

International Conference on Radioactive Waste Management: Solutions for a Sustainable Future (CN-294)



International Conference on Radioactive Waste Management: Solutions for a Sustainable Future

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Multinational Cooperation Initiative on Post-Closure Criticality Safety

Demonstrating the criticality safety of a final disposal concept in the post-closure phase, i.e. over very long timescales, is a complex and unique endeavour for many, if not all, waste management organisations (WMO) that have to dispose of spent fuel. While certain matters are intrinsically related to the particularities of each individual disposal concept, the WMOs do, in fact, address many similar aspects. Therefore, the sharing of knowledge, experience and innovative ideas between them has clear benefits. For instance, the envisioned exchange would enable the development of a methodology to perform meaningful comparisons and increase understanding between the different WMO approaches to assessing criticality safety. This would, in turn, facilitate an informative comparison and validation between their respective results. Furthermore, this evaluation on first-principles would consolidate each WMO's individual approach by anchoring it in the appropriate international RD&D context. Consequently, a multinational cooperation effort, allowing a transparent and effective information exchange between WMOs on post-closure criticality topics, will provide a great benefit.

This contribution gives an overview of the current efforts to establish and further develop such a WMO-level multinational collaboration. These efforts were recently initiated as a joint effort by the Radioactive Waste Management (RWM, UK) and the National Cooperative for the Disposal of Radioactive Waste (Nagra, Switzerland) in the context of the IGD-TP (<https://igdtp.eu>). The initiative presently enjoys great interest from more than 10 waste management organisations from Europe, the U.S. and Canada. Further opportunities for wider involvement are planned to ensure that those who want to be involved can do so and the collaboration maximises success.

The presentation will place this initiative in context by first briefly discussing the context of post-closure criticality safety and previous international exchanges on post-closure criticality and will summarise their results and conclusions. Based on this, the motivation underpinning the present collaboration efforts will be explained. Furthermore, the main goals and benefits envisioned for the collaborative work and the current status will be presented. Lastly, the strategy and future plans for the proposed multinational cooperation will also be summarised.

Do you wish to participate as a Young Professional?

No

Speaker's title

Ms

Affiliation

Nagra - National Cooperative for the Disposal of Radioactive Waste

Do you wish to be considered for a Young Professional grant?

Not specified

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