

Site (Data) : Richard

Stock of waste as at December 2005

Country: CZECH REPUBLIC

Reporting Year: 2005

Site Name: Richard

Full Name: Radioactive Waste Repository Richard

Inventory Reporting Date: December 2005

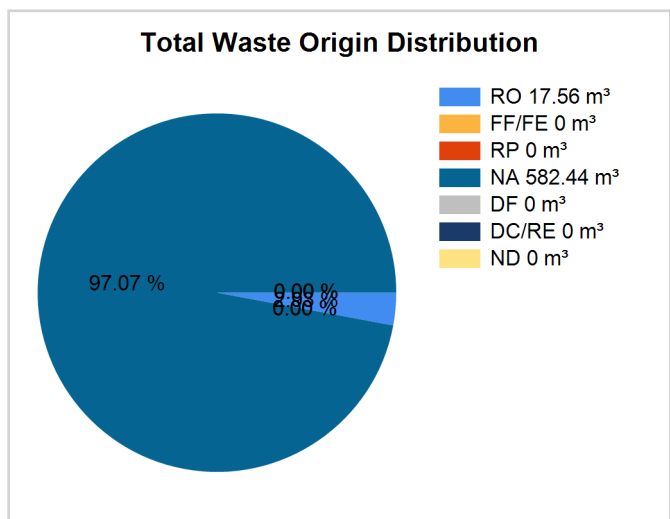
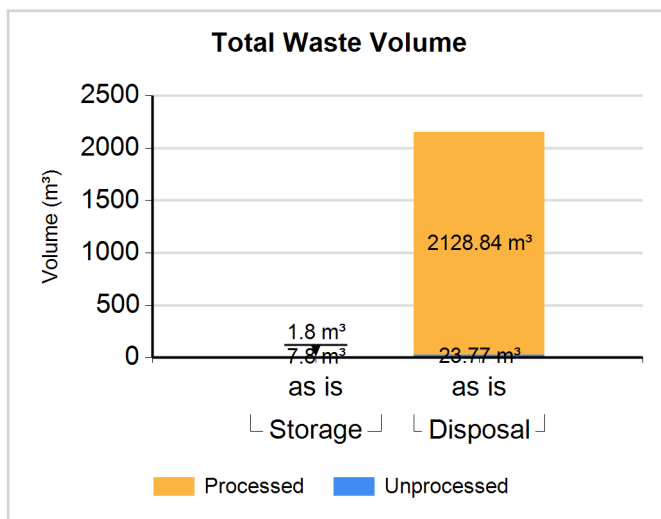
Waste Matrix Used: cz-eu

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	5.000	5.000	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	2.800	2.800	17.56	0.00	0.00	82.44	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 m ore 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	2.596E-003	2005.12
	2.596E-003							
Co-60		18		Y	N	N	3.719E+005	2005.12
		3.719E+005						
Cs-137	22	13		Y	N	N	2.388E+005	2005.12
	1.448E+001	2.388E+005						
Pm-147	1			Y	N	N	1.026E-004	2005.12
	1.026E-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 m ore than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Ba-133	7			Y	N	N	1.770E-004	2005.12
	1.770E-004							
Cd-109	14			Y	N	N	6.842E+000	2005.12
	6.842E+000							
Ce-144	2			Y	N	N	7.430E-004	2005.12
	7.430E-004							
Ce-144				Y	N	N	0.000E+000	2005.12
Cf-252	14	1		Y	N	N	1.131E+001	2005.12
	6.050E-001	1.070E+001						
Co-57	15			Y	N	N	3.920E-002	2005.12
	3.920E-002							

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Co-60	948	181	1	Y	N	N	9.628E+005	2005.12
	2.432E+002	9.036E+005	5.898E+004					
Cs-134	1			Y	N	N	2.059E-004	2005.12
	2.059E-004							
Cs-137	187	147	1	Y	N	N	4.105E+005	2005.12
	9.713E+001	3.534E+005	5.697E+004					
Eu-152	2			Y	N	N	2.354E-004	2005.12
	2.354E-004							
Fe-55	19			Y	N	N	3.079E+000	2005.12
	3.079E+000							
H-3	3	7		Y	N	N	4.136E+003	2005.12
	9.381E-001	4.135E+003						
Kr-85	79	33		Y	N	N	1.493E+003	2005.12
	1.299E+002	1.363E+003						
Mn-54	1			Y	N	N	2.144E-007	2005.12
	2.144E-007							
Na-22	2			Y	N	N	1.031E-005	2005.12
	1.031E-005							
Pb-210	1			Y	N	N	1.087E-004	2005.12
	1.087E-004							
Pm-147	26			Y	N	N	5.798E+001	2005.12
	5.798E+001							
Ru-106	3			Y	N	N	6.226E-003	2005.12
	6.226E-003							
Se-75	16			Y	N	N	1.199E-001	2005.12
	1.199E-001							
Sr-89				Y	N	N	0.000E+000	2005.12
Sr-90	276	31		Y	N	N	2.742E+003	2005.12
	1.613E+002	2.581E+003						

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Tl-204	4			Y	N	N	8.246E-002	2005.12
	8.246E-002							
Tm-170				Y	N	N	0.000E+000	2005.12
Y-88				Y	N	N	0.000E+000	2005.12
Zn-65	1			Y	N	N	6.298E-004	2005.12
	6.298E-004							

Spent Sources > 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c	o	n	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	194	51	Y	N	N	N	N	N	4.277E+003	2005.12
	3.625E+001	4.241E+003								
C-14	1		Y	N	N	N	N	N	2.000E-004	2005.12
	2.000E-004									
K-40	2		Y	N	N	N	N	N	6.920E-007	2005.12
	6.920E-007									
Ni-63	1		Y	N	N	N	N	N	3.205E-001	2005.12
	3.205E-001									
Pu-238	4	2	Y	N	N	N	N	N	1.108E+002	2005.12
	2.500E+000	1.083E+002								
Pu-239		38	Y	N	N	N	N	N	2.434E+003	2005.12
		2.434E+003								
Ra-226	1		Y	N	N	N	N	N	3.657E-001	2005.12
	3.657E-001									
U-238	2		Y	N	N	N	N	N	9.540E-001	2005.12
	9.540E-001									

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	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	107	66	Y	N	N	7.544E+003	2005.12
	6.778E+001	7.476E+003					
C-14	12	2	Y	N	N	1.431E+001	2005.12
	3.309E+000	1.100E+001					
Pu-239	17	25	Y	N	N	1.206E+003	2005.12
	6.200E+000	1.200E+003					