

# Leaflet 15

## Training Requirements and Courses

### CONTENTS

#### Paragraph

- 1 Scope
- 2 Statutory requirements and parallel arrangements
- Duties
  - 3 Commanding Officers/Head of Establishment (CO/HoE)
  - 4 Radiation Safety Officer (RSO)
  - 5 Radiation Protection Supervisor (RPS)
  - 6 Workplace Supervisor (WPS)
  - 7 Line managers
  - 8 Employees
- Training Requirements
  - 9 Radiation Safety Officers (RSOs)
  - 15 Radiation Protection Supervisors (RPSs)
  - 21 Workplace Supervisors (WPSs)
  - 27 Employees working with radiation
  - 28 Others
- 32 Type of Radiation Protection Training
- 35 Records
- 36 Related Leaflets

#### Table

- 1 Related Leaflets

#### Annex

- A Core of Competence for Radiation Safety Training

### Scope

1 This Leaflet covers the training requirements for the statutory and MOD policy radiation safety appointments. Training required under the Ionising Radiations (Medical Exposure) Regulations 2000 is covered in Leaflets 25 and 26.

### Statutory Requirements

2 In addition to the general requirements of the Health and Safety at Work etc Act 1974 and the Management of Health and Safety at Work Regulations 1999, the following specific legislation applies directly or is applied indirectly through parallel arrangements designed to achieve equivalent standards:

- Ionising Radiations Regulations 1999 (IRR99) (apply directly).
- The Environmental Permitting (England & Wales) Regulations 2010 (EPR10) (as amended) & associated Exemption Order (parallel arrangements);
- Radioactive Substances Act (Scotland & Northern Ireland) 1993 (RSA93) (as amended) & associated Exemption Order (parallel arrangements).

## Duties

### Commanding Officer (CO) or Head of Establishment (HoE)

3 The Commanding Officer or Head of Establishment (CO/HoE) has a duty to the Secretary of State, and a personal responsibility, to protect the environment and secure the health, safety and welfare of their staff at work. The CO/HoE is also required to protect persons not in MOD employment (e.g. members of the public) against risks to their health and safety arising from the MOD work activities. This includes radiation safety. The CO/HoE's authority (but not responsibility) for radiation safety management arrangements may be delegated to appropriate personnel, such as a Radiation Safety Officer (RSO).

### Radiation Safety Officer (RSO)

4 The Radiation Safety Officer (RSO) is to co-ordinate the radiation safety training (including basic, on the job and continuation training) for personnel at the unit or establishment.

### Radiation Protection Supervisor (RPS)

5 An RPS must be appointed where it is necessary to designate a controlled or supervised area. Where an RPS is appointed, their duties are to include ensuring that all workers under their control have been suitably instructed in the hazards and radiation protection procedures and are aware of the relevant safety orders and instructions.

### Workplace Supervisor (WPS)

6 In units where it is unnecessary to appoint an RPS, a WPS may need to be appointed with duties to ensure that work is carried out in accordance with local orders for radiation safety (see Leaflet 16). In addition, the WPS is to ensure that all persons carrying out work with the radiation in their area have been suitably instructed in the hazards and radiation protection procedures and are aware of the relevant safety orders and instructions.

### Line managers

7 Line managers have a duty to follow the management arrangements that the CO/HoE has put in place to ensure that when an individual takes over RSO/RPS/WPS duties from another individual then they are to receive appropriate training or information to ensure that they can carry out their new role.

### Employees

8 It is the responsibility of employees to ensure that they understand the radiation hazards and are aware of the relevant safety orders and instructions in their working area.

## Training Requirements

### Radiation Safety Officers (RSOs)

9 The Radiation Safety Officer is appointed by the CO/HoE as part of the local safety organisation and will normally discharge the radiation protection duties of the CO/HoE detailed in Leaflet 39 Annex A

10 Radiation Safety Officers are to ensure that they are familiar with the specific radiation hazards of their unit or establishment to carry out the RSO duties detailed in Leaflet 39, Annex B.

11 Training for the RSO is to be comprised of a combination of a short generic training package and local specific training. Advice on both the generic package and local component of training necessary is to be sought from the RPA.

12 The modules detailed in Annex A are for a basic level of knowledge for radiation safety training. The degree of detail that each module is to provide will depend on the range of tasks to be supervised and the individual's previous level of relevant knowledge.

13 Where an RSO appointment has been terminated, a previously trained and appointed RSO may be reinstated without further training provided that:

13.1 The process over which supervision is exercised is unchanged since the last appointment.

13.2 A period of no greater than 2 years has elapsed since termination of the appointment.

14 RSOs are also to receive refresher training at intervals not exceeding 5 years after the completion of an RSO course.

### **Radiation Protection Supervisors (RPSs)**

15 Radiation Protection Supervisors (RPSs) are appointed to carry out the duties as detailed in Leaflet 39, Annex B in respect of controlled or supervised areas.

16 Training for the RPS is to be comprised of a combination of a short generic training package and local specific training. Advice on both the generic package and local component of training necessary is to be sought from the RPA.

17 The modules detailed in Annex A are for a basic level of knowledge for radiation safety training. The degree of detail that each module is to provide will depend on the range of tasks to be supervised and the individual's previous level of relevant knowledge.

18 Completion of an RPS training course does not automatically qualify an individual to be appointed as an RPS. The CO/HoE or appointed RSO is to satisfy themselves that the people they appoint to act as RPSs:

18.1 Have received appropriate information and instruction;

18.2 Know and understand the local orders and contingency plans relevant to the work with ionising radiation;

18.3 Possess sufficient authority to allow them to supervise all the radiation protection aspects of the work in areas subject to local orders;

18.4 Know what to do in an emergency;

18.5 Know where to seek more information or advice.

19 Where a RPS appointment has been terminated, a previously trained and appointed RPS may be reinstated without further training provided that:

19.1 The process over which supervision is exercised is unchanged since the last appointment.

19.2 A period of not greater than 2 years has elapsed since termination of the appointment.

20 RPSs are also to receive refresher training at intervals not exceeding 5 years after the completion of an RPS course.

**Workplace Supervisors (WPSs)**

21 For certain types of work involving minor quantities of radioactive material, the generation of X-rays or work in radon affected areas, it is unnecessary to designate a controlled or supervised area and therefore no requirement for the appointment of an RPS. However, it is still necessary to have workplace supervision to ensure that work is carried out in accordance with local orders for radiation safety. Under these circumstances, it is MOD policy that an individual is trained and appointed as a Workplace Supervisor (WPS) to carry out the duties as detailed in Leaflet 39, Annex D.

22 Training for the WPS is less onerous than that for an RPS and is to be conducted by attendance on a short generic training package or local specific training. Advice on components of local training is to be sought from the RPA.

23 The training requirement for each WPS is to be specified in local orders.

24 The modules detailed in Annex A are for a basic level of knowledge for radiation safety training. The degree of detail that each module is to provide will depend on the range of tasks to be supervised and the individual's previous level of relevant knowledge.

25 Where a WPS appointment has been terminated, a previously trained and appointed WPS may be reinstated without further training provided that:

25.1 The process over which supervision is exercised is unchanged since the last appointment.

25.2 A period of not greater than 2 years has elapsed since termination of the appointment.

26 WPSs are also to receive refresher training every 5 years after the completion of a WPS course.

**Employees working with radiation**

27 All employees on a site where controlled or supervised areas are designated are to be given information or instruction to avoid being unnecessarily exposed i.e. recognition and understanding of warning signs.

**Others**

28 There are specific training requirements for duty holders under the Ionising Radiation (Medical Exposure) Regulations 2000 (see Leaflet 25 and Leaflet 26)

29 Some managers on a site where work with ionising radiation is carried out may not be directly involved in the work. However, they are to receive training to help them develop and sustain a commitment to restricting radiation exposure.

30 Female employees are to be informed of the possible risk from exposure to ionising radiation to the foetus and to a nursing infant and of the importance of informing the CO in writing as soon as possible after becoming aware of their pregnancy or if they are breast feeding.

31 Visitors (those not involved with work in the area) who are to enter designated areas are to be briefed on radiation protection requirements before entry to those areas (see Leaflet 5).

**Types of Radiation Protection Training**

32 Radiation Protection training is available as follows:

- Courses held at HMS Sultan and detailed in the appropriate DIN GEN;
- WPS (Foundation) on-line course;

- WPS (Advanced workshop) course;
- Other radiation protection courses delivered at units/establishments;
- Equipment specific courses.

33 The unit or establishment is to be consulted in advance in order to ascertain the most suitable radiation protection training package.

## Records

Records of appointments and attendance at radiation protection training courses and/or local radiation protection training are to be recorded on personnel files and the records retained in accordance with JSP392 Volume 1 Chapter 3 and JSP441 Defence Records Management Policy and Procedures.

## Related Leaflets

34 Leaflets referred to within this Leaflet are shown in Table 1.

Table 1 Related Leaflets

Leaflet Number	Leaflet Title
3	Introduction and use of radioactive substances and radiation generators
5	Written arrangements for unclassified persons entering controlled areas
16	Local Orders
25	Dental X-ray machines
26	Medical diagnostic X-ray machines
39	Radiation safety duties of MOD employees

**This page is intentionally blank**

## Leaflet 15 Annex A

### Core Competencies for Radiation Safety Training

- 1 The nature of ionising radiation and its interaction with tissue confined to those types of ionising radiation which may be encountered, but also including:
    - 1.1 The nature of any harmful effects;
    - 1.2 The principle of restricting exposure to ionising radiation so far as reasonably practicable;
    - 1.3 The concepts of internal and external radiation exposure.
  - 2 The quantities used for (as appropriate to the circumstances):
    - 2.1 Measuring ionising radiation, including the units of measurement;
    - 2.2 Activity of radioactive substances;
    - 2.3 Contamination.
- NOTE
- A detailed understanding of all dose quantities may not be needed, provided there is an understanding of what is meant by the general term 'dose of ionising radiation'.
- 3 Relevant measurement techniques (i.e. those that will be met in the course of normal work), for example:
    - 3.1 Thermo-luminescent dosimeter (TLD);
    - 3.2 Electronic dosimeter;
    - 3.3 Other personal dosimeter;
    - 3.4 Bioassay;
    - 3.5 Air sampling;
    - 3.6 Workplace portable monitors for radiation and contamination.
  - 4 Basic legal requirements:
    - 4.1 The Ionising Radiations Regulations 1999 (IRR99) and Approved Code of Practice (L121);
    - 4.2 Local orders, their purpose and how to use them to secure compliance with IRR99;
    - 4.3 Risk assessments;
    - 4.4 Provisions specific to women and young people;
    - 4.5 Designation of people and areas;
    - 4.6 Appreciation of relevant general health and safety legislation, such as the Management of Health and Safety at Work Regulations 1999.
  - 5 The basic principles of practical radiation protection:
    - 5.1 Time;
    - 5.2 Distance;
    - 5.3 Shielding;
    - 5.4 Containment;

- 5.5 Good housekeeping;
- 5.6 How those principles are carried through in the particular work situation.
- 6 In-house knowledge, as appropriate:
  - 6.1 The CO/HoE's safety policy and organisation;
  - 6.2 The specific functions the RPS would be expected to undertake;
  - 6.3 Relevant dose limits;
  - 6.4 Operational levels set by the CO/HoE for the particular workplace;
  - 6.5 Content of the local orders established by the CO/HoE;
  - 6.6 Contingency plans;
  - 6.7 Where help and advice can be obtained.
- 7 Practical procedures and reporting of an accident, incident or near miss.