

## SCHEDULE 8

### RADIOACTIVE SUBSTANCES ACTIVITIES

#### PART 3

##### Duties of SEPA

###### **Optimisation and dose limits**

**26.**—(1) SEPA must exercise its relevant functions in relation to radioactive substances activities to ensure that the radiation protection of individuals subject to public exposures is optimised.

(2) SEPA must exercise its relevant functions in relation to radioactive substances activities to ensure that the sum of doses to an individual does not exceed—

- (a) an effective dose of 1 millisievert in a year;
- (b) an equivalent dose for the lens of the eye of 15 millisieverts in a year;
- (c) an equivalent dose for the skin of 50 millisieverts in a year, averaged over any 1 cm<sup>2</sup> of skin regardless of the area exposed.

(3) In these Regulations, “effective dose” and “equivalent dose” have the same meaning as in the Basic Safety Standards Directive.

(4) In order to estimate effective and equivalent doses, SEPA must use the values and relationships recommended in—

- (a) chapters 4 and 5 of ICRP Publication 116(1) for the estimation of doses from external exposure; and
- (b) chapter 1 of ICRP Publication 119(2) for the estimation of doses from internal exposure.

###### **Dose constraints**

**27.**—(1) In carrying out its relevant functions in relation to radioactive substances activities, SEPA must have regard to the following maximum doses which may result from the planned carrying on of a radioactive substances activity, for use at the planning stage in radiation protection—

- (a) 0.3 millisieverts per year from any source from which radioactive discharges are first made on, or after, 13th May 2000; or
- (b) 0.5 millisieverts per year from the discharges from any single site.

(2) For the purposes of sub-paragraph (1), the maximum doses do not apply to doses which arise from medical exposures.

###### **Estimation of doses to the members of the public**

**28.**—(1) SEPA must make arrangements for the estimation of doses to members of the public from radioactive substances activities.

(2) The arrangements must be proportionate to the risk of exposure to radiation from the activities involved.

**29.** SEPA must—

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- (1) ICRP, 2010. Conversion Coefficients for Radiological Protection Quantities for External Radiation Exposures. ICRP Publication 116, Ann. ICRP 40(2-5).
  - (2) ICRP, 2012. Compendium of Dose Coefficients based on ICRP Publication 60. ICRP Publication 119, Ann. ICRP 41(Suppl.)

- (a) identify radioactive substances activities for which an assessment of doses to members of the public is to be carried out; and
  - (b) specify that an assessment may be carried out either—
    - (i) in a realistic way; or
    - (ii) by screening assessment.
- 30.** Where it has specified that an assessment must be carried out in a realistic way, SEPA must—
- (a) decide on a reasonable extent of surveys to be conducted and information to be taken into account in order to identify the representative person, taking into account the effective pathways for transmission of the radioactive substances;
  - (b) decide on a reasonable frequency of monitoring of the relevant parameters as determined in sub-paragraph (a);
  - (c) ensure that the estimates of doses to the representative person include—
    - (i) assessment of the doses due to external radiation, indicating, where appropriate, the type of the radiation in question;
    - (ii) assessment of the intake of radionuclides, indicating the nature of the radionuclides and, where necessary, their physical and chemical states, and determination of the activity concentrations of these radionuclides in food and drinking water or other relevant environmental media; and
    - (iii) assessment of the doses that the representative person, as identified in sub-paragraph (a), is liable to receive; and
  - (d) keep records relating to—
    - (i) estimates of intakes of radionuclides; and
    - (ii) the results of the assessment of the doses received by the representative person.

### **Inspections**

**31.—(1)** SEPA must establish and maintain a programme of inspections (a “radioactive substances activities programme of inspections”) for each type of radioactive substances activity.

- (2) The programme must take into account—
- (a) the potential magnitude and nature of the hazard associated with each type of radioactive substances activity;
  - (b) a general assessment of radiation protection issues in radioactive substances activities; and
  - (c) the state of compliance with each of—
    - (i) these Regulations;
    - (ii) any authorisation.

(3) SEPA must prepare a report (a “radioactive substances inspection report”) on an inspection describing its findings from the inspection.

(4) SEPA must communicate a radioactive substances inspection report to any authorised person SEPA considers appropriate.

(5) SEPA must compile information (“radioactive substances protection and safety information”) relating to the protection of human health and the environment, and the safety of the public concerning—

- (a) significant lessons learned from inspections;
- (b) significant lessons learned from reported incidents and accidents; and

- (c) related findings.

### **Record keeping**

**32.**—(1) SEPA must keep records of an authorisation granted for an activity involving a high-activity sealed source.

- (2) The records must include details of—
  - (a) the radionuclide in the source;
  - (b) the radionuclide’s activity at the time of manufacture or, if not known, the activity at the time of the first placing on the market or at the time the authorised person acquired the source; and
  - (c) the type of source.
- (3) SEPA must keep the records up to date, including following transfer of a source.

### **Sealed sources**

**33.** SEPA must establish a system to enable an authorised person to inform SEPA of a transfer of a high-activity sealed source.

### **Orphan Sources**

**34.**—(1) SEPA must, for the purpose specified in sub-paragraph (2), promptly provide specialised technical advice and assistance to a person who—

- (a) suspects the presence of an orphan source; and
- (b) does not normally carry on radioactive substances activities.
- (2) The purpose is to ensure—
  - (a) the protection of members of the public from radiation; and
  - (b) the safety of the source.

**35.**—(1) SEPA must have plans, preparations or provisions in place to—

- (a) control and recover any orphan source; and
- (b) deal with an emergency due to an orphan source.

(2) The plans, preparations or provisions required by sub-paragraph (1) include the drawing up of appropriate response plans and measures.

**36.**—(1) Where SEPA is satisfied that radioactive waste ought to be disposed of and it is unlikely that the waste will be disposed of in accordance with an authorisation on the grounds that either—

- (a) the premises where the waste is located are unoccupied;
- (b) the occupier is absent or insolvent;
- (c) the occupier is a member of the public; or
- (d) for any other reason,

SEPA may serve a notice (“a radioactive waste disposal notice”) on a person requiring the person to dispose of the radioactive waste in a specified manner.

(2) The person on whom SEPA may serve a radioactive waste disposal notice includes the occupier of the premises where the radioactive waste is located or, if the premises are unoccupied, the owner of the premises.

- (3) A radioactive waste disposal notice must specify—
  - (a) the radioactive waste to be disposed of;
  - (b) the person who is required to dispose of the radioactive waste;
  - (c) the manner in which the radioactive waste is to be disposed of;
  - (d) the date by which the radioactive waste is to be disposed of; and
  - (e) the reasons why SEPA is satisfied that the radioactive waste is unlikely to be disposed of in accordance with an authorisation (which may include that the radioactive waste is on premises occupied by a member of the public).
- (4) This sub-paragraph applies where SEPA has served a radioactive waste disposal notice and the person on whom it was served has failed to comply with it (in whole or in part).
- (5) Where sub-paragraph (4) applies, SEPA may—
  - (a) dispose of radioactive waste; and
  - (b) recover from the occupier of the premises, or, if the premises are unoccupied, from the owner of the premises, any expenses reasonably incurred from disposing of the waste.