



STUK's Perspective on Near Surface Repositories

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Licensing

- License for operation of the VLLW repository is granted by STUK
 - STUK is authorized to grant license for operation when the disposal is not large scale disposal (Nuclear Energy Act, Section 16)
- Disposal of VLLW is not large scale disposal (Nuclear Energy Decree, Section 6)
 - Large scale disposal of nuclear waste
 - the disposal facility contains nuclear waste in which the total activity is higher than 1 TBq, or
 - the alpha activity, excluding natural uranium, thorium and depleted uranium, is higher than 10 GBq.
 - The disposal of VLLW
 - The average activity concentration of significant radionuclides does not exceed 100 kBq/kg, and
 - the total activity of significant radionuclides does not exceed the values mentioned above

Licensing

- Contents requirements of license application for operation are set in the Sections 42 and 43 of Nuclear Energy Decree; some extracts:
 - Documents equivalent to the documents referred to in Section 36 (operating license application for a nuclear facility) – graded
 - FSAR
 - Quality management program
 - Operational limits and conditions
 - Programme for radiation monitoring in the environment
 - Description of the organizations planning and implementing the operations
 - Description of the timetable of nuclear waste management and its estimated costs
 - Description of the types and amounts of nuclear waste

Safety requirements

- STUK Regulation on the Safety of Disposal of Nuclear Waste (STUK Y/4/2018)
 - Applied graded
 - For example, multi-barrier principle graded according to the containment period
 - Safety Case required
- Detailed safety requirements
 - YVL Guides applied
 - Detailed requirements for VLLW disposal are being prepared
 - Site (distance to water resources, control of surface waters, properties of soil and ground)
 - Barriers (relatively short containment period)
 - Monitoring
 - Safety case

