

Radioactive waste management infrastructure in Africa

The challenge...

In most African countries, radioactive sources and materials used in different sectors originate from various developed countries around the world. However, the provenance of these materials is often unknown.

In addition, inadequate waste management regulatory infrastructure, absent or incomplete waste inventories, inappropriate waste management facilities, and a limited number of properly qualified and experienced staff are serious shortcomings in some African countries, and contribute to the significant number of orphan sources on the continent.

The project...

Progress in improving radioactive waste management infrastructure in the AFRA region has not been uniform in all participating countries. This is because countries that joined the IAEA and AFRA in recent years were not able to benefit fully from the assistance offered under previous technical cooperation projects. This regional project therefore aims to continuously improve radioactive waste management infrastructure for greater safety and security in African countries. Countries are grouped into two categories allowing for a customized approach in terms of assistance provided. For those in Category 1, the approach will focus on the establishment of a waste management infrastructure, while for those in the Category 2, the focus will be on the further development and improvement of the waste management infrastructure.

It is highly important for AFRA that States Parties continue collecting, characterizing and conditioning all known disused radioactive sources (spent high activity radioactive sources and long lived sealed radioactive sources (LLSRS) as these are seen as posing the highest risk to people and the environment. The project will also aim to develop regional capability and a sustainable mechanism for the safe handling, treatment, storage and disposal of all existing and future radioactive disused sources on the continent. The use of national organizations and AFRA modalities, such as specialized teams drawn from more advanced African countries and existing regional designated centres for training and ad hoc services, will be encouraged.

The impact...

Previous projects significantly strengthened radioactive waste management infrastructure in some AFRA States Parties, while in others countries assistance was still required to develop their expertise to a level that could be sustained. The expected outcomes, by the end of this project, are: 75% of Category 1 Member States will be upgraded to Category 2 and 80% of Category 2 Member States will have sustainable radioactive waste management programmes in place.



Disused sources.