



STANDARD OPERATING PROCEDURES FOR THE USE OF SEALED INSTRUMENT SOURCES - LIQUID SCINTILLATION COUNTER INTERNAL / EXTERNAL STANDARDS

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

Instrument users do not need to register centrally but must undergo appropriate local training that familiarises them with the contents of these 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 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

Internal standards have been installed in the instrument by the manufacturer and must not be interfered with or removed.

External standards: should be used in accordance with the manufacturer's instructions.

6) Security and containment

Internal standards 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 in use **external standards** should be stored securely in their authorised storage location.

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 source has been damaged, lost or stolen, inform the RSC and Radiation Protection Service immediately.

University Radiation Protection Adviser

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APPLICATION SCHEDULE

Schedule reference	SS/TI/LSC/###
Faculty / School:	
Radiation Safety Coordinator	
Radiation Protection Supervisor	
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		RPS Signature	
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These local rules should be reviewed annually