

Security regulation overview for radioisotopes in Korea

Radiation is being used widely in industrial, medical, research and education field in Korea. The number of license in Korea have been increased continuously and about 8,500 licenses are valid in 2019. Among them, the number of sealed source user is about 2,400 and about 11,000 sealed sources have been being used.

Legal system was launched in 1953 for radiation safety. Nuclear Safety Act (NSA) is based on IAEA BSS (1996). Basic requirements are including licensing processes (review & inspection) and radiation protection for safety and security.

Security was ancillary measure for safety in the former version of this act. But, introducing new requirements in 2015 based on IAEA security recommendations and code of conduct on the safety and security, the act have got well organized security measures.

Basic security is adopted all radiation handling for prevention of loss and robbery. And special requirements are added for high risk radiation sources such as category 1, 2 of IAEA categorization. These requirements are including security system (based on the concept of detection & assessment, delay and response, etc.) and management (preparation of a security plan, security zones, access control, trustworthiness, information protection etc.)

About 160 licensees are having category 1, 2 radiation sources such as Co-60, Cs-137, Ir-192 for medical or industrial purpose in Korea and each licensee is implementing security measures based on own security management plan.

National level efforts are implementing also. The regulatory authority (Nuclear Safety and Security Commission & Korea Institute of Nuclear Safety) is checking status and encouraging security strengthen. Korea have expressed support for Code of Conduct on Safety and Security of Radioactive Sources including Guidance on the Import and Export of Radioactive sources since 2004. Korea was inspected International Physical Protection Advisory Service(IPPAS) of IAEA in 2012 successfully and adopted IAEA security requirements to legal system by publishing 'Requirements for radioisotope security management' in 2015.

Regulatory review and annual inspection to licensee is general activity for security implementation. But special activities were carried when national events were held such as U-20 FIFA soccer games in 2017 and 2018 Pyeong Chang Olympic winter games in order to prevent malicious use.

Korea have been making an effort to establish and implement security policy and is going to improve consistently. These efforts are going to contribute spread of security culture.

Gender

Male

State

Republic of Korea

Author: Dr HAN, Sang eun

Presenter: Dr HAN, Sang eun

Track Classification: CC: National nuclear security regulations