

ROLE OF RADIATION PROTECTION OFFICER IN TRANSPORTATION OF RADIOACTIVE SOURCES IN MALAYSIAN NUCLEAR AGENCY

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Abstract: Malaysian Nuclear Agency (Nuclear Malaysia) is executing activities involving radioactive sources namely in medical, waste managements, industries and agriculture. The Radiation Protection Officer (RPO) plays a critical role in ensuring the safe transportation of radioactive sources within the Nuclear Malaysia, serving as the primary guardian of radiological safety throughout the entire transport process. An involvement of RPO was examine in several stages; pre-transport planning and assessment, documentation for regulatory compliance, safety implementation, personnel training, emergency preparedness and response and finally the monitoring and quality assurance. Based on the assessment and monitoring of an internal transportation of radioactive sources form shows that Americium -Beryllium -241, Barium-133, Cobalt-57, Cobalt-60, Cesium-137. Iridium-192 and Strontium -90 were the most radioactive sources transported from the agency for different purposes. In addition, as International Atomic Energy Agency (IAEA) was initiate the Global Radium-226 Management Initiative, the RPO in the agency should plan to coordinate multiple stakeholders in ensuring the safe transport of the Radium-226 which will be recycle to other application. This paper demonstrates the organisational structure on radiation protection program in the agency and the practices on the safe transportation of radioactive sources in order to comply with regulatory requirements. Trending of the radioactive sources that were transported from 2022-2024 also will be show.

Keywords: Radiation Protection Officer, Role, Transportation of Radioactive Sources