Group A Presentation

2023 August 8

Practical training on geochemical investigation and seismic survey

Resident Site selection Construction communication Operation After closure Closure Backfill • Long-• Groun Natural Accumulat Geophysical techniq term dwater investigation analog safety ue drainag experienc • Earthquake • Benefit monito е ring history • Rock • Engineers Hydrology and Stress operators • Ice age cooperati on Enhance process

Professional Training for Researchers and Operators

- Accumulate Research and Operation Experience
- Cooperation and Communication between Engineers and Operators (construction)
- New type of architecture

Q: What do you want to learn from the research?

- Taiwan is in a similar situation with Japan: Many earthquakes and nuclear spent fuel
- About the Horonobe Underground Research Facility
 - How was the site selected?
 - How was the seismic stability evaluated? Hardness of the mineral composition?

Q: What do you want to learn from the research?

- Migration of underground water terrain might affect the research and operation of spent fuel repository.
- Radionuclide transport parameters might change.
- How can this problem be solved?

In the grand scheme of things, where do the things you did today fall?

Importance of geochemical investigation and seismic survey

- 1. Understand the properties (e.g. hardness) of the ground structure for seismic safety evaluation and architectural design
- 2. Understand how the chemical properties would affect the solubility of elements, which is important to understand the migration of radionuclide