Contribution ID: 231 Type: POSTER

PREPARATIONS FOR TRANSPORTING URANIUM OXIDE CONCENTRATE FROM THE UNITED REPUBLIC OF TANZANIA

On July 30, 2025, Tanzanian President Samia Suluhu Hassan launched uranium pilot processing plant in Namtumbo District, Ruvuma region in Southern Tanzania, approximately 470 km South West of Dar es Salaam and 120.46 km North East of Songea town. This is the first uranium processing plant in the country serving as a crucial step toward large-scale industrial operations. Although the pilot plant is expected to produce a small quantity of uranium oxide concentrate (yellow cake) per annum, the need for enhanced capacity to deal with such materials especially during storage and transportation emerges. From regulatory point of view, the United Republic of Tanzania (URT) has a number of enabling legislations which include but not limited to: the Atomic Energy Act No.7 of 2003 and its amendment 2025; Atomic Energy (Protection from ionizing and non-ionizing radiation) Regulations, 2023 and its amendments and the packaging and transport of radioactive materials regulations, 2011. The URT's regulatory capacity with respect to transportation of radioactive materials has been established for several years through the IAEA TC projects such as RAF 9046 –Strengthening Effective Compliance

Assurance for the Transport of Radioactive Material, RAF 9060 (Building Competent Authority Effectiveness in Regulating the Safe Transport of Radioactive Materials); and RAF 9063 (Strengthening Competent Authorities for the Safe Transport of Radioactive Material), among others. Regulatory capacity was further enhanced through the European Union (EU) Project titled "Support to the Regulatory Authority of Tanzania" which was implemented between 2017 and 2020. In terms of transport infrastructure, there is a good road network from the uranium mining and milling site to Mtwara Port. This port was recommended in the "Fact Finding Mission Report for Tanga and Mtwara" conducted in January 2018 under the aforesaid EU project. Despite of these achievements, some limitations may exist due to lack of practical experiences in transporting radioactive materials, particularly uranium oxide concentrate (U3O8) commonly known as the yellowcake. Also, there remains a need to enhance the regulatory capacity by equipping the regulatory body with the necessary tools and equipment. Furthermore, strengthening interagency collaboration is essential to further support and improves the overall regulatory effectiveness. Last but not least is the need for improving the regulatory staff succession plan to take care of the aging workforce.

Country or International Organization

Instructions

Author: SAWE, Shovi (Tanzania Atomic Energy Commission)

Co-author: Mr MWIMANZI, JEROME (Tanzania Atomic Energy Commission (TAEC))

Presenter: SAWE, Shovi (Tanzania Atomic Energy Commission)

Track Classification: Track 1 Legislative and Regulatory Framework for Safe and Secure Trans-

port