

Procurement of sealed radioactive sources by Educational / Research institutions

1. Sealed radioisotopes (Activity more than exemption limit)

Radioactive sealed sources used in calibration, research and training purposes involve activity ranging from few kBq (~ µCi) to GBq (~ mCi). Sources are either imported or supplied by BRIT. The regulation of this radiation facilities are in accordance with the provisions of the Atomic Energy Act, 1962, Atomic Energy (Radiation Protection) Rules, 2004 and Atomic Energy (Safe Disposal of Radioactive Waste) Rules, 1987 and various standards issued there under. As per Atomic Energy (Radiation Protection) Rules, 2004, the applicant is required to obtain Registration from AERB.

The applicant needs to submit duly filled in Application form to obtain consent for procurement of sealed sources. AERB reviews the following pre-authorisation / pre-registration requirements:

- Intent of use
- The device containing the sealed source(s) is approved by AERB (if applicable).
- Availability of Safe and secure source storage facility.
- Approval of installation to use the radioactive materials.
- Availability of suitable Radiation (area and personnel) monitoring instruments.
- Availability of qualified and trained man power such as Radiological Safety Officer (RSO) which commensurate with the *degree of hazard potential*.
- Commitment from prospective users to return decayed / unused sources to original supplier.

“Based on the review of the above and the Application for registration of sealed sources, AERB issues the Registration of Sealed source facility. On receipt of the registrations, application for procurement of radioactive sealed sources should be submitted. On procurement of sealed sources(s), the applicant is required to intimate to AERB the receipt of the sources.

Responsibilities of user:

- The Consentee is required to intimate to AERB on procurement of the sources.
- The Consentee is required to submit to AERB periodic status report (once in 6months) of the sealed radioactive sources in their custody.
- The Consentee should not transfer the sealed source(s), without the permission of AERB.
- Any unusual occurrence or loss of radioactive source or devices with source therein should be promptly reported, within 24 hours, to the AERB and this should be followed by a detailed report.
- The Consentee shall ensure the security of the sources in their possession.