September 2014

## Improving radioactive waste management infrastructure in Africa

## The challenge...

The safe management of radioactive waste requires legislation and an organizational structure – a regulatory authority – to regulate the work of the waste operators who collect, process, store and dispose of radioactive waste. This should be supported by adequate technical skills and experience at a level corresponding to the national needs, as well as appropriate facilities and equipment.

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...

The technical cooperation programme has been assisting countries in Africa with waste management infrastructure for nearly 20 years. This project provided continued support to establish or upgrade waste management infrastructure in States Parties to the African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA), especially those that had not yet received assistance in this field. The project also aimed 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.

Twenty eight Member States took part in the project, which provided training for over 200 professionals in areas including waste inventory systems, medical waste management and cradle to grave management of radioactive sources. Expertise was also provided in various areas, including waste management policy and strategy.



Disused sources.

## The impact...

Earlier projects have significantly strengthened radioactive waste management infrastructure in several AFRA States Parties, and with this continued support, countries in Africa have established or improved radioactive waste inventories, and improved their waste management facilities. Through national workshops, national capacities in the field of naturally occurring radioactive material (NORM) were developed, helping countries dealing with past mining activities and ongoing accumulation of operational waste.

The project helped Member States in various ways. Assistance was provided to develop national legislation and strategy for waste management in Cameroon. The IAEA assisted with reviewing and revising Nigeria's design of a low level and intermediate level radioactive waste processing and storage facility. The design for a sealed source radioactive waste storage facility was reviewed in Botswana, and construction is planned to begin towards the end of 2014.

To build on the achievements of this project, activities will continue over the next four years with a follow up project, co-funded by the European Union, that aims to further strengthen radioactive waste management in Africa.