

Site (Data) : Kh SE

Stock of waste as at December 2011

Country: UKRAINE

Reporting Year: 2011

Site Name: Kh SE

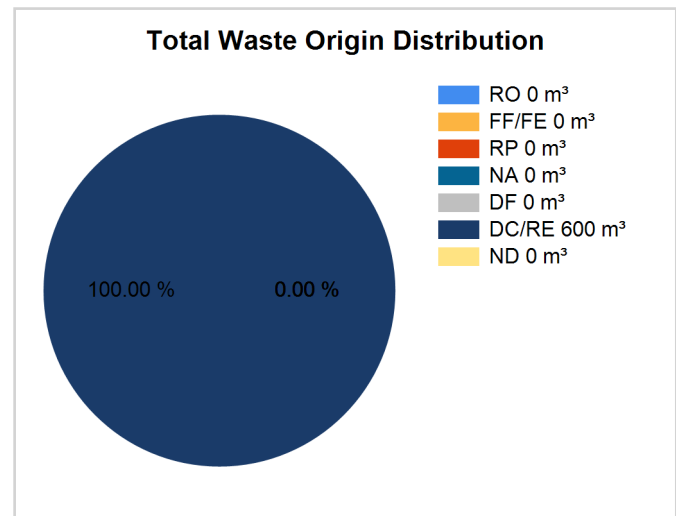
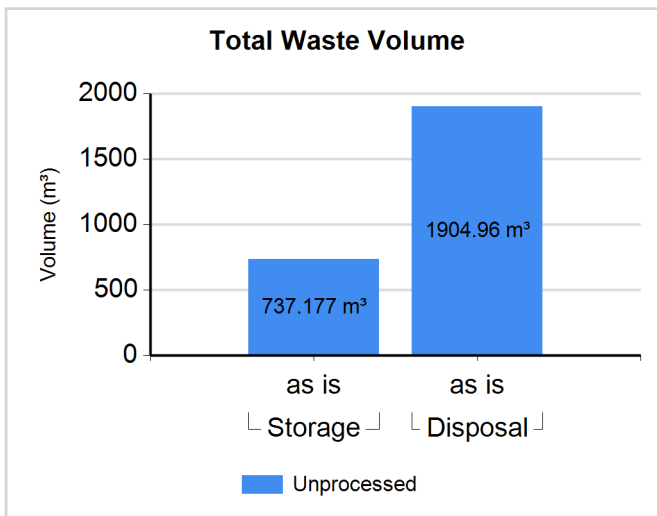
Full Name: Kharkov State Interregional Special Enterprise

Inventory Reporting Date: December 2011

Waste Matrix Used: Ukraine

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: Mid-Active

Waste Class Name	Location / Facility	Proc.	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
Mid-Active	Storage / Module 21	N	N	2.047	2.047	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Storage / PIPE	N	N	735.130	735.130	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Disposal / Module 1	N	N	1044.960	1044.960	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Disposal / Module 18	N	N	60.000	60.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Disposal / Module 19	N	N	400.000	400.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00
Mid-Active	Disposal / Module 20	N	N	400.000	400.000	0.00	0.00	0.00	0.00	0.00	100.00	0.00

Comment # 6808: The additional characteristics of the waste

Unprocessed: liquid (aqueous), solid (non-dispersible)

Processed: solid (non-dispersible)

Comment # 22684: pipe

735,13 m3

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Processing - Conditioning method(s)

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

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					
Cd-109	22			N	Y	Y	0.000E+000	
Ce-139	1			N	Y	Y	0.000E+000	
	0.000E+000							
Ce-139	1			N	Y	Y	0.000E+000	
Cf-252	1			N	Y	Y	0.000E+000	
Cf-252	1			N	Y	Y	0.000E+000	
	0.000E+000							
Cf-252	16	1		N	Y	Y	1.700E+001	
		1.700E+001						
Co-56	25			N	Y	Y	0.000E+000	
Co-56	17			N	Y	Y	0.000E+000	
Co-56	1			N	Y	Y	0.000E+000	
Co-57	3			N	Y	Y	0.000E+000	

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Co-57	1			N	Y	Y	0.000E+000	
Co-57	2			N	Y	Y	0.000E+000	
	0.000E+000							
Co-57	26			N	Y	Y	0.000E+000	
Co-57	1			N	Y	Y	0.000E+000	
	0.000E+000							
Co-58	31			N	Y	Y	0.000E+000	
Co-60	427			N	Y	Y	1.160E+002	
	1.160E+002							
Co-60	81			N	Y	Y	3.070E+002	
	3.070E+002							
Co-60	1			N	Y	Y	0.000E+000	
Co-60	3			N	Y	Y	5.000E+000	
	5.000E+000							
Co-60	75			N	Y	Y	0.000E+000	
Co-60	1			N	Y	Y	0.000E+000	
Co-60	1630			N	Y	Y	2.650E+002	
	2.650E+002							
Co-60	20			N	Y	Y	0.000E+000	
	0.000E+000							
Co-60	2			N	Y	Y	4.000E+000	
	4.000E+000							
Co-60		2		N	Y	Y	4.700E+001	
		4.700E+001						

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Co-60		29		N	Y	Y	3.100E+002	
		3.100E+002						
Co-60	39			N	Y	Y	0.000E+000	
	0.000E+000							
Co-60	30			N	Y	Y	6.350E+001	
	6.350E+001							
Cs-134	1			N	Y	Y	0.000E+000	
	0.000E+000							
Cs-137	703			N	Y	Y	8.700E+001	
	8.700E+001							
Cs-137	75			N	Y	Y	1.000E+002	
	1.000E+002							
Cs-137		318		N	Y	Y	1.000E+004	
		1.000E+004						
Cs-137		2557	1	N	Y	Y	8.450E+004	
		8.450E+004						
Cs-137	78			N	Y	Y	2.000E+001	
	2.000E+001							
Cs-137		111		N	Y	Y	5.900E+003	
		5.900E+003						
Cs-137		271		N	Y	Y	1.100E+004	
		1.100E+004						
Cs-137	2			N	Y	Y	0.000E+000	
Cs-137		2557		N	Y	Y	8.450E+004	
		8.450E+004						
Cs-137	6	89		N	Y	Y	2.128E+003	
	7.900E+000	2.120E+003						
Cs-137	9			N	Y	Y	3.270E+000	
	3.270E+000							

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Cs-137	60	520		N	Y	Y	2.603E+004	
	2.660E+001	2.600E+004						
Cs-137		2		N	Y	Y	7.000E+000	
		7.000E+000						
Eu-152		1		N	Y	Y	2.300E+001	
		2.300E+001						
Fe-55	15			N	Y	Y	2.000E+000	
	2.000E+000							
Fe-55	2			N	Y	Y	0.000E+000	
Fe-55	2			N	Y	Y	0.000E+000	
Fe-59	8			N	Y	Y	0.000E+000	
H-3	43			N	Y	Y	1.000E-001	
	1.000E-001							
H-3	376			N	Y	Y	1.800E+002	
	1.800E+002							
H-3		38		N	Y	Y	3.100E+004	
		3.100E+004						
H-3		10		N	Y	Y	1.610E+002	
		1.610E+002						
Hg-203	1			N	Y	Y	0.000E+000	
	0.000E+000							
Hg-203	5			N	Y	Y	1.000E+000	
	1.000E+000							
I-125	2			N	Y	Y	0.000E+000	
I-131	1			N	Y	Y	1.000E+000	
	1.000E+000							

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Ir-192	12			N	Y	Y	1.000E-001	
	1.000E-001							
Ir-192	3			N	Y	Y	8.800E+000	
	8.800E+000							
Ir-192	1			N	Y	Y	2.300E+000	
	2.300E+000							
Ir-192	221			N	Y	Y	4.000E-001	
	4.000E-001							
Ir-192	12			N	Y	Y	1.120E+001	
	1.120E+001							
Kr-85	1			N	Y	Y	2.300E+000	
	2.300E+000							
Mn-54	13			N	Y	Y	0.000E+000	
Mn-54	1			N	Y	Y	0.000E+000	
	0.000E+000							
Mn-54	5			N	Y	Y	0.000E+000	
Na-22	3			N	Y	Y	0.000E+000	
Na-22	1			N	Y	Y	0.000E+000	
Na-22	1			N	Y	Y	0.000E+000	
	0.000E+000							
Na-22	14			N	Y	Y	0.000E+000	
Pm-147	42	10		N	Y	Y	3.602E+002	
	2.000E-001	3.600E+002						
Pm-147	21			N	Y	Y	0.000E+000	

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Pm-147	10			N	Y	Y	0.000E+000	
Po-210	130			N	Y	Y	0.000E+000	
Ru-106	1			N	Y	Y	0.000E+000	
Sn-113	24			N	Y	Y	0.000E+000	
Sn-113	1			N	Y	Y	0.000E+000	
	0.000E+000							
Sn-119m	3			N	Y	Y	0.000E+000	
Sn-119m	1			N	Y	Y	0.000E+000	
Sn-119m	2			N	Y	Y	0.000E+000	
	0.000E+000							
Sr-90	45			N	Y	Y	0.000E+000	
	0.000E+000							
Sr-90	2			N	Y	Y	0.000E+000	
	0.000E+000							
Sr-90	6459			N	Y	Y	2.090E+002	
	2.090E+002							
Sr-90	100			N	Y	Y	2.500E+001	
	2.500E+001							
Sr-90	18			N	Y	Y	0.000E+000	
Sr-90	1837	1		N	Y	Y	3.000E+002	
	3.000E+002							
Sr-90		20		N	Y	Y	1.600E+002	
		1.600E+002						

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Sr-90	165			N	Y	Y	5.300E+001	
	5.300E+001							
Sr-90		1		N	Y	Y	3.200E+001	
		3.200E+001						
TI-204	9			N	Y	Y	3.100E+000	
	3.100E+000							
TI-204	4			N	Y	Y	2.100E+000	
	2.100E+000							
TI-204	1			N	Y	Y	0.000E+000	
Tm-170	2			N	Y	Y	0.000E+000	
Tm-170	1			N	Y	Y	0.000E+000	
Tm-170	21			N	Y	Y	0.000E+000	
Tm-170	1			N	Y	Y	0.000E+000	
Y-88	1			N	Y	Y	0.000E+000	
	0.000E+000							
Zn-65	79			N	Y	Y	0.000E+000	
Zn-65			1	N	Y	Y	1.090E+005	
			1.090E+005					

Spent Sources > 30 years in Disposition

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c	u	c	Total Activity for all Groups (GBq)	Decay Date			
	Group I less than or equal 2 GBq	Group II more than 2GBq						n	n	a
	num/activity	num/activity						d	d	t

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Am-241		6	N	Y	Y	7.280E+001	
		7.280E+001					
Am-241	82		N	Y	Y	2.700E+000	
	2.700E+000						
Am-241	2		N	Y	Y	0.000E+000	
	0.000E+000						
Am-241	160		N	Y	Y	9.800E+001	
	9.800E+001						
Am-241		75	N	Y	Y	1.100E+003	
		1.100E+003					
Am-241	50	48	N	Y	Y	5.629E+002	
	1.690E+001	5.460E+002					
Am-243		1	N	Y	Y	1.500E+003	
		1.500E+003					
C-14	5		N	Y	Y	4.000E-001	
	4.000E-001						
C-14	6		N	Y	Y	1.000E-001	
	1.000E-001						
Ni-63	10		N	Y	Y	8.100E+000	
	8.100E+000						
Ni-63	5		N	Y	Y	1.570E+000	
	1.570E+000						
Ni-63	14		N	Y	Y	8.800E+000	
	8.800E+000						
Np-237	2		N	Y	Y	0.000E+000	
	0.000E+000						
Pu-238	2715		N	Y	Y	3.100E+000	
	3.100E+000						
Pu-238	1553		N	Y	Y	9.100E+002	
	9.100E+002						

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Pu-238		78	N	Y	Y	8.000E+003	
		8.000E+003					
Pu-238	4	1	N	Y	Y	7.300E+000	
		7.300E+000					
Pu-238	2		N	Y	Y	0.000E+000	
		0.000E+000					
Pu-239	1744		N	Y	Y	0.000E+000	
Pu-239	141		N	Y	Y	0.000E+000	
		0.000E+000					
Pu-239	18923		N	Y	Y	3.600E+002	
		3.600E+002					
Pu-239		8	N	Y	Y	1.000E+002	
		1.000E+002					
Pu-239	9453		N	Y	Y	1.300E+001	
		1.300E+001					
Pu-239		1	N	Y	Y	1.600E+002	
		1.600E+002					
Pu-239	2		N	Y	Y	0.000E+000	
		0.000E+000					
Pu-239	3		N	Y	Y	0.000E+000	
		0.000E+000					
Pu-239	10098		N	Y	Y	3.200E+002	
		3.200E+002					
Pu-239	1		N	Y	Y	0.000E+000	
Ra-226	2		N	Y	Y	3.700E-001	
		3.700E-001					
Ra-226	5		N	Y	Y	0.000E+000	
		0.000E+000					

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Ra-226	1		N	Y	Y	0.000E+000	
	0.000E+000						
Ra-226	5		N	Y	Y	0.000E+000	
Ra-226	978		N	Y	Y	2.000E-001	
	2.000E-001						
Ra-226	2		N	Y	Y	0.000E+000	
	0.000E+000						
Th-232	2		N	Y	Y	0.000E+000	
Th-232	1		N	Y	Y	0.000E+000	
U-234	53		N	Y	Y	0.000E+000	
	0.000E+000						
U-238	26		N	Y	Y	0.000E+000	
U-238	2		N	Y	Y	0.000E+000	
U-238	43		N	Y	Y	0.000E+000	
	0.000E+000						

Multiple Nuclides SRS in Disposition

Nuclide	Activity of Sources (GBq)	cond	uncond	cat	Decay Date
Sr-90	1.300E+002	N	Y	Y	
Y-90	0.000E+000	N	Y	N	
Sr-90	5.300E-001	N	Y	Y	