RESPONSIBILITIES

Radiation Workers

All radiation workers must adhere to the procedures contained within the Radiation Policy, together with any additional procedures which may be contained within relevant Specific Local Rules and RPO Guidance Notes in order to comply with their statutory duties and responsibilities under the Ionising Radiation Regulations 1999 and other relevant legislation.

Prior to first commencing radiation work, each worker is required to sign a declaration (on the RRW form), confirming that they have read and understood the parts relevant to them; and agree to act in accordance with them.

Radiation Workers must be familiar with the properties of all ionising radiations that they propose to use, and have a legal duty to protect both themselves and others from any potential hazards associated with their work. They must not expose either themselves or others to ionising radiation to a greater extent than is reasonably necessary for the work on which they are engaged, or exceed any dose limit. All Radiation Workers may therefore be required to attend training sessions covering aspects of radiation protection arranged by the URPO, in addition to any training received in-Department. Users of open sources of ionising radiation must satisfy URPO of suitable training prior to being registered to work with open sources and must attend a Radiation Safety Training course by URPO as soon as possible to starting work with ionising radiations.

In the event that a Radiation Worker intends to work with ionising radiation at another establishment, the URPO must be informed of the details of such work prior to its commencement.

Any accident or incident involving ionising radiation must be reported to both the relevant RPS and the URPO, as soon as possible. In this context, accident refers to a situation in which a person is harmed (i.e. receives a radiation dose), incident refers to a situation in which a person could have been harmed. A spill of radioisotope on the skin is an example of an accident. The discovery of unrecorded contamination of an area during a pre-use monitoring check is an example of an incident.

Project Supervisors

In accordance with the general policy for management of health and safety within the University, Project Supervisors have a duty, delegated to them from the Head of School, to provide "such supervision as is necessary" to ensure the safety of all students for whom they are responsible. This duty extends to all students working with ionising radiations, both postgraduate and undergraduate (see University Health and Safety Policy for further guidance).

Project Supervisors are required to confirm that each new radiation worker has received sufficient appropriate training before work with ionising radiation commences (URPO Form RRW), and, to ensure that the Radiation Risk Assessment for the laboratory in which the work will be undertaken is reviewed and (if necessary) amended.

Radiation Protection Supervisors

A Radiation Protection Supervisor (RPS) will be appointed in each School where it is necessary to designate Controlled or Supervised areas. The RPS must receive confirmation of their appointment in writing from the Head of School and a copy sent to the URPO. The person appointed must: understand the requirements of such legislation as affects the work of the department; be able to exercise the necessary supervision; and understand the precautions needed to restrict exposures.
In Schools where there are many research groups engaged in work with ionising radiation, it will be necessary to appoint several RPS to provide adequate supervision of all radiation areas. Each RPS appointed should have supervisory responsibility for the activities in a specified area or areas.

The RPS is responsible for ensuring that all relevant information received from the URPO is circulated to users in the department, keeping all necessary records, and keeping the URPO informed of changes in personnel engaged in radiation work within the department.

**Duties of Radiation Protection Supervisors**

The Ionising Radiations Regulations 1999 require the University to appoint **Radiation Protection Supervisors** (RPS) within each School in which a **Controlled** or **Supervised** area has been designated. Larger Schools may have multiple Radiation Protection Supervisors to be responsible for specified areas within the department. At the discretion of the Head of School Laboratory Radiation Protection Supervisors (LRPS) may be appointed to assist the RPS by providing day-to-day supervision over the use of ionising radiation within a particular laboratory.

An RPS has the following responsibilities:

1. To co-operate at all times with the University Radiation Protection Officer (URPO) and his/her staff, in the interest of radiation safety, and to ensure that all relevant information received from the URPO is circulated to users within the department.

2. To provide support to staff and students under his/her control on all matters connected with radiation safety.

3. To keep an up-to-date list of all radiation workers for whom s/he is responsible and to inform the URPO of all additions before work with ionising radiations commences, and of any deletions.

4. To satisfy him/herself, in conjunction with the relevant project supervisor, that workers are familiar with any Local Rules, Radiation Policy, signs etc. that all procedures followed are as safe as possible and in accordance with the relevant legislation and Code of Practice. To assess what training is needed prior to commencement of work with ionising radiations, and ensure that each worker receives sufficient training to enable them to work safely without placing either themselves or others at risk. Training should include specific practical experience provided within the department.

5. To ensure that all female radiation workers are made fully aware of the dangers to the foetus from ionising radiations in early pregnancy. To recommend that, should the situation arise, they inform their employer as soon as possible so that steps may be taken to ensure that they work in safe conditions for the remainder of their pregnancy.

6. To draw up **Systems of Work**, in conjunction with the Radiation Protection Adviser (RPA) and the URPO, for all **Controlled Areas** for which s/he is responsible. To provide, where necessary, specific local rules/procedures for use within the laboratory / school. e.g. operating instructions for a specific piece of equipment. To review regularly both the designation of **Supervised Areas** and the use of radiation warning signs, and make any necessary changes.

7. To ensure that any Classified radiation workers undergo a full medical at the nominated Occupational Health department before commencing work with ionising radiations, and
have a further examination on finishing such work or on leaving the employment of the University.

8. To ensure that a Prior Radiation Risk Assessment form is completed for each new project involving the use of radioisotopes. Each form should be countersigned by the RPS and submitted to the URPO.

9. To ensure that any personal monitoring issued is promptly distributed and worn whenever work with radioisotopes is being performed. To return these badges promptly to the URPO when requested. To notify any worker whose badge dose report is above the minimum detectable dose, and where necessary investigate the circumstances.

10. To deal with, and keep a record of, accidents, and take steps to avoid their recurrence where possible. To report any such accidents to the Head of School and the URPO as soon as possible, using an Accident Report Form.

11. To ensure the proper functioning and annual calibration of monitoring instruments and to keep a record of calibration results. To inform the URPO immediately a new instrument is obtained so that it may be registered and calibrated, and to ensure that instruments are recalibrated following repair or replacement of detector.

12. To ensure regular monitoring for contamination and radiation hazards and to record all results, even when nothing is detected. To ensure that any areas of contamination are cleaned immediately by a suitable method, with advice and/or assistance from the URPO when necessary.

13. To be responsible for the ordering of all radioactive substances through the URPO and to inform the URPO immediately if any other radionuclides are brought directly into the School. The RPS is additionally responsible for ensuring that the departmental quotas for stock and disposals are never exceeded, unless special permission has been obtained in advance from the URPO. Any loss of radioactive material must be reported immediately.

14. To ensure that all radioactive materials are clearly labelled and kept in a suitable locked store when not in use. To check stocks of isotopes regularly and dispose of all unwanted materials in accordance with the authorisation for disposal.

15. To keep records of all sealed and unsealed radiation sources with their date of acquisition and disposal. To send promptly to the URPO at the end of each month, details of all acquisitions and disposals for the period, on the approved format. The method of disposal (e.g. sink, bin etc.) should always be indicated.

16. To ensure that any radioactive materials moved between departments are adequately labelled and in a suitable container to prevent spillage. To ensure that any radioactive materials permanently transferred to or from another department are shown as such on the relevant stock or disposal records. This applies to both the departments concerned.

17. To keep records of use of any Mobile Sources (e.g. moisture probes), giving details of date and time used, together with name of user and destination.

18. To ensure that, where practicable, all sealed sources are leak tested at least once every 24 months, and results recorded.
19. To ensure that any X-ray equipment is kept in good working order and that all safety interlocks, warning lights etc. are functioning. To make regular checks for X-ray leakage around the equipment and to provide suitable shielding where necessary.

20. To check that, prior to any maintenance work being carried out in a Controlled area or on any equipment or plant which could involve a potential radiation hazard such as fume cupboards, ventilation systems, drains etc., all areas and equipment are free from significant radiation / contamination, and to issue a signed Permit to Work to the relevant maintenance staff before any such work commences.

21. To carry out regular departmental self-inspections, using the checklists issued by the URPO for guidance. To report any matters arising from the inspection or any other relevant problems/incidents such as
   a) any suspected radiation hazards,
   b) any radiation accidents or major spills,
   c) any new projects and/or procedures being used,
   d) any deterioration in the state of protection in the department, including any equipment needed for protection,
   e) any repeated breaches of protection rules,

   to the Head of School and, where appropriate, the URPO.

22. To establish operational procedures so that the radiation exposure of each worker is kept as low as is reasonably practicable.

23. To identify potential radiation hazards and draw up appropriate contingency plans if a radiation hazard is likely to arise as a result of a reasonably foreseeable accident, occurrence or incident. To take all reasonably practicable steps to prevent such an incident and to limit the consequences should any such incident occur.

24. To be a member of the Radiation Protection Sub-committee and be a member of the Safety-Radiation mail base.

Heads of Schools

Each Head of School is responsible for the safe use of ionising radiations within their School, for ensuring that Laboratory Self Inspections are carried out in accordance with the requirements of the Management of Health and Safety at Newcastle University, and for ensuring that all members of staff and students are aware both of the hazards associated with radiation work and of their responsibilities to both themselves and others within the laboratory.

To assist in ensuring the day to day compliance with all relevant regulations and Local Rules, the Head of School will appoint one or more suitable Radiation Protection Supervisors in accordance with the requirements of IRR99 and subject to the approval of the Radiation Protection Sub-Committee. The Head of School will confirm such appointments (RPS and LRPS) in writing, with a copy being sent to the URPO. URPO may decide that an appointed RPS is not suitable & not accept that appointment, in which case the Head of School will have to appoint another person.