



## STANDARD OPERATING PROCEDURES FOR THE USE OF SEALED SOURCES IN TEACHING

### 1) Key personnel

**Radiation Safety Coordinator (RSC)** provides administrative and practical support, undertakes periodic monitoring and safety checks, and assists with lab inductions and local radiation safety training.

**Responsible person:** Each source must have a named person responsible for supervising the source, controlling its use and keeping records.

### 2) Competency and training

Demonstrators must undergo appropriate local training that familiarises them with the contents of these procedures and relevant risk assessments.

Students must be given appropriate instructions and training so that they understand the procedures for safe use, and must be under appropriate close supervision at all times.

### 3) Source management

Prior notification to, and written authorisation of the University Radiation Protection Officer (URPO) is required before:

- acquiring or purchasing any sealed source;
- transferring any sealed source from its authorised locations.

Transport off campus or disposal of any sealed source must only be undertaken by the Radiation Protection Service.

Source records must be kept detailing the radionuclide, activity, activity date, type and serial numbers, receipt date, and current location.

### 4) Checks, maintenance and testing

Sealed sources should be checked and a usage log completed every time they are removed from or returned to the secure store.

A check of each sealed source location must be made every month by the responsible person and notified to the URPO by email.

Sealed sources should be subject to an appropriate leak test annually (leak testing and source auditing is undertaken by the Radiation Protection Service).

### 5) Exposure control

To keep doses as low as reasonably practicable sources should be handled indirectly (using forceps) and the handling time kept to a minimum.

Further shielding or personal protective equipment (PPE) should be used when appropriate.

### 6) Security and containment

Sources should only be used for the specified experiment and used / kept in the authorised locations (see application schedule).

Sources must not be left unattended and when not in use should be stored in the authorised storage location.

The key to the storage safe should be kept by the responsible person and only issued to registered demonstrators.

### 7) Dose assessment and investigation

Radiation doses received during routine use would be much less than the university's dose constraint of 1mSv.

Radiation dosimeters are not required to be worn.

### 8) Contingency plans

If it is suspected that a sealed source has been damaged, lost or stolen, inform the RSC and Radiation Protection Service immediately.

**University Radiation Protection Adviser**

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**University Radiation Protection Officer**

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#### APPLICATION SCHEDULE

Schedule reference	
Faculty / School:	
Radiation Safety Coordinator	
Responsible person	

#### Sources covered

Source details	Experiment details	Authorised usage locations	Critical examination reference	Authorised source storage location

#### Authorised users

Demonstrator	Date of training

Demonstrator	Date of training

Date updated / reviewed		Signature	
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These operating procedures should be reviewed annually