



STANDARD OPERATING PROCEDURES FOR THE USE OF SEALED INSTRUMENT SOURCES

1) Key personnel

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

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

2) Competency and training

Persons who will handle, install or remove sealed sources from instruments must first register with the Radiation Protection Service and undergo appropriate local training.

Instrument users do not need to register centrally but must undergo appropriate local training that familiarises them with the contents of these operating procedures and relevant risk assessments.

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

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).

Before first use any instrument containing a sealed source must be subject to a critical examination by the Radiation Protection Service.

5) Exposure control

Source handlers: Sources should be installed in the instrument as detailed in the manufacturer's instructions. To keep doses as low as reasonably practicable sealed sources should be handled indirectly and the handling time kept to a minimum.

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

Instrument users: must not interfere with or handle the source or source container.

6) Security and containment

Each source should only be installed in the specified instrument and used / kept in the authorised locations (see application schedule).

When not in use the instrument location should be kept secure.

When not installed in an instrument each source should be stored in its authorised storage location.

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

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 Manager immediately.

University Radiation Protection Manager

Andrew Cowling

34202



STANDARD OPERATING PROCEDURES FOR THE USE OF SEALED INSTRUMENT SOURCES

APPLICATION SCHEDULE

Schedule reference	
Faculty / School / Group:	
Radiation Safety Coordinator	
Responsible person	

Sources covered

Source details	Instrument details	Authorised instrument locations	Critical examination reference	Authorised source storage location

Authorised users

Source handlers	Date of training

Instrument users	Date of training

Date updated / reviewed		Signature	
-------------------------	--	-----------	--

These operating procedures should be reviewed annually