

Safe Operating Procedure for use of ^{241}Am sealed source in NPL 165

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Sealed ^{241}Am radioactive sources with an exposed active surface and activity $<10\text{ }\mu\text{Ci}$ will be installed in the CCD test system in NPL 165. The source will be screwed into a flat piece of aluminum, which will then be taped to the inside wall of the cryostat such the CCD detector is exposed to radiation from the source. The cryostat will be pumped to vacuum.

- Only handle the source if you have completed the sealed source radiation safety training.
- Perform a reference background measurement with the CCD detector before the source is installed. There should be no measurable alpha activity.
- Minimize exposure (minimize time, maximize distance) when handling and installing the source.
- Wear gloves when handling the source and do not touch the active surface.
- Wash hands after handling the source.
- After the source is removed, perform a background measurement with the CCD detector. If any alpha activity is detected, it indicates a radioactive leak. You should contact your supervisor and inform Eric Smith, Gary Holman, or Alejandro Garcia.
- When not in use, secure the source in the storage location marked **X** in the floor plan below.

