

INFORMATION SHEET 12

Radiation Protection Supervisor Training



The Ionising Radiations Regulations 1999 require that radiation employers must ensure that:

- Employees *working with radiation* receive sufficient information, instruction and training to enable them to work safely;
- All appointed Radiation Protection Supervisors (RPSs) receive training necessary for the fulfilment of the requirements of the role (normally by attending a formal training course);
- All classified persons receive appropriate training, so that they understand the hazards associated with their work and the precautions require;
- Where appropriate, women are informed of the possible hazards to the foetus;
- The employers must also provide employees with suitable and complete instruction regarding the operation of contingency plans (those involved or affected by the arrangements).

Examples of working with radiation

In general, all common applications of ionising radiation in the workplace can be considered to be "working with radiation" and the decision as to whether or not a particular form of work is subject to the requirements of the Ionising Radiation Regulations 1999 (IRR99) is reasonably straightforward. However, the IRR99 defines the types of work to which the regulations apply. These fall into the following categories:

Any Practice

A "Practice" means work involving production, processing, handling, use, holding, storage, transport or disposal of radioactive substances, or work involving the use of any electrical equipment, emitting ionising radiation and operating at more than 5 kV".

IRR99 defines a "radioactive substance" as any substance which cannot be disregarded for the purposes of radiation protection. Values of activity and activity concentrations above which the substance must be considered as radioactive are quoted in schedule 8 to the regulations.

Any work undertaken in a radon atmosphere

Where employees are working in an area where the concentration of radon gas in air exceeds 400 Bq/m³ (averaged over any 24 hour period), then they are considered to be working with radiation. Such a situation could arise, for example, with respect to work in underground mines.

Work with Naturally Occurring Radioactive Materials (other than a practice)

In some situations substances containing naturally occurring radioactive materials are used in work which would not be defined as a practice, for example, the processing of natural ores. It is considered that where such work could lead to individuals incurring doses of greater than 1mSv in a year, then this cannot be disregarded for the purposes of radiation protection, and is therefore subject to the requirements of IRR99.

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Health and Safety Regulations

The Ionising Radiations Regulations 1999 are enforced by the Health and Safety Executive and are concerned with the safety of individuals who may be exposed to radiation at work. The employer must ensure that radiation exposure is restricted so far as is reasonably practicable. Regulation 14(a) states:

"Every employer shall ensure that those of his employees who are engaged in work with ionising radiation are given appropriate training in the field of radiation protection and receive such information instruction and training for them to know:

- the risks to health created by exposure to ionising radiation;
- the precautions which should be taken;
- the importance of complying with the medical, technical and administrative requirements of the Regulations.

Under these regulations a Radiation Protection Supervisor (RPS) is appointed by the radiation employer, and the RPS must be trained. The RPS should normally be in a line management position but routinely involved in the work. See Work with Ionising Radiation Guidance to the Ionising Radiations Regulations 1999, paragraph 234 which states:

"Training will also be needed where the employer arranges for employees to perform particular functions required by these regulations, for example to act as a radiation protection supervisor".

The training must also be relevant to the work being supervised. See Work with Ionising Radiation Guidance to the Ionising Radiations Regulations 1999, paragraph 291 which states:

"The training received will need to reflect the complexity of the work undertaken".

The Radiation Protection Supervisor

The RPS is appointed to oversee the work and ensure that the local rules are followed. The RPS also plays a role in meeting the conditions imposed by the relevant enforcement agencies via environmental permits and certificates of registration or authorisation.

Radioactive Substances Regulations

There are different requirements depending on whether the operator is in England, Scotland, Wales or Northern Ireland. An employer who is authorised by the environment agency (EA in England and Wales, SEPA in Scotland and IPRI in Northern Ireland) to keep radioactive material or accumulate or dispose of radioactive waste, must comply with the conditions in the permit or certificate. For permit holders in England and Wales, this includes the general management condition which states:

"The operator shall manage and operate his activities using sufficient competent persons and resources".

and for certificate holders in Scotland:

"The Registered Person shall ensure that only suitably qualified and experienced persons shall have access to and be permitted to use the Registered Substances".

It is often the case that the RPS will take on the role of assisting the employer with meeting the conditions of the Certificate or Permit.

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When is RPS training necessary?

RPS training must be completed if:

- the employee is new to the RPS role;
- there has been a significant increase in the use of ionising radiation or if new equipment or radiation sources have been introduced;
- any new or significantly different radiation work is planned;
- any significant new legislation or directives are introduced.

NB: Refresher RPS training will also normally be required 3-5 years from the last formal RPS training.

As we don't go for a "one size fits all" approach to customers, we **always** discuss your specific training requirements in detail with you before making any firm arrangements so that we can provide you with the right training course. Also don't worry if the points below appear to cover more than you will need. The course material and syllabus appropriate to your use of ionising radiation will be decided on in partnership with yourselves.

Our RPS Course

During the course the following aspects of the RPS role will be covered:-

- general responsibilities of the RPS;
- the obligation to ensure that the work with ionising radiations is carried out in accordance with the requirements of the IRR99;
- to ensure that the local rules are observed;
- the RPS to be able to liaise with both management and the RPA;
- the RPS to be able to supervise the radiological protection aspects of the work; and
- the RPS to be able to recognise the need to seek further advice in certain situations.

During the course the RPS will be taught:-

- to understand the relevant sections of the IRR99 and Local Rules;

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- to understand the precautions necessary for the work being performed, and the degree of restriction of exposure gained from using the precautions.

Practical aspects of the RPS role that will be covered are:-

- maintaining source records for all radioactive sources on site;
- performing routine workplace radiation (dose rate/contamination) monitoring and recording results;
- making arrangements for the testing of radiation monitoring equipment;
- making checks on the operation of safety systems and warning systems and recording results;
- making arrangements for the statutory leakage testing of radioactive sources;
- arranging for the issue and return of personal dosimeters to employees at the start and finish of the dosimeter wear period;
- co-ordinating with contractors on site; and
- discussing with the RPA any significant issues or changes to work practices or equipment.

During the course the RPS will be able to participate in problem solving sessions with other participants. These will be related to their uses of ionising radiation.

Other regulations/safety directives

Depending on the relevance and particular course objectives, the following regulations, directives and guidance will also be covered during the course:-

- Health and Safety at Work, etc Act 1974;
- Management of health & Safety at Work Regulations 1999;
- The Ionising Radiation (Medical Exposure) Regulations 2000 (IRMER);
- Radioactive Substances Act 1993;
- The Radiation Emergency Preparedness and Public Information Regulations 2001 (REPPPIR);
- The Justification of Practices involving Ionising Radiation Regulations 2004;
- The Environmental Permitting (England and Wales) Regulations 2011;
- Council Regulation (Euratom) No. 1493/93 on shipment of radioactive substances between Member States;
- The High-Activity Sealed Radioactive Sources and Orphan Sources Regulations 2005;
- The Transfrontier Shipment of Radioactive Waste and Spent Fuel Regulations 2008



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Thinking of using us for Radiation Protection Supervisor Training?

Our formal RPS courses can be held on your premises, or at a mutually agreed venue.

Details of all our courses, including an estimate of the likely costs is available through our RAPAS web site, www.rapas.co.uk or on enquiry by email or telephone.

Please contact us for further details.

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