



Contribution ID: 296

Type: POSTER

Pre controlling of the discharge of liquid (or other forms) radioactive waste effluents Regulatory Control for discharge of liquid radioactive effluents

The criteria and options for the selection of appropriate technology for either discharge of liquid radioactive effluents directly or concentrate and store for decay is an important regulatory decision due to the potential for increased exposure, associated costs and the complexity of technical and environmental considerations.

An effective model can be used to estimate and evaluate the impact of liquid radioactive effluents before discharge. The production source term (P) was used by assuming that the production is constant and continuous over time. The build-up activity (A(T)) will depend on the total removal rate (K). The increase or decrease in activity concentration relies on the volume of water body when the effluent reaches the environment. This model demonstrates and provides the regulatory decision-makers with a straight forward method to ensure that the selected option will meet the exemption criteria, confirm the radiation risk is sufficiently low as not to warrant any further control and inherently safe. In addition, the model would ensure that selected option has no additional impact on environment and public exposure and has no regulatory concern with no appreciable likelihood of scenarios that could lead to a failure to meet both without any regulatory concerns or control issues.

Primary authors: Ms ALAMERI, Buthaina; MAJALI, Mustafa (FANR)

Presenters: Ms ALAMERI, Buthaina; MAJALI, Mustafa (FANR)

Track Classification: Track 5 - Practical experiences in integrating safety and sustainable development