Summary of Underground Radioactive Waste Repositories

Repository	Location	Description	Waste Type & Capacity	Status	Comments
Bratrstvi	Czech Republic	Converted former uranium mine at a depth of 50 m	Approx 1,200 m^3 of NORM (naturally occurring radioactive materials)	Operating since 1974 Planned closure in 2030	Repository only occupies small area of approx 80 km long total excavations. Total inventory reported to end of 2010 was approx 1,000 m^3.
Richard	Czech Republic	Converted former limestone mine at a depth of 70 m	Licenced capacity of 8,400 m^3 of L&ILW from research & industrial uses	Operating since 1964 Planned closure in 2070	Repository only occupies small area of approx 40 km long total excavations. Total inventory reported to end of 2010 was approx 7,250 m^3.
VLJ Loviisa	Finland	Purpose-built, rock cavern repository at depth of 110 m in granite	10,000 m^3 of LLW 5,000 m^3 ILW	Operating since 1998 Planned closure 2055	Short-lived L&ILW from the 2 Loviisa reactors Access by 1.1 km long ramp tunnel Total inventory reported to end of 2010 was 1,682 m^3
VLJ Olkiluoto	Finland	Purpose-built, silo type repository at depth of 60 to 95 m in tonalite bedrock	5,000 m^3 of LLW 3,500 m^3 ILW Future expansion by up to 20,000 m^3 planned (4 additional disposal silos)	Operating since 1992	Short-lived L&ILW from the 2 operating Olkiluoto reactors, plus future waste from 3rd reactor under construction and 4th reactor being planned Access by ~ 1 km long ramp tunnel Total inventory reported to end of 2010 was 5,315 m^3
Konrad	Germany	Former iron ore mine being converted to repository for "non-heat generating radioactive waste". New purpose built disposal rooms being constructed at depth of approx 800 m.	Licenced capacity of 303,000 m^3. First phase capacity 63,000 m^3.	Currently under construction. Operation expected to start in 2019.	Licenced for "non-heat generating" waste category, which includes long-lived wastes (but not HLW or fuel).
Bataapati	Hungary	Purpose-built, rock cavern repository at depth of 250 m in granite	Total planned capacity of 25,000 m^3	Currently under commissioning. Operation expected to start in early 2013 and end in 2084	L&ILW from operation of Hungary's nuclear power plants.
Himdalen	Norway	Purpose-built, rock cavern repository at depth of 50 m in gneiss bedrock	Total capacity of 2,000 m^3	Operating since 1999 Planned closure in 2030	Built into a hillside with ramp access. Mainly research reactor wastes.

Repository	Location	Description	Waste Type & Capacity	Status	Comments
DNDR Baita Bihor	Romania	Converted former uranium mine at a depth of 840 m	Total capacity of 5,000 m^3	Operating since 1985	Mainly L&ILW from research and industrial uses Total inventory reported to end of 2010 was about 2,000 m^3.
Wolsung L&ILW Disposal Centre	South Korea	Purpose-built, silo type repository at depth of 200 m in granodiorite bedrock	20,000 m^3 in 6 silos Expansion up to 160,000 m^3 planned	Currently under commissioning. Operation expected to start in early 2013	L&ILW from operation of all reactors in South Korea
SFR	Sweden	Purpose-built, rock cavern & silo type repository at depth of 50 m in granite	Current capacity 63,000 m^3 of L&ILW Future expansion of up to 200,000 m^3 planned.	Operating since 1988 Expansion planned in 2020	Short-lived L&ILW from all reactors in Sweden Located under Baltic Sea, access by ~1 km long ramp tunnel Total inventory reported to end of 2010 was approx 34,000 m^3
WIPP	USA	Purpose-built, rock cavern repository at depth of 655 m in a salt bed	175,000 m^3 of long-lived transuranic waste (TRU) from US defense related activities	Operating since 1999	Facility was ready for operation in 1988, but start of operation was delayed by court challenges. Total inventory reported to end of 2010 was approx 64,000 m^3 of “contact handled” (LLW) and 2,400 m^3 of “remote handled” (ILW)

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