# Am-241 gamma calibration source (SOP)

Building/Room(s) covered by this SOP	Cenpa 110
Department	Physics
Principal Investigator Name	Peter Kammel
Principal Investigator Signature/Date	7/25/2025

## 1. Purpose

This SOP outlines the safe handling, storage, and usage procedures for an Am-241 gamma-emitting radioactive source used in laboratory settings.

#### 2. Scope

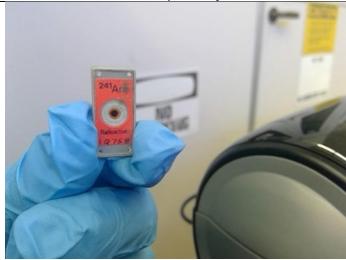
Applies to all personnel handling sealed Am-241 sources for calibration, detection, or measurement applications in controlled lab environments.

#### 3. Responsibilities

Lab Personnel: Must complete radiation safety training before handling.

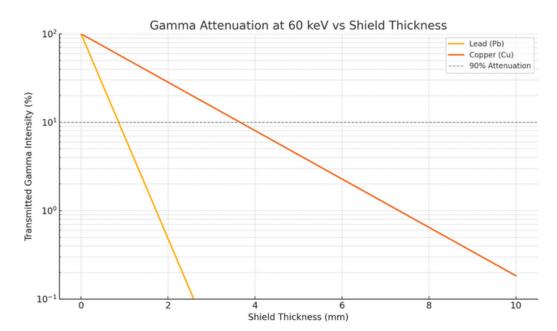
#### 4. Source Information

Parameter	Value	
Isotope	Americium-241 (Am-241)	
Activity	12 uCi	
Radiation Type	Primarily alpha, with 59.5 keV gamma	
Form	Sealed source (e.g., button, disk, epoxy-	
	sealed)	



## **6. Safety Precautions**

- 1. Minimize exposure (minimize time, maximize distance) when handling and installing the source.
- 2. Wear gloves when handling the source and do not touch the active surface. Alternative keep it in a plastic bag to avoid direct contact. Better use both. Wash hands after handling the source.
- 3. Secure source in locked cabinet when not in use.
- 4. Monitor radiation levels using a calibrated survey meter. 60 keV gammas can be easily shielded with 2mm of lead or 5 mm copper.



# training records maintained by G. Holman

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