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## Enhancing the Security at Radioactive Source Facility through the upgrade of the Physical Protection System

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There are several reasons why the security of radioactive sources is important in Nigeria. Radioactive sources have since played an important role in the Nigerian economy from its application for diagnosis, teletherapy and brachytherapy in Medicine to Non-destructive testing, sterilization and Food preservation in industry and Research and Education. Hundreds of thousands of high-activity radioactive sources are in use around the world for industrial and medical applications. The Oil and Gas sector in Nigeria remains the major source of revenue and radioactive sources play a major role from exploration to production. The non-destructive technique using radioactive material facilitates many of the activities in the Oil and Gas. Additionally, the use of radioactive sources in Agriculture have demonstrated its potential to fight hunger and poverty achieving one of the sustainable development goals in a growing world population. These and many others require effective security of radioactive sources for continued socio-economic development of every society. These benefits from the use of radioactive sources are not without some risks. Moreover, the international community's assessment concluded that terrorist have indicated the ambition to acquire and possible use Radiological Dispersive Device (RDD), Radiological Exposure Device (RED), or sabotage radiological facilities for the purpose of revenge, terror, or intimidation against a government or institution, causing severe economic or environmental damage, receive a financial reward, either for stealing radioactive source or for carrying out an attack for hire. Radioactive material has been used to kill a former Russian secret service agent having absorbed a lethal dose. The changing security landscape in Nigeria requires an upgrade of physical security systems at its high-risk radiological facilities to mitigate the changing threat. In this paper, we highlight the processes for enhancing physical security at our facilities in Nigeria.

## **Country OR Intl. Organization**

Nigeria

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