

# International Conference on the Management of Naturally Occurring Radioactive Materials (NORM) in Industry

## VIRTUAL EVENT

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## GETTING URANIUM OR REE PROJECTS LICENSED AND EFFICIENTLY OPERATED THROUGH ADAPTED NUCLEAR TECHNOLOGIES

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Over the whole life-cycle uranium or REE production at mines, mills and refineries can benefit from adaption of proven nuclear technologies with respect to safety, efficiency and regulatory compliance. Moreover, a sound NORM management helps to operate smoothly and avoids related liability risks.

In particular in the fields of

- Decontamination of equipment and facilities,
- Management of NORM waste and
- Decommissioning and remediation,

well-planned corresponding measures can be required to convince regulators issuing the necessary licenses. However, several uranium or REE production projects worldwide do not get licensed, whether out of e.g. environmental concerns or due to insufficient compliance with safety requirements.

To cope with that various technologies for removal or reduction of contamination provide the opportunity for re-use of (spent) equipment and for achieving dramatic volume reduction by separation/concentration of NORM in the course of managing these wastes. To facilitate disposal appropriate treatment technologies achieve fixation/chemical stability and thus reduce the potential hazardousness. Specific decommissioning and remediation technologies facilitate closure of uranium or REE production facilities and sites at the end of their lifetime and prevent from future legacy/liability risks. As a cross-cutting issue of highest importance for all processes of uranium or REE production strict fulfillment of all safety requirements, namely radiation protection is required.

Application of appropriate technologies may initially result in higher effort, but can facilitate realization of relevant projects and in the end enables reduction of the total costs of ownership.

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