (i) is subject to individual dose assessment pursuant to regulation 22;
 - (ii) has been provided with and has been trained to use any personal protective equipment that may be necessary pursuant to regulation 9(2)(c);
 - (iii) has received any specific training required pursuant to regulation 15; and
 - (iv) has been certified fit pursuant to regulation 25 for the work with ionising radiation which the person is to carry out; or
- (c) not being a classified person, have entered or remain in the area in accordance with suitable written arrangements.

(4) The written arrangements referred to in paragraph (3)(c) shall ensure that—

- (a) an employee or a non-classified outside worker aged 18 years or over, does not receive in any calendar year a cumulative dose of ionising radiation which would require that person to be designated as a classified person; or
- (b) any other person does not receive in any calendar year a dose of ionising radiation exceeding any relevant dose limit.

(5) A non-classified outside worker is not permitted to enter or remain in a controlled area pursuant to paragraph (3)(c) unless they have been provided with personal protective equipment and training pursuant to paragraph (3)(b)(ii) and (iii).

(6) An employer who has designated an area as a controlled area shall not permit a person to enter or remain in such area in accordance with written arrangements pursuant to paragraph (3)(c) unless the employer can demonstrate, by personal dose monitoring or other suitable measurements, that the doses are restricted in accordance with paragraph (4).

(7) An employer who has designated an area as a controlled area shall, in relation to a classified outside worker, ensure that—

- (a) the classified outside worker is subject to arrangements for estimating the dose of ionising radiation received by that worker whilst in the controlled area;
- (b) as soon as is reasonably practicable after the services carried out by that classified outside worker in that controlled area are completed, an estimate of the dose received by that worker is entered into that worker's radiation passbook; and
- (c) when the radiation passbook of the classified outside worker is in the possession of that employer, the passbook is made available to that worker upon request.

(8) The employer who carries out the monitoring or measurements pursuant to paragraph (6) shall keep the results of the monitoring or measurements referred to in that paragraph for a period of 2 years from the date they were recorded and shall, at the request of the person to whom the monitoring or measurements relate and on reasonable notice being given make the results available to that person.

(9) In any case where there is a significant risk of the spread of radioactive contamination from a controlled area, the employer who has designated that area as a controlled area shall make adequate arrangements to restrict, so far as is reasonably practicable, the spread of such contamination.

(10) Without prejudice to the generality of paragraph (9), the arrangements required by that paragraph shall, where appropriate, include—

- (a) the provision of suitable and sufficient washing and changing facilities for persons who enter or leave any controlled or supervised area;
- (b) the proper maintenance of such washing and changing facilities;
- (c) the prohibition of eating, drinking or smoking or any similar activity to result in the ingestion, inhalation or absorption of a radioactive substance by any employee or outside worker in a controlled area; and
- (d) the means for monitoring contamination—
 - (i) within a controlled area and, where appropriate, in the adjacent area; and
 - (ii) on any person, article or goods leaving a controlled area.

Monitoring of designated areas

20.—(1) Every employer who designates an area as a controlled or supervised area shall take such steps as are necessary (otherwise than by use of assessed doses of individuals), having regard to the nature and extent of the risks resulting from exposure to ionising radiation, to ensure that levels of ionising radiation are adequately monitored for each such area and that working conditions in those areas are kept under review.

(2) Adequate monitoring referred to in paragraph (1) shall include—

- (a) in relation to areas designated on the basis of external radiation, measurement of dose rates (averaged over a suitable period if necessary); and
- (b) in relation to areas designated on the basis of internal radiation, measurements where appropriate of air activity and surface contamination taking into account the physical and chemical states of the radioactive contamination.

(3) The employer upon whom a duty is imposed by paragraph (1) shall provide suitable and sufficient equipment for carrying out the monitoring required by that paragraph, which equipment shall—

- (a) be properly maintained so that it remains fit for the purpose for which it was intended; and
- (b) be adequately tested and examined at appropriate intervals.

(4) Equipment provided pursuant to paragraph (3) shall not be or remain suitable unless—

- (a) the performance of the equipment has been established by adequate tests before it has first been used; and
 - (b) the tests and examinations carried out pursuant to paragraph (3) and sub-paragraph (a) have been carried out by or under the supervision of a suitably qualified person.
- (5) The employer upon whom a duty is imposed by paragraph (1) shall—
- (a) make suitable records of the results of the monitoring carried out in accordance with paragraph (1) and of the tests carried out in accordance with paragraphs (3) and (4);
 - (b) ensure that the records of the tests carried out in accordance with paragraphs (3) and (4) are authorised by a suitably qualified person; and
 - (c) keep the records referred to in sub-paragraph (a), or copies of those records, for at least 2 years from the respective dates on which they were made.
- (6) Suitable records of the results of the monitoring referred to in paragraph 5(a) shall include—
- (a) in relation to areas designated on the basis of external radiation, an indication of the nature and quality of the radiation in question;
 - (b) in relation to areas designated on the basis of internal radiation, an indication, where appropriate, of the nature and physical and chemical states of the radioactive contamination.