Radiation (Emergency Preparedness and Public Information) Regulations 2019/703 reg. 2 Interpretation



View proposed draft amended version

Version 2 of 2

1 July 2022 - Present

Subjects Health and safety at work

2.— Interpretation

(1) In these Regulations, unless the context otherwise requires-

"the 2017 Regulations" means the Ionising Radiations Regulations 2017;

"the Agency" in relation to premises or a plan relating to premises-

- (a) in England, means the Environment Agency,
- (b) in Wales, means Natural Resources Body for Wales, and
- (c) in Scotland, means the Scottish Environment Protection Agency;

"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;

"authorised defence site" has the meaning given by regulation 2(1) of the Health and Safety (Enforcing Authority) Regulations 1998¹;

"Category 1 responder" has the meaning set out in Parts 1, 2 and 2A of Schedule 1 to the Civil Contingencies Act 2004²;

"Category 2 responder" has the meaning set out in Parts 3, 4 and 5 of Schedule 1 to the Civil Contingencies Act 2004³;

"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 local authority'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, Her Majesty's Coastguard;

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

"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-

(a) in relation to England, [an integrated care board]⁴ established under section 14D of the National Health Service Act 2006⁵,

(b) in relation to Wales, means a local health board established under section 11 of the National Health Service (Wales) Act 2006, and

(c) in relation to Scotland, a health board established under section 2 of the National Health Service (Scotland) Act 1978;

"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;

"local authority" means in relation to-

- (a) London, the London Fire Commissioner,
- (b) an area where there is a Metropolitan County Fire and Rescue Authority, that authority,
- (c) the Isles of Scilly, the Council of the Isles of Scilly,

(d) an area in the rest of England, the county council for that area, or, where there is no county council for that area, the district council for that area,

- (e) an area in Scotland, the council for the local government area, and
- (f) an area in Wales, the county council or the county borough council for that area;

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

"new nuclear build site" has the meaning given by regulation 2A of the Health and Safety (Enforcing Authority) Regulations 1998⁶;

"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 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 1965⁷;

"nuclear warship site" has the meaning given by regulation 2B of the Health and Safety (Enforcing Authority) Regulations 1998⁸:

"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" are to be interpreted in accordance with regulation 10;

"outline planning zone" means a zone determined in accordance with regulation 9 and covered by the local authority's offsite emergency plan;

"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 21 and 22;

"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 20;

"regulator" means-

- (a) the Health and Safety Executive; or
- (b) the Office for Nuclear Regulation in the event the premises is-
 - (i) a licensed site;
 - (ii) an authorised defence site;
 - (iii) a new nuclear build site; or
 - (iv) a nuclear warship site;

(c) but in the event that an agreement has been reached between the Health and Safety Executive and the Office for Nuclear Regulation to transfer responsibility in respect of specific premises, the person to whom that responsibility was transferred;

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

"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.

(5) In these Regulations, references to "*local authority*", unless the context otherwise requires, are to the local authority in which the premises are situated, and references to "*lead local authority*", where more than one local authority is involved, are to that local authority.

Notes

- 1 The reference to authorised defence site was introduced by paragraph 72 of Part 3 of Schedule 3 to S.I. 2014/469.
- Paragraph 1A was inserted by article 2 of S.I. 2011/1233. Parts 1 and 2 of Schedule 1 have also been amended by paragraph 27 of Schedule 1 to the National Health Service (Consequential Provisions) Act 2006 (c. 43), section 312 of and Part 8 of Schedule 22 to, the Marine and Coastal Access Act 2009 (c. 23), paragraph 132 of Schedule 5, paragraph 16 of Schedule 7 and paragraph 100 of Part 2 of Schedule 14 to the Health and Social Care Act 2012 (c. 7), article 2 of S.I. 2008/3012, paragraph 429 of Part 1 of Schedule 2 to S.I. 2013/755, and paragraph 1 of Part 1 of Schedule 3 to S.S.I. 2013/119. Part 2A of Schedule 1 was inserted by article 41 of S.I. 2018/644.
- Parts 3 and 4 of Schedule 1 have been amended by paragraph 132 of Schedule 5 to the Health and Social Care Act 2012, paragraph 16 of Schedule 9 to the Civil Aviation Act 2012 (c.19), paragraph 81 of Part 5 of Schedule 12 to the Energy Act 2013, paragraph 152 of Part 2 of Schedule 1 to the Infrastructure Act 2015 (c. 7), article 2 of S.I. 2005/2043, paragraph 4 of Part 1 of Schedule 1 to S.I. 2005/3050, paragraph 6 of Part 1 of Schedule 1 to S.I. 2016/645, and article 41 of S.I. 2018/644. Part 5 of Schedule 1 was inserted by article 41 of S.I. 2018/644.
- 4 Words substituted by Health and Care Act 2022 (Consequential and Related Amendments and Transitional Provisions) Regulations 2022/634 Sch.1 para.1(1) (July 1, 2022)
- 5 Section 14D was inserted by section 25 of the Health and Social Care Act 2012.
- 6 Regulation 2A was inserted by paragraph 73 of Part 3 of Schedule 3 to S.I. 2014/469.
- 7 Section 1 was substituted by paragraph 17 of Part 2 of Schedule 12 to the Energy Act 2013.
- 8 Regulation 2B was inserted by paragraph 73 of Part 3 of Schedule 3 to S.I. 2014/469.

reg. 4 Hazard evaluation



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

4.— Hazard evaluation

(1) The operator of any premises to which these Regulations apply must 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) must 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 must 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 force 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 1999^{1} and to regulation 8 of the 2017 Regulations.

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

Notes

1 Regulation 3 was amended by S.I. 2003/2457, S.I. 2005/1541, S.S.I. 2006/457, S.I. 2015/21 and S.I. 2015/1637.

reg. 5 Consequence assessment



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

5.— Consequence assessment

(1) Where the evaluation undertaken under regulation 4 reveals the potential for a radiation emergency to occur, the operator must 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 must be completed within two months after the day on which the hazard evaluation required by regulation 4 is completed.

reg. 6 Review of hazard evaluation and consequence assessment



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

6.— Review of hazard evaluation and consequence assessment

(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 must make a further assessment to take account of that change.

(2) For such time as the work with ionising radiation in respect of which an evaluation made pursuant to regulation 4(1) continues, the operator must, within 3 years of the date of the completion of the last evaluation (whether made in accordance with regulation 4(1) or this paragraph), or longer, if agreed by the regulator, either—

(a) make a further evaluation; or

(b) if there is no change of circumstances which would affect the last consequences report required by regulation 7, make a declaration to that effect.

(3) Where a declaration is made in accordance with paragraph (2)(b), a copy of that declaration must be provided to the local authority, and to the regulator, within 28 days of the making of the declaration.

(4) The further evaluation required by this regulation must comply with the provisions of regulation 4(2) to (4), and regulation 5, where applicable.

reg. 7 Consequences report



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

7.— Consequences report

(1) Where the operator has made an assessment pursuant to regulation 5(1) or a review in accordance with regulation 6(1) or 6(2), unless regulation 6(2)(b) applies, the operator must prepare a report setting out the consequences identified by that assessment, called a consequences report, as soon as reasonably practicable on completion of the assessment.

(2) The operator must send the consequences report to the local authority—

(a) before the start of any of the work with ionising radiation to which the assessment relates; or

(b) where the report is as the result of a review in accordance with regulation 6, as soon as practicable after completion of the report.

(3) A consequences report must include the particulars set out in Schedule 4.

(4) Following receipt of the consequences report by the local authority, the operator must, within a reasonable period of time, offer a meeting to the local authority to discuss the consequences report.

(5) The operator must comply with any reasonable request for information made by a local authority, following receipt of the consequences report, required by the local authority to enable it to prepare the off-site emergency plan which it is required to prepare under regulation 11, within 28 days of the date on which that information was requested.

(6) The operator must provide the regulator with details of the assessment made under regulation 5 and the consequences report within 28 days of the date on which the consequences report is sent to the local authority.

reg. 8 Detailed emergency planning zone



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

8.— Detailed emergency planning zone

(1) The local authority must determine the detailed emergency planning zone on the basis of the operator's recommendation made under paragraph 2 of Schedule 4 and may extend that area in consideration of—

- (a) local geographic, demographic and practical implementation issues;
- (b) the need to avoid, where practicable, the bisection of local communities; and
- (c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator.

(2) However, the local authority and operator may agree that, in relation to the premises, other arrangements are in place which sufficiently mitigate the consequences of any radiation emergency, and that no detailed emergency planning zone is necessary.

(3) The local authority must inform the operator and the regulator, within two months of having received the consequences report under regulation 7, of the determination made under paragraph (1).

(4) Where the local authority and the operator have agreed that no detailed emergency planning zone is necessary in accordance with paragraph (2), the local authority must inform the regulator as soon as reasonably practicable.

(5) On receipt of the local authority's confirmation of the detailed emergency planning zone, the operator must record the detailed emergency planning zone as finalised.

(6) The local authority may re-determine the detailed emergency planning zone—

(a) if there is a change in the local area which necessitates such a re-determination; or

(b) if the local authority deems it appropriate as a consequence of the operator's consequences report made after an evaluation in accordance with regulation 6(1) or 6(2)(a).

(7) If the local authority re-determines the detailed emergency planning zone in accordance with paragraph (6), it must inform the operator and regulator as soon as reasonably practicable.

reg. 10 Operator's emergency plan



View proposed draft amended version

Version 3 of 3

1 November 2021 - Present

Subjects Health and safety at work

10.— Operator's emergency plan

(1) Where the operator has made an evaluation in accordance with regulation 4(1) which shows that a radiation emergency might arise, the operator must make an adequate emergency 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 radiation emergencies identified by the evaluation.

(2) When preparing an emergency plan, as required by paragraph (1), the operator must take into account—

(a) the steps the operator has taken under regulation 4(4); and

(b) the consequences assessed in accordance with regulation 5, including any variable factors which might affect the severity of the emergency.

(3) The operator's emergency plan must—

- (a) contain the information set out in Part 1 of Schedule 6; and
- (b) be drawn up in accordance with the principles and purposes set out in Schedule 7.

(4) The operator must not require any person to carry out work with ionising radiation, and no person shall carry out such work unless—

(a) the operator has complied with the requirements of paragraph (1); and

(b) the local authority has complied with its duties in connection with the off-site emergency plan as set out in regulation 11, and has confirmed this to the operator in writing.

(5) The operator must, when preparing the emergency plan, or reviewing it under regulation 12(1), consult—

(a) the operator's employees;

(b) any persons carrying out work on behalf of the operator and who the operator considers might be affected by a radiation emergency;

- (c) the lead local authority;
- (d) the health authority in whose area the premises to which the emergency plan relates is situated;
- (e) [the UK Health Security Agency]¹;
- (f) in addition to [the UK Health Security Agency]¹, if the premises to which the emergency plan relates is in—

- (i) Wales, Public Health Wales, and
- (ii) Scotland, [Public Health Scotland]²;
- (g) the Category 1 responders in whose area in which the premises to which the emergency plan relates is situated; and
- (h) such other persons, bodies or authorities as the operator considers appropriate.

(6) The operator must ensure that any employee on site is or has been provided with such suitable and sufficient information, instruction and training as they require in relation to a radiation emergency.

(7) The operator must ensure that any emergency worker who may be involved with or may be affected by arrangements in the operator's emergency plan is or has been provided with—

- (a) suitable and sufficient information, instruction and training;
- (b) any equipment necessary to perform the functions allocated to them by the operator's emergency plan; and

(c) any equipment necessary to restrict their exposure to ionising radiation including, where appropriate, the issue of suitable dosemeters or other devices.

(8) In the case of a person who is not employed by the operator, the information, instruction, training and equipment required by regulation (7) relates only to specialised equipment to be used on the operator's premises in accordance with the operator's emergency plan, and which is information, instruction, training or equipment the operator does not expect the person to have received or have available already.

(9) An operator which has prepared an emergency plan in accordance with this regulation must—

- (a) review that plan as a consequence of any review required by regulation 6; and
- (b) update the plan, if necessary, as a consequence of a review undertaken in accordance with sub-paragraph (a).

(10) The operator must retain the emergency plan on the premises to which it relates, and must provide details of that plan to the local authority and the regulator upon request and within such reasonable time as the local authority or the regulator may request.

Notes

Words substituted by Radiation Emergency and Consultation Regulations 2021/1110 reg.2(2) (November 1, 2021)
Words substituted by Public Health Scotland Order 2019/336 (Scottish SI) Sch.2(2) para.16(2) (April 1, 2020)

Schedule 3 para. 7



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

7.

The assessment must identify any protective action that may need to be taken for the range of potential radiation emergencies.

Schedule 3 > para. 7

Schedule 3 para. 8



View proposed draft amended version

Version 2 of 2

1 November 2021 - Present

Subjects Health and safety at work

8.

The assessment must assess the consequences of suitable and sufficient source terms by distance and by exposure pathway, and the distances to which protective action would be required based on the United Kingdom's Emergency Reference Levels, published by [the UK Health Security Agency]¹.

Notes

1 Words substituted by Radiation Emergency and Consultation Regulations 2021/1110 reg.2(3) (November 1, 2021)

Schedule 3 > para. 8



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

1.

The following factual information must be provided in the operator's consequences report-

(a) the name and address of the operator;

(b) the postal address of the premises where the radioactive substance will be processed, manufactured, used or stored, or where the facilities for processing, manufacture, use or storage exist;

(c) the date on which it is anticipated that the work with ionising radiation will commence or, if it has already commenced, a statement to that effect.

Schedule 4 Particulars to be included in a consequences report > Part 1 Factual Information > para. 1



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

2.

The operator must include the following recommendations in the consequences report-

(a) the proposed minimum geographical extent from the premises to be covered by the local authority's off-site emergency plan; and

(b) the minimum distances to which urgent protective action may need to be taken, marking against each distance the timescale for implementation of the relevant action.

Schedule 4 Particulars to be included in a consequences report > Part 2 Recommendations > para. 2



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

3.

In relation to a minimum geographical extent recommended under paragraph 2, the operator must also include within the consequences report—

(a) the recommended urgent protective actions to be taken within that zone, if any, together with timescales for the implementation of those actions; and

(b) details of the environmental pathways at risk in order to support the determination of food and water restrictions in the event of a radiation emergency.

Schedule 4 Particulars to be included in a consequences report > Part 2 Recommendations > para. 3



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

4.

The operator must set out the rationale supporting each recommendation made in the consequences report.

Schedule 4 Particulars to be included in a consequences report > Part 3 Rationale > para. 4



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

5.

In particular, the operator must set out-

(a) the rationale for its recommendation on the minimum distances for which urgent protective action may need to be taken; and

(b) where the operator and local authority have agreed that no off-site planning is required, and therefore no emergency planning is recommended, the rationale for that agreement.

Schedule 4 Particulars to be included in a consequences report > Part 3 Rationale > para. 5

Schedule 7 Principles and purposes of emergency plans para. 1



View proposed draft amended version

Version 1 of 1

22 May 2019 - Present

Subjects Health and safety at work

1.

Any person with responsibility for preparing an emergency plan under these Regulations must consider the following principles when preparing that plan—

(a) the necessity for the plan to respond to the particular characteristics of a given radiation emergency as those characteristics emerge;

(b) the necessity to optimise protection strategies to ensure that the proposed response, as a whole, is predicted to do more to mitigate the radiation emergency and facilitate transition from that emergency to an existing exposure situation than to increase its duration or consequences, taking into account—

(i) the health risks arising from exposure to ionising radiation as a result of the radiation emergency, in both the long and the short term;

(ii) the economic consequences of the radiation emergency;

(iii) the effects of the disruption, both on the premises and the area immediately surrounding it, and on the public perception of the effects of the radiation emergency;

(c) the necessity of avoiding, so far as possible, the occurrence of serious physical injury to any person; and

(d) the necessity of ensuring that an appropriate balance is struck between the expected harms and benefits of any particular protective action so as to maximise the benefit of that action.

Schedule 7 Principles and purposes of emergency plans > Part 1 Principles to which emergency plans must have regard > para. 1