

Best Practice on facility characterisation from a material and waste end-state perspective

Provided by: The WPDD Task Group on Radiological Characterisation and Decommissioning

Corresponding authors: Arne LARSSON (Studsvik) / Inge WEBER (OECD NEA)
Arne.Larsson@studsvik.se / Inge.Weber@oecd.org

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The Task Group on Radiological Characterisation and Decommissioning within the Nuclear Energy Agency (NEA) Working Party on Decommissioning was established to identify and present Best Practice in radiological characterisation at different stages of decommissioning as well as areas that could or should be developed further by international cooperation and coordination.

The first phase of the project was focusing on general aspects of strategies for radiological characterisation in decommissioning of nuclear facilities. The second phase of the project focus on strategies for optimising radiological characterisation in a waste and materials end-state perspective, building on previous task group findings.

One of the activities within the second phase has been to conduct a survey with the main objective to identify Best Practice. The survey was in the form of a questionnaire in two versions, one for regulators and one for owners/implementers.

Sections of the questionnaire to gather views on Best Practice:

- Initiation of a characterisation program
- Planning and preparation
- Implementation (i.e. conducting the characterisation measurements and samplings)
- Data assessment phase (evaluation of the results)
- Quality assurance

A section on the national legislation in the regulator version and a case study section in the owner version complement the questionnaire in order to get an overview of the regulatory frameworks and also practical experiences.

The extensive questionnaire was distributed to a wide audience of recognised experts throughout the member states. 53 responses were received from in total 12 countries. Most responses were from Europe but also Asia and North America were represented.

The preliminary conclusions are:

- There is a solid experience in radiological characterisation among regulators as well as owners/implementers
- Responses demonstrates to large extent a common view of regulators and owners/implementers on Best Practice
- There are several “Do not know” on certain details – most likely due to limited experience of large characterisation projects
- Reducing uncertainty about waste and identification of waste classification are generally the highest priorities
- National legislation related to clearance as well as the disposal programs has a significant impact on radiological characterisation

The poster contains an overview of the objectives, results and conclusions of the survey.