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# GN050 – Checklist for New Radiation Workers

#### Introduction

1. Identify worker

The University has a moral and legal responsibility to protect those working with radiation and radioactivity, and those affected by that work. It does this by the application of a radiation safety management system, details of which can be found in section 31 of the Health and Safety Policy Framework Arrangements document (see <a href="http://www.docs.csg.ed.ac.uk/Safety/Policy/Framework - Arrangements.pdf">http://www.docs.csg.ed.ac.uk/Safety/Policy/Framework - Arrangements.pdf</a> ). An important part of this system is the initial steps needed to be taken for staff and students who will be starting work with radiation or radioactivity. This Guidance Note provides a checklist on what needs to be done for these members of the University. Regardless of their employment status, they are known in this Guidance Note as "radiation workers".

| That staff and students will be working with radiation or radioactivity should be identified as soon as possible. If they are new to the University, this should preferably be done before their first day of employment.  |  |
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| 2. Basic Training  |  |
| All University of Edinburgh radiation workers must attend the basic training in radiation safety course run by the Radiation Protection Unit, before they can start work unsupervised. The only exception to this is if they have had <i>comparable</i> training elsewhere, in which case they must attend the Basic Radiation Protection course "Regulation" module as soon as possible¹. Normally four Basic Radiation Training Courses in Research and Teaching are run per year. Basic Courses for Veterinary Work are done on an ad hoc basis. To minimise any delay in training, new radiation workers should be booked on the next course as soon as possible. Dates of the next Basic Radiation Protection course in Research and Teaching are put on the RPU website as soon as possible at this webpage:  https://www.ed.ac.uk/health-safety/radiation-protection/training Unfortunately due to constraints imposed by Room Bookings, we are not able to confirm dates for more than one course ahead. |  |

# <sup>1</sup> The Regulation module contains instruction on the UoE's arrangements to meet its legal obligations. This of course would not be available in any other organisation's training arrangements.

New Radiation Workers can begin work without having attended

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3. Supervision

the Basic Training Course if necessary, but only under close supervision by an appropriate trained and experienced member of staff. "Close" means immediate and direct. If this is recognised as necessary, the appropriate supervisor needs to be nominated and briefed. After training, an appropriate level of supervision might still be necessary, particularly for undergraduates. 4. Radioactive Substance Permit It is possible that new work with radioactive material will not covered by an existing Radioactive Substances Permit (formerly known as Certificates of Registration or Authorisation). This should be checked as soon as possible. If not, the RPU should be contacted immediately; new Permits can take many months to obtain. 5. Risk Assessment If it is new work, is it covered by an existing generic radiation risk assessment? Details of the University's radiation risk assessment arrangements can be found at this webpage: http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP COP019.pdf Remember that the risk assessment might need to take into account if the worker is pregnant or breastfeeding; see http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP COP013.pdf for more information. If there isn't an existing generic risk assessment, the RPU should be contacted for assistance; staff should not complete a radiation risk assessment without any professional support. The Proposed Scheme of Work form (see next section) is the formal means of converting a generic radiation risk assessment into a specific radiation risk assessment, but staff can contact the RPU before completing the PSoW, particularly with large or complicated radiation projects.

Undergraduates are permitted to work with certain ionising radiation sources, with the appropriate degree of supervision. Since undergraduates are not normally exposed to ionising radiation in the course of their work, their annual dose is limited to 1 mSv. Entry into a radiation Controlled Area is only permitted when the following conditions are met:

- I. the entry is for teaching or demonstration purposes;
- II. their potential annual radiation dose is restricted to the dose limits for members of the public;
- III. their attendance is closely supervised; and
- IV. the entry conditions are in writing, normally incorporated into the Local Rules.

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| 6. Proposed Scheme of Work   |  |
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| A completed Proposed Scheme of Work form must be submitted and received back countersigned before unsupervised radiation work starts. Information about PSoW can be found at this webpage:   |  |
| http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP CoP007.pdf PSoW templates for use can be found at this webpage: https://www.ed.ac.uk/health-safety/radiation-protection/radiation-protection-management/proposed-schemes-of-work. In the case of undergraduates, if the work with radiation is essentially watching a demonstration, their supervisor is responsible for completing an appropriate collective Proposed Scheme of Work form. If it involves more involvement in the radiation work, then the undergraduate needs to complete their own PSoW form.  |  |
| 7. Local Training  |  |
| The Basic Courses in Radiation Protection do not include instruction and training on any <i>particular</i> equipment or process. There will often be a need for such training to be provided at a local level, and might involve either formal training provided by an external provider, or just local instruction by a competent member of staff. It must be adequate for the job and should be arranged by or on behalf of the new worker's line manager. The fact that it has been given should be recorded. Information on the University's training requirements for radiation workers can be found at this webpage; <a href="http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP008.pdf">http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP008.pdf</a> . |  |
| 8. Dosimetry   |  |
| Does the radiation worker need a dosemeter (or other form of personal dosimetry)? This will be stated on the returned PSoW, but might be determined earlier if the worker is going to be working with an existing process. Supply of an appropriate personal dosimeter will need to be arranged with the University's normal dosimetry service. Arrangements for this can be obtained from your local Radiation Protection Supervisor.   |  |
| 9. Classification  |  |
| Will the radiation worker need to be classified? Information on classification can be found at this webpage: <a href="http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP">http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP</a> COP015.pdf  The University's normal approach is to avoid classification, and the need for classification is normally determined by the RPU. If however classification is required, time will need to be allowed to arrange for a medical examination and registration with the  |  |

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National Registry of Radiation Workers. University staff *must not* 

make their own arrangements for classification. Note that undergraduates cannot be classified workers.

## 10. Radiation Protection Supervisor

The radiation work will need to be within the purview of a Radiation Protection Supervisor. The names and details of the current RPSs can be found at this webpage: <a href="https://www.ed.ac.uk/health-safety/radiation-protection/supervisors">https://www.ed.ac.uk/health-safety/radiation-protection/supervisors</a>. If the radiation worker is not within any of the current RPS's area, then a new RPS might have to be appointed. The RPU should be contacted in this case. Information about the RPS role can be found at this webpage; <a href="http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP">http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP</a> COP001.pdf

## 11. Work at External Organisations

Is the new radiation worker undertaking the work at one or more organisations external to the University? If so, that organisation might impose requirements that need to be met before the visit. Common amongst these are a need for a medical, and signature by a line manager or the University Radiation Protection Adviser. The medical might take some time to arrange. Information on working at organisations outwith the UK can be found at this webpage:

http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP COP016.pdf .

#### 12. Personal Protective Equipment

Will the radiation worker need any personal protective equipment, such as a lead apron, protective eyewear or a lab coat? This might have to be ordered, and checked that it fits and is suitable for the wearer.

#### 13. Further Information

Further advice on the University's arrangements for radiation safety can be found in its Codes of Practice and Guidance Notes — see <a href="https://www.ed.ac.uk/health-safety/radiation-protection/codes-of-practice-and-guidance">https://www.ed.ac.uk/health-safety/radiation-protection/codes-of-practice-and-guidance</a>.

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