

Site (Data) : Richard

Stock of waste as at December 2004

Country: CZECH REPUBLIC

Reporting Year: 2004

Site Name: Richard

Full Name: Radioactive Waste Repository Richard

Inventory Reporting Date: December 2004

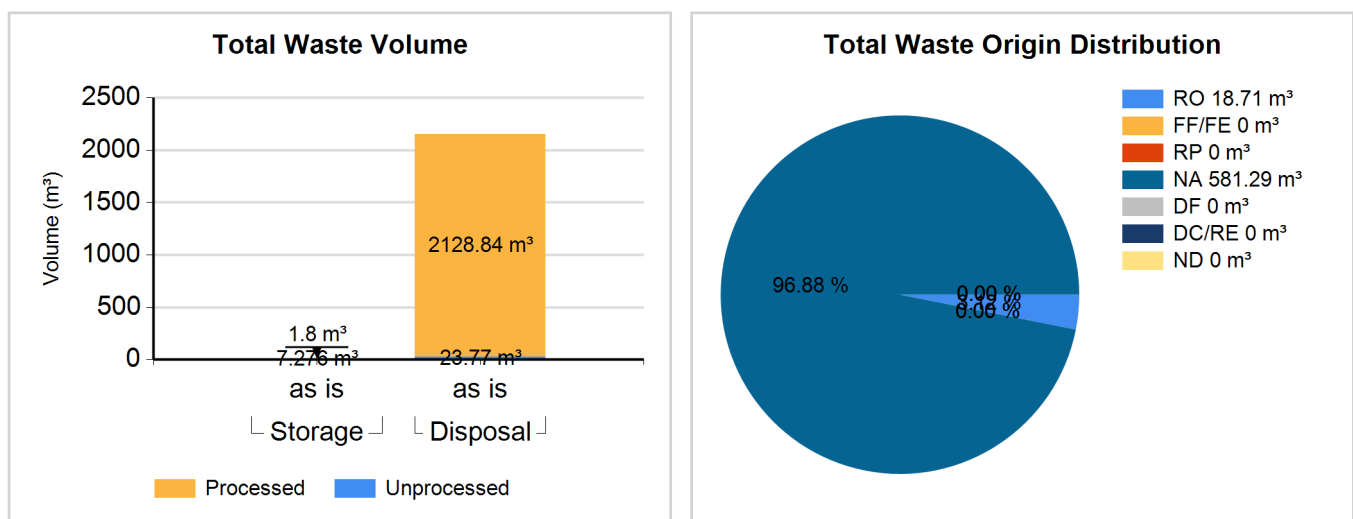
Waste Matrix Used: cz-eu

Comment # 380: Information

Abandoned mine Richard (60 km N of Prague) serves as repository for radioactive waste from research, industry and medicine. Basic waste acceptance requirements are a dose rate at 5 cm distance from the surface of the waste package less than 1 mSv/h. The accepted waste corresponds to the IAEA LLW waste class.

Waste Inventory

Est=distribution is an estimate, Proc.=Is the waste processed (Yes/No)? RO=Reactor Operations, FF/FE=Fuel Fabrication/Fuel Enrichment, RP=Reprocessing, NA=Nuclear Applications,DF=Defence, DC/RE=Decommissioning/Remediation, ND=Not Determined



Note: where volume "as dispo" is provided, volume "as is" is used in the graph instead.

Waste Class: LILW-SL

Waste Class Name	Location / Facility	Proc	Est	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-SL	Storage	N	Y	4.603	4.603	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Storage	Y	N	0.200	0.200	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Disposal	N	Y	23.770	23.770	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Disposal	Y	Y	2128.840	2128.840	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Waste Class: LILW-LL

Waste Class Name	Location / Facility	Proc	Est	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-LL	Storage	N	Y	2.673	2.673	18.71	0.00	0.00	81.29	0.00	0.00	0.00
LILW-LL	Storage	Y	Y	1.600	1.600	0.00	0.00	0.00	100.00	0.00	0.00	0.00

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Spent Sources <=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Cf-252	1			Y	N	N	3.376E-003	2004.12
	3.376E-003							
Co-60		18		Y	N	N	4.241E+005	2004.12
		4.241E+005						
Cs-137	22	13		Y	N	N	2.443E+005	2004.12
	1.481E+001	2.443E+005						
Pm-147	1			Y	N	N	1.336E-004	2004.12
	1.336E-004							

Spent Sources <=30 years in Disposition

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Ba-133	5			Y	N	N	1.320E-002	2004.12
	1.320E-002							
Ce-144	2			Y	N	N	1.810E-003	2004.12
	1.810E-003							
Ce-144	2			Y	N	N	1.810E-003	2004.12
	1.810E-003							
Cf-252		1		Y	N	N	1.392E+001	2004.12
		1.392E+001						
Co-57	4			Y	N	N	3.730E-003	2004.12
	3.730E-003							
Co-60	677	135		Y	N	N	4.913E+005	2004.12
	2.685E+002	4.910E+005						

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Cs-137	152	144		Y	N	N	3.617E+005	2004.12
	8.303E+001	3.616E+005						
Fe-55	3			Y	N	N	2.974E-001	2004.12
	2.974E-001							
H-3	2	6		Y	N	N	4.348E+003	2004.12
	1.229E-001	4.348E+003						
Kr-85	52	26		Y	N	N	1.369E+003	2004.12
	3.750E+001	1.331E+003						
Na-22	1			Y	N	N	7.594E-004	2004.12
	7.594E-004							
Pm-147	4			Y	N	N	4.700E+000	2004.12
	4.700E+000							
Ru-106	3			Y	N	N	1.238E-002	2004.12
	1.238E-002							
Sr-90	201	30		Y	N	N	2.754E+003	2004.12
	1.185E+002	2.635E+003						
Tl-204	1			Y	N	N	9.906E-002	2004.12
	9.906E-002							
Zn-65	1			Y	N	N	1.775E-003	2004.12
	1.775E-003							

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Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	173	50	Y	N	N	3.373E+003	2004.12
	3.562E+001	3.337E+003					
Pu-238	4	2	Y	N	N	1.116E+002	2004.12
	2.520E+000	1.091E+002					
Pu-239		38	Y	N	N	2.434E+003	2004.12
		2.434E+003					
Ra-226	1		Y	N	N	3.658E-001	2004.12
	3.658E-001						
U-238	2		Y	N	N	9.540E-001	2004.12
	9.540E-001						

Spent Sources > 30 years in Disposition

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	107	66	Y	N	N	7.516E+003	2004.12
	6.789E+001	7.448E+003					
C-14	12	2	Y	N	N	1.431E+001	2004.12
	3.310E+000	1.100E+001					
Pu-239	17	25	Y	N	N	1.206E+003	2004.12
	6.200E+000	1.200E+003					