

Regulatory Oversight in Ensuring the Safe and Secure Transport of Nuclear and Radioactive Materials in Ghana: Challenges and Recommendations

The safe and secure transportation of nuclear and radioactive materials is a vital aspect of the peaceful application of nuclear technology. In Ghana, the Nuclear Regulatory Authority (NRA), which was established by the Nuclear Regulatory Authority Act, 2015 (Act 895), has the responsibility to ensure that the transportation of these materials adheres to strict safety and security standards consistent with international obligations. As part of its legal and regulatory framework, the NRA has developed draft regulations based on the International Atomic Energy Agency (IAEA) Regulations for the Safe and Secure Transport of Radioactive Materials. The oversight of NRA includes the licensing of transport operators, conducting thorough inspections, and enforcing transport activities that involve radioactive materials. Safety measures include the use of Type A and Type B packaging, following pre-approved transport routes to reduce risks, and maintaining detailed documentation with hazard labelling. Security measures are also strict, featuring armed escorts for high-risk shipments, GPS tracking, and cooperation with the Ghana Armed Forces, Ghana Police Service, and Customs Service to deter theft, sabotage, or unlawful trafficking. Despite these initiatives, challenges persist, such as insufficient funding for cutting-edge monitoring technologies, a lack of public understanding regarding transport hazards, and the necessity for improved cross-border cooperation to meet regional standards. To address these issues, key recommendations include funding advanced detection technologies, enhancing public education, and reinforcing regional partnerships to maintain safety and security in the transportation of nuclear and radioactive materials in Ghana. This abstract highlights Ghana's commitment to conforming with international best practices, as demonstrated through its adherence to IAEA conventions, including the Convention on the Physical Protection of Nuclear Material (CPPNM). By sharing its experiences and strategies at this international conference, Ghana seeks to contribute to global discussions on strengthening regulatory oversight for the safe and secure transport of nuclear and radioactive materials, fostering collaboration to mitigate risks in an interconnected world.

Country or International Organization

Instructions

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