

Review of Safety Assessments for Radioactive Waste Storage facilities

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Radioactive Waste Management standard AR 10.12.1 of the Nuclear Regulatory Body from Argentina, held on the year 2016, requires that radioactive waste storage facilities need to develop a safety assessment, prior to operation, in order to ensure safety among the lifecycle of this facilities and guarantee that radiation protection measures to the public and the environment are accomplished, as well as dose limits and constraints.

Given the national broad nuclear power plan and the large amount of radioactive facilities and activities in the country, there are several radioactive waste storage facilities already constructed, and it is expected that more will be constructed in the near future to provide capacity for all the radioactive waste generated. As some of these facilities were constructed prior to the update of the standard, they didn't have a specific safety assessment associated independent of facility safety case. In views of improving and regularizing this situation, since 2018 the regulatory body has been requiring operators, to fulfill with the requirement of the mentioned standard and to develop the Safety Assessment including scenarios for normal operation and accidental conditions of the storage facilities located within their sites.

During 2019, an instructive of the content of the safety assessment was developed by the Radioactive Waste Management Control Section of Nuclear Regulatory Authority, in order to facilitate to operators the process of preparation of the documentation needed to perform the safety assessment.

This paper addresses the regulatory review process for the safety assessment of these facilities, emphasizing on the creation of a multidisciplinary group to evaluate the documentation, the radiation protection measures and dose limits and constraints taken into account and the scenarios considered.