

Site (Data) : Püspökszil

Stock of waste as at December 2009

Country: HUNGARY

Reporting Year: 2009

Site Name: Püspökszil

Full Name: Radioactive Waste Treatment and Disposal Facility (RWTDF)

Inventory Reporting Date: December 2009

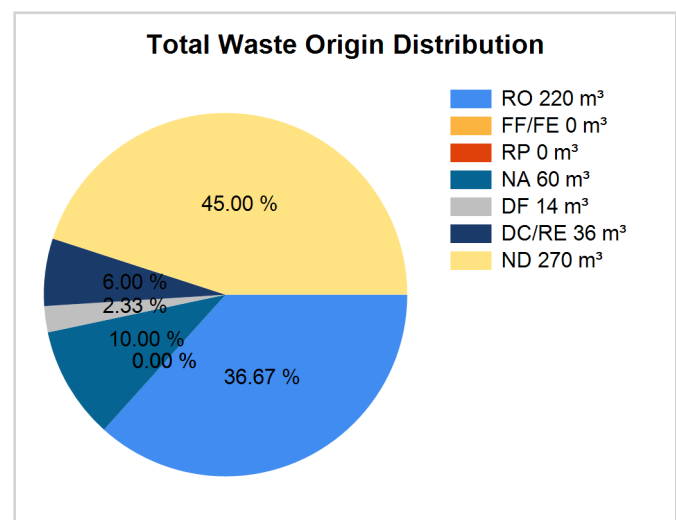
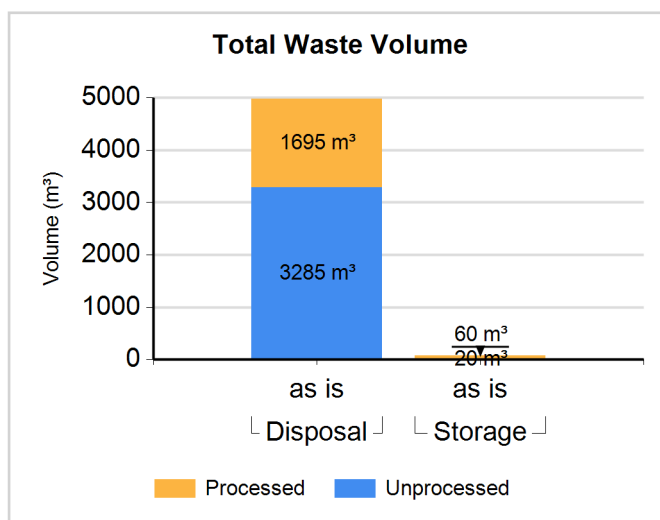
Waste Matrix Used: PURAM_1

Comment # 339: Percentage of Capacity Used

The percentage of disposal facility capacity used takes in to consideration the volume of waste plus losses due to voids, buffer and backfill materials

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	Disposal	N	N	1330.000	1330.000	20.00	0.00	0.00	20.00	2.00	8.00	50.00
LILW-SL	Disposal	Y	N	685.000	685.000	80.00	0.00	0.00	0.00	0.00	0.00	20.00

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	N	20.000	20.000	10.00	0.00	0.00	10.00	5.00	10.00	65.00
LILW-LL	Storage	Y	N	60.000	60.000	10.00	0.00	0.00	10.00	5.00	10.00	65.00
LILW-LL	Disposal	N	N	1955.000	1955.000	20.00	0.00	0.00	20.00	2.00	8.00	50.00
LILW-LL	Disposal	Y	N	1010.000	1010.000	80.00	0.00	0.00	0.00	0.00	0.00	20.00

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Processing - Treatment method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Compaction	N	N	Same	N

Processing - Conditioning method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Bituminization	N	N		Y
Cementation	N	N	Increase	N
Encapsulation	N	N	Same	N

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					
Co-60	2846	428		Y	N	Y	2.863E+005	
	2.550E+002	2.860E+005						
Cs-137	1085	215		Y	N	Y	9.646E+003	
	7.160E+002	8.930E+003						
H-3	747	37		Y	N	Y	1.742E+003	
	2.400E+000	1.740E+003						
Ir-192	4134	3		Y	N	Y	1.310E+002	
	1.150E+002	1.600E+001						
Kr-85	312	1		Y	N	Y	6.060E+001	
	5.090E+001	9.700E+000						
Pm-147	111			Y	N	Y	5.000E+000	
	5.000E+000							
Sr-90	201	18		Y	N	Y	3.766E+002	
	3.560E+001	3.410E+002						

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	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					
Co-60	4177	4		Y	Y	Y	2.168E+002	
	8.880E+001	1.280E+002						
Cs-137	1435	61		N	Y	Y	4.436E+003	
	3.060E+002	4.130E+003						
H-3	1114	353		Y	Y	Y	8.467E+004	
	5.680E+002	8.410E+004						
Kr-85	6956	1		Y	Y	Y	6.440E+001	
	5.980E+001	4.600E+000						
Pm-147	603			N	Y	Y	3.900E+000	
	3.900E+000							
Po-210	531			N	Y	Y	0.000E+000	
	0.000E+000							
Sr-90	1137	28		Y	N	Y	2.645E+004	
	2.470E+002	2.620E+004						

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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	7557	36	Y	N	Y	1.032E+003	
	1.700E+002	8.620E+002					
Am-241	49	36	Y	N	Y	9.718E+003	
	9.780E+001	9.620E+003					
C-14	14		Y	N	Y	2.000E-001	
	2.000E-001						
Pu-238	11		N	Y	Y	1.230E+001	
	1.230E+001						
Pu-238	1	1	Y	N	Y	3.719E+002	
	9.000E-001	3.710E+002					
Pu-239	503		N	Y	Y	1.000E-001	
	1.000E-001						
Pu-239	10	74	Y	N	Y	4.487E+003	
	1.660E+001	4.470E+003					
Ra-226	1371	2	Y	N	Y	9.250E+001	
	6.960E+001	2.290E+001					
Ra-226	22	11	Y	N	Y	1.274E+002	
	2.880E+001	9.860E+001					
Tc-99	60		Y	N	Y	4.000E-003	
	4.000E-003						

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	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241	923	38	N	Y	Y	1.264E+003	
	5.360E+001	1.210E+003					
Am-241	18	32	N	Y	Y	2.494E+003	
	2.440E+001	2.470E+003					
C-14	138		Y	N	Y	1.000E+001	
	1.000E+001						
Pu-238	64		N	Y	Y	1.230E+001	
	1.230E+001						
Pu-238	2	2	N	Y	Y	4.363E+001	
	3.000E-002	4.360E+001					
Pu-239	22	1	N	Y	Y	1.060E+001	
	9.000E-001	9.700E+000					
Ra-226	306		Y	N	Y	4.700E+000	
	4.700E+000						
Ra-226	6	1	N	Y	Y	2.190E+001	
	5.400E+000	1.650E+001					
Tc-99	3030	1	N	Y	Y	1.080E+002	
	1.030E+002	5.000E+000					

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RadioNuclide Inventory in Disposal

RadioNuclide	Activity (GBq)
Americium (Am-241)	31.1
Carbon (C-14)	3170
Cesium (Cs-137)	14.8
Cobalt (Co-60)	6440
Hydrogen (H-3)	263000
Iridium (Ir-192)	56.2
Krypton (Kr-85)	33.5
Plutonium (Pu-239)	1390
Promethium (Pm-147)	1430
Radium (Ra-226)	73.1
Strontium (Sr-90)	6200
Technetium (Tc-99)	0.2

RadioNuclide Inventory in Storage

RadioNuclide	Activity (GBq)
Americium (Am-241)	0.03
Carbon (C-14)	728
Cesium (Cs-137)	12.5
Cobalt (Co-60)	4.6
Hydrogen (H-3)	8780
Krypton (Kr-85)	518
Plutonium (Pu-239)	2.26
Promethium (Pm-147)	0.02
Radium (Ra-226)	13.9
Strontium (Sr-90)	4.2