

SOP for neutron detector calibration

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The neutron detector calibration will take place in Labs Rm.110 or Rm.106. Am, Cf-252 or Am-Be sources will be used. All procedures will follow the [General CENPA Sealed Source SOP](#). Here we add specifics for the measurements.

- Only handle Am alpha sources with gloves and wash hands after operation. Used areas will be checked for alpha source contamination.
- If the 3 mCi Am-Be is used, the irradiation will take in a separate room, which will be sealed off for general access and marked as containing neutron sources.
- Rm. 110 contains a locked cabinet, marked with a radiation sign, where the sources will be stored when not in use. The radiation sign will be updated for the sources stored.
- The measurement program will only take a few days and the sources will be returned within a week.
- Safe distances for personnel will be established with radiation monitor, taking the RBE (for relative biological effectiveness) of the specific particles into account.