

# Radiation Safety Training 2017

## Radiation Protection Supervisor (RPS)

**(All sources covered)**

*'Best training course I have ever attended, anywhere...'*

CD (RPS Training April 2016)

**25-26 September 2017**

*'Excellent content with interest held over the length of the course. Presented in an easily understandable way''*

RM (RPS Training January 2014)

Missenden Abbey  
Buckinghamshire



## RADIATION PROTECTION SUPERVISOR TRAINING

### Scope

This 2-day residential course is designed for Radiation Protection Supervisors (RPS). Whilst the course is primarily intended for the new RPS it will be equally useful as a refresher (i.e. those who have not received training in the last 3-5 years). In designing this course we have taken a different approach to other course providers by training the RPS regardless of their specific areas of work (e.g. sealed sources, x-rays, radiochemicals etc). Whilst this approach may not be suitable for all, we believe the commonality provides a better grounding for the RPS in the longer term and enhances delegate interaction and mutually beneficial learning. We do however provide a personalised section in each delegates course notes that presents additional information relating to their particular area of ionising radiation use.

We also recognise that whilst the role of the RPS is defined in the *Ionising Radiations Regulations 1999*, the workplace RPS is usually expected to do much more. For example, those working with closed or open sources will often be required to keep records meeting the requirements of registrations, authorisations or permits (*Radioactive Substances Act 1993 & Environmental Permitting Regulations 2010*). Those working in areas containing x-ray equipment will often be the best placed to supervise contactors during critical examinations. Others may need to organise transport of radioactive materials.

This course therefore meets the RPS core knowledge requirements specified by the HSE, but much more besides. Our experience as Radiation Protection Advisers to many different types of client reveals common issues which we aim to discuss during this course. These include helping the RPS to gain a thorough understanding of the **purpose of local rules** and the actual **duties they are required to undertake**.

### Course Summary

#### Day One

- Nature of Ionising radiation
- Radiation Protection Principles
- Internal and external radiation hazards
- Practical Radiation Protection
- Risk Assessment
- Radiation Protection Management

#### Day Two

- Radiation Protection Legislation
- Duties of the RPS
- Local Rules
- The RPA & Radiation Employer
- Contingency Planning
- Optional Test



## RADIATION PROTECTION SUPERVISOR TRAINING

### Radiation Safety Training for all?

We believe that the basics of a RPS core syllabus can be taught to all, regardless of the types of ionising radiation sources being used. However, a RPS who is involved exclusively with x-rays will have little to do with radioactive substances. Despite this, a thorough foundation in all the basic principles of radiation protection, regardless of source type, is included to reinforce learning. In addition, our unique personalised training notes ensure that each delegate is also aware of specific radiation protection issues relating to their own area.

#### Who should attend?

This course is open to persons who will be appointed as a RPS in the following areas:

- Unsealed radionuclides (e.g. laboratory based research or teaching work)
- Sealed radioactive sources (e.g. radiometric gauging, calibration etc)
- X-ray sources (e.g. XRF / XRD, radiography, security inspection, quality assurance etc)

Whilst we place no restrictions on attendance there may be circumstances where this course is not wholly suitable. This will normally be apparent where particularly specialised uses of ionising radiation take place (e.g. x-ray medical radiography or some types of nuclear medicine). However, we have found that many employers send their medical related delegates on our course due to our excellent course reviews and feedback.

In addition, we have many delegates from the industrial radiography sector on our course – however note the course is not designed to specifically meet NDT certification (but it meets the radiation safety requirements).

The bottom line: If you are after 'RPS Training' then this course will be for you.

*'...Excellent course book, very informative with a reader friendly style. A very good course. Well Done! ...'*

*(MK, Feb 2009)*

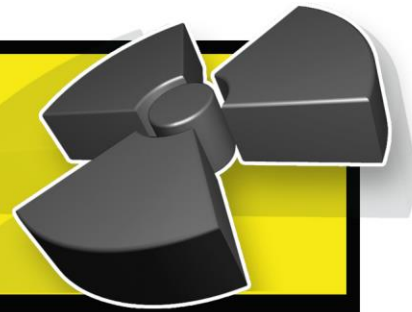
*'...Fascinating subject and course content... thank you very much – thoroughly enjoyable'*

*(AN, June 2008)*

The *Ionising Radiations Regulations 1999* require that employers appoint one or more of their employees as Radiation Protection Supervisors for the purposes of securing compliance with *local rules*.

#### Typical delegates

Theatre nurses / PET  
Museum staff  
Shielding designers  
Security industry  
Detector manufacturers  
Research & teaching  
QA / NDT / Niton (XRF)  
Oil and gas industry  
Local government  
School teachers  
Aerospace  
Clothing manufacture  
Airport / Dock / Cargo



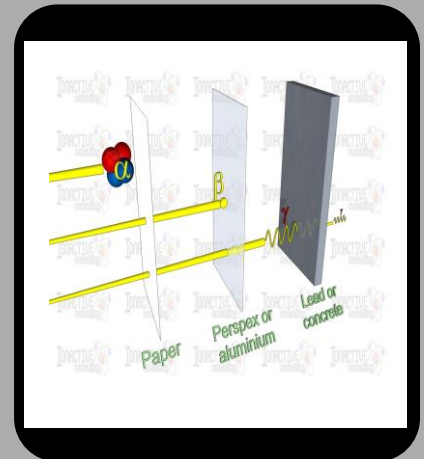
## RADIATION PROTECTION SUPERVISOR TRAINING

### Aims of the course

The aims of the course are to:

- Understand the nature of ionising radiations, their effects and quantification of harm.
- Understand radiation protection principles and the importance of the ALARP principle.
- Acknowledge and appreciate the external and internal radiation hazard.
- Become familiar with practical radiation protection techniques (for all source types).
- Use quantities for measuring dose, dose rate and exposure.
- Be aware of the range of active and passive radiation / contamination monitoring techniques available for assessing personal and environmental exposure. Know how to choose the correct technique for your area of work.
- Understand and use the principles of risk assessment to assist in assessing exposure and its significance and relevance to specified dose limits.
- Be aware of the legislation which underpins radiation protection and how the RPS fits into the regulatory framework (and where they do not).
- Be familiar with radiation protection management procedures (e.g. designation of areas, written systems of work, classified radiation workers).
- Know when local rules are required, what they should contain and who should write them.
- Understand the role of the RPS (what you need to do *and what you invariably end up doing*).
- Appreciate the importance of good record keeping.
- Understand the role of the RPA (and how to use them).
- Understand the responsibility of the radiation employer.
- Recognise the implications of a radiation incident and appreciate the importance of contingency planning.

We encourage a **friendly group atmosphere** and support discussion between delegates. This is the best way to learn from each other and this is why we encourage delegates to attend from all areas of ionising radiation source use.



*'Good use of comparisons to highlight risks. Mark was very enthusiastic and knowledgeable. The course presentation was very user friendly and the format excellent'*  
(TM, April 2008)

*'Course content was extremely good. Coming into the course with no experience in this subject - all learning objectives have been met'*  
(AH, June 2007)

## RADIATION PROTECTION SUPERVISOR TRAINING

### Outline Safety Training Programme

The programme will be altered to reflect the needs of the delegates who attend, an example is as follows:

#### Day One (Monday 25 September 2017)

- 10.00 – 10.15** Delegate welcome, introductions and outline of course.
- 10.15 – 11.00** Nature of ionising radiations, their effects and quantification of harm.  
*Coffee / Refreshments*
- 11.15 – 11.30** Radiation Protection Principles: ALARP.  
**11.30 – 11.45** *Group Exercise* 'ALARP 4 ALARP sake'.  
**11.45 – 12.00** Internal and External radiation hazards.  
**12.00 – 12.15** Dose, dose rate and quantification of exposure (including units of measure).  
**12.15 – 12.30** Practical Radiation Protection (Intro)  
*3 Course Lunch*
- 13.30 – 14.15** Practical Radiation Protection (breakout session)  
Closed sources / Xrays Open Sources  
For this session the group will split according to the delegate's use and experience of ionising radiation.
- 14.15 – 15.00** Active & passive radiation / contamination monitoring (including equipment and dosimetry).  
**15.00 – 15.20** Risk Assessment 1 (hazards, probability and severity).  
*Tea / Refreshments*
- 15.40 – 16.10** Risk Assessment 2 (putting radiation risk into context).  
**16.10 – 16.40** *Group Exercise* 'Risky Business'.  
**16.40 – 17.50** Radiation Protection Management.  
**17.50 – 18.10** Optional Course Assessment Part 1  
*Close of Day 1*  
*Dinner*

#### Refreshments

We understand our minds work best when suitably fed and watered! In addition to the programmed refreshment and comfort breaks; tea / coffee, water, cordials, fruit and biscuits will be available throughout the day. A three course buffet lunch will also be served. Please advise at time of booking if there are any particular dietary requirements or other special needs.

#### Course test and certification

We will provide an optional written multiple choice test paper at the end of the course which will be conducted in an open book setting. All delegates who attend the course will receive an 'Attendance' certificate, whilst those who take the test and pass will also receive an 'Achievement' certificate.

## RADIATION PROTECTION SUPERVISOR TRAINING

### Day Two (Tuesday 26 September 2017)

08.30 – 09.30	Review of Day 1.
09.30 – 10.30	Radiation protection legislation. <i>Coffee / Refreshments</i>
10.45 – 11.45	Development and content of local rules.
11.45 – 12.30	The duties and responsibilities of the RPS. <i>3 Course Lunch</i>
13.30 – 14.15	The RPS continued. <i>Group Exercise</i> 'Its not my responsibility mate...'
14.15 – 14.45	Record keeping ( <i>it has to be done .....</i> )
14.45 – 15.00	<i>Group Exercise</i> 'Poptastic Records'. <i>Tea / Refreshments</i>
15.20 – 15.45	The RPA & Radiation Employer.
15.45 – 16.30	Contingency planning & the RPS role in dealing with incidents.
16.30 – 16.45	Course summary.
16.45 – 17.15	Optional Course Assessment (Part 2). <i>Close of Course</i>

### Accommodation

**Single room en-suite accommodation is provided.** A three course dinner will be served in the evening of day 1 and a full English breakfast the following morning. Three course lunch is provided each day. Free wireless broadband is also available.

### Administration

**Date:** 25-26 September 2017

**Course Ref:** ION8004

**Places available:** 18

**Course fee:** £475 + VAT (£95.00) = **£570.00**

**Venue:** Missenden Abbey Conference Centre, Great Missenden, Buckinghamshire, HP16 0BD

**Register interest** on line at:

[http://www.ionactive.co.uk/training\\_services.html](http://www.ionactive.co.uk/training_services.html)

**Book the course** by downloading an application form via the same webpage; please complete and fax back to us. **Payment by credit card available** – call, book & pay over the phone!

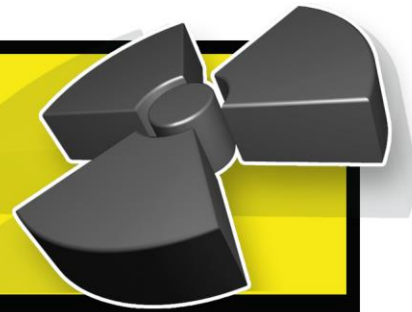
### Course material

Each delegate will receive a comprehensive set of course notes packed with information and other useful reference material. Each set will also contain a personalised section relating to the actual sources the delegate uses.

*'The venue and food was excellent value for money' (DD, March 2010)*

Missenden Abbey is close to the M40 and M25, both of which are just a 20 minute drive. London Marylebone is 40 minutes away by train, and the international connections of Heathrow just 30 minutes by car. Further details will be supplied with your delegate notes on booking.





## RADIATION PROTECTION SUPERVISOR TRAINING

### Terms and conditions

- 1) The course will be held on the date indicated subject to sufficient response. If all places on the course become full we may be able to arrange a repeat course.
- 2) The course fee includes all refreshments, lunch, an evening meal, hotel accommodation for one night and breakfast on day 2. The venue has free parking.
- 3) Payment of fees must be made in advance of this course, either by a cheque (payable to 'Ionactive Consulting Ltd') or by BACS transfer (details supplied after confirmation of booking). Bookings will therefore be held as provisional until all fees have been paid.
- 4) Provisional bookings within 31 days of the course commencing cannot be held until payment is received.
- 5) We do not issue invoices except for the purposes of your own financial records. We will accept purchase orders but these will be treated for information only and not in lieu of payment of course fees. We will issue VAT receipts on request.
- 6) Cancellations of course places must be made in writing. Fees will be refunded where the cancellation is made up to 14 days prior to the course starting. Cancellations made within 14 days of the course commencing will not be refunded unless we can find a suitable replacement.
- 7) We will accept substitution of places held on this course.
- 8) All course material, notes and multi-media presentations remain the property of Ionactive Consulting Ltd who retains copyright. This material must not be copied in whole or in part other than for personal study of the delegate attending the course.
- 9) Our courses cannot be recorded, visually or audibly, without the express permission of Ionactive Consulting Ltd.
- 10) We retain the right to make appropriate alterations to the timetable and course content specified in the course programme. A refund of fees would be made if we were required to cancel a course and this shall be the limit of our liability.

### Continued support

The Ionactive Consulting website provides a wealth of information – much will be useful to the newly trained RPS.

- Free newsletter
- Online guidance
- Extensive links
- Career guidance
- Multimedia presentations

### Contact Details

**Address:**

Ionactive Consulting Limited  
400 Thames Valley Park Drive  
Thames Valley Park, Reading  
Berkshire  
RG6 1PT  
United Kingdom

**Office Phone:**  
0800 043 9985

**Mobile Phone:**  
07841 435377

**Fax:**  
0871 7333945

**Email:**  
mark.ramsay@ionactive.co.uk