

International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry

VIRTUAL EVENT

International Conference on
**Management of Naturally
Occurring Radioactive
Material (NORM) in Industry**

19–30 October 2020

#NORM2020



Contribution ID: 231

Type: Poster

Current Status of the Management of Naturally Occurring Radioactive Material (NORM) wastes and Residues in the United Republic of Tanzania.

Didasi W. Shao, Lazaro S.P. Busagala, Firmi P. Banzi, Shovi F. Sawe and Salehe M. Gurisha.

Tanzania Atomic Energy Commission; P.O. Box 743, Arusha, Tanzania

Abstract

Naturally occurring radioactive material (NORM) wastes often contain high level of radioactivity caused by radionuclides of uranium and thorium series. NORM wastes in United Republic of Tanzania are found in the tailings from gold mines, production of natural gas, crushing and processing of coal and phosphate rock and soon from uranium mining which is in the commissioning stage. Generally, mining operations are usually accompanied by dumping of large quantities of tailings in the environment which are rich in radioactive minerals. If the tailings from these activities are not managed properly might cause the radiological exposure to human, contaminate surface water, ground water, soil and the surrounding environment. The aim of this paper is to evaluate the national current status for the management of naturally occurring radioactive material (NORM) wastes and residues in the United Republic of Tanzania. The evaluation covers inventory of NORM - related industries in the country; regulatory framework; education and training of NORM industries staff, national policy and strategies for the management of NORM wastes and residues; assessment of radiation exposure from NORM wastes and residues disposals; international cooperation on the management of NORM wastes and residues; and implementation of activities under NORM-related IAEA's projects which Tanzania is participating or has participated.

REFERENCES

- [1] Tanzania Atomic Energy Commission (TAEC), The Atomic Energy Act, No.7 of 2003.
- [2] Tanzania Atomic Energy Commission (TAEC), The Atomic Energy (Protection from Ionizing Radiation) Regulations 2004.
- [3] United Republic of Tanzania, Radioactive Waste Management for the Protection of Human Health and Environment Regulations of 1999.
- [4] United Republic of Tanzania, the Atomic Energy (Radiation Safety in the Mining and Processing of Radioactive Ores) Regulations of 2011.
- [5] International Commission on Radiation Protection, 2005 Recommendations of the ICRP, Draft for Consultation, 22 July 2004.
- [6] International Atomic Energy Agency, Compliance Monitoring for Remediated Sites, IAEA -TECDOC – 1118, IAEA, Vienna, October, (1999).
- [7] International Atomic Energy Agency, Measurement of Radionuclides in food and the environment, A Guide Book, Technical Reports Series No. 295, IAEA, Vienna, 1989.
- [8] International Atomic Energy Agency, International Basic Safety Standards for Protection Against Ionizing Radiation and the Safety of Radiation Sources, Safety Series No. 115, IAEA, Vienna, 1996.

Primary authors: Mr SHAO, Didasi W. (Tanzania Atomic Energy Commission (TAEC).); Prof. BUSAGALA, Lazaro S.P. (Tanzania Atomic Energy Commission (TAEC).); BANZI, Firmi P.; SAWE, Shovi F.; GURISHA, Salehe M.

Presenter: Mr SHAO, Didasi W. (Tanzania Atomic Energy Commission (TAEC).)

Session Classification: Session VI - Solutions for Residue and Waste Management

Track Classification: NORM Residue and Waste Management