

Topic 2: Application of Graded Approach to Disposal of Radioactive Waste

Current regulation for disposal of radioactive waste varies from high-level waste (Cat 1) to low-level waste (Cat 2) in Japan is described on attached information slides. Regulations on Cat 1 Facility and Cat 2 Facility can be divided into Cat 1 Facility, in which Approval of Design and Construction Plan and Pre-Service Inspection are conducted after Permit of Business according to the characteristics of Cat 1 waste vitrified with high-level waste liquid, and Cat 2 Facility, in which only Confirmation of Facility is performed after Permit of Business according to the characteristics of Cat 2 waste.

2 – 1

In Japan, as for Cat 2 Facility, Pit Disposal Facility in Rokkasho Aomori, where No.1 & 2 in operation and No.3 under "Inspection: Confirmation of Facility", has been progressing on the design and construction stage. Also, Trench Disposal Facility in Tokai Ibaraki under "Review: Permit of Business", is on the basic design stage.

Q 2 – 1

This regulatory framework is structured in line with Graded Approach. Is the regulation on disposal facility in each of your home country similar to the framework described above?

2 – 2

When such a mechanism is implemented, for example, with regard to the content of Bentonite, which expands and makes it difficult for water to permeate when absorbing water, in the soil piled up to cover the upper part of the pit, since the Pit Disposal Facility is a Cat 2 Facility, Design and Construction approval and Pre-service Inspection are not carried out. It makes it difficult to check details of what was explained at the time of basic design review, during and after construction.

Q 2 – 2

What do you think it would be possible to respond to the case where the details of the contents explained at the time of basic design review cannot be confirmed at the time of confirmation of facility inspection? Could one way to respond to this be coordination between review and inspection?