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OVERVIEW OF THE KNOWN AND EXPECTED NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM) SITES IN UGANDA.

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OVERVIEW OF THE KNOWN AND EXPECTED NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM) SITES IN UGANDA.

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Uganda is currently having major activities involving generation of Naturally Occurring Radioactive Material (NORM). The major activities include; oil and gas industry exploration and processing, phosphate production and processing of phosphate fertilizers, Uranium exploration, mining of monazite sand, mining of gold among others.

The key NORM sites are the phosphate mining and processing in Usukulu and Bukusu, Kilembe Copper Mining site, gold mining sites in: Kahengyere and Muti in Buhweju and Mashonga in Kyamuhunga in Bushenyi district;; Murindi, Mpororo, Rubuguri and Karamba in Kisoro district; Bikongozo valley in Rukungiri district; Kashenyi, Kanungu, and Muramba in Kanungu district; Tira and Amonikakine in Busia district; Kamalenge and Kisita in Mubende district; Rupa and Kamalera in Moroto district and Kafu River in Hoima district.

The identification of the above major NORM sites have been done by Atomic Energy Council (AEC) the national regulatory body and by the Directorate of Geological Surveys and Mines (DGSM). The country has prospects of uranium and with increased human activities on these natural resources, there are possibilities of elevated levels of NORM.

Also the countrywide aerial surveys by DGSM indicated that there were several areas within the country with higher background radiation dose rates and this need further investigation.

Despite of the major known NORM sites, the AEC was provided with funds by the government of Uganda to purchase a High Purity Germanium detector for analysis of various soil, food and water samples in the various parts of the country. This is one of the mechanism of identifying the other potential sites in the country. The detector is due for operations by 2020.

AEC is coordinating with other stakeholders to conduct a nationwide indoor radon survey. This will also provide very important information on location of NORM sites in the country. The process is underway to procure radon detectors for this exercise.

The identification of the NORM sites is key so that national regulatory policies and guidance can be established for the protection of the workers and the public by ensuring all operations are regulated.

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