

ENVIRONMENTAL PROTECTION AGENCY



ON RADIONUCLIDES DISCHARGED FROM NUCLEAR POWER

REACTORS

LITHUANIA, 2014

Compilation sheets for reporting radionuclides discharged from nuclear power reactors during normal operation

A. 1

La-140 Ce-141 Ce-144

Pu-238

Cm-243

Pu-239+Pu-240 Am-241 Cm-242

Compilation sheet for reporting airborne discharges from nuclear power reactors		
Reactor site (name/type): RBMK-1500, Ignalina Nuclear Power Plant, Lithuania	Period (year of discharge): 2013	
Air volume released during the period $(m^3) - 2,773*10^{10}$		

Category/Radionucklides	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
Noble gases			
Ar-41		0	
Kr-85		0	
Kr-85m		0	
Kr-87		0	
Kr-88		0	
Kr-89		0	
Xe-131m		0	
Xe-133		0	
Xe-133m		0	
Xe-135		0	
Xe-135m		0	
Xe-137		0	
Xe-138		0	
Particulates (excluding iodines)			
Cr-51		0	
Mn-54		$1.309*10^4$	
Co-58		0	
Fe-59		0	
Co-60	7,1*10 ⁻³	$1,372*10^{7}$	
Zn-65	7,1 10	0	
Sr-89		$1,708*10^{6}$	
Sr-90	2,0*10 ⁻⁵	$3,690*10^6$	
Zr-95	2,0 10	0	
Nb-95		0	
Ag-110m		0	
Sb-122		0	
Sb-124		0	
Sb-125		-	Not measured
Cs-134		0	i tot mousurou
Cs-137	5,7*10 ⁻³	9,371*10 ⁶	
Ba-140	- , ~	0	
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Not measured
Not measured
Not measured
Not measured
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Category/Radionucklides	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
Cm-244		-	Not measured
Total-alpha	1,10*10 ⁻⁶	0	
Iodines			
I-131		0	
I-132		0	
I-133		0	
I-135		0	
Tritium	9,0*10 ⁻¹	$4,144*10^{9}$	
Carbon-14	5,2*10-1	4,392*10 ⁹	

A.2.

Compilation sheet for reporting liquid discharges from nuclear power reactors			
Reactor site (name/type):RBMK-1500,IgnalinaPeriod (year of discharge):2013Nuclear Power Plant, Lithuania			
Water volume released during the period (m^3) : 2,3*10 ⁷			

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
Tritium	3300	1,92*10 ¹⁰	Measured H-3 in wate form
Other radionuclides (excluding H-3)			
S -35(¹)			Not measured
Cr-51 Mn-54 Fe-55 Fe-59 Co-58 Co-60 Ni-63 Zn-65 Sr-89 Sr-90 Zr-95 Nb-95 Ru-103 Ru-106 Ag-110m Sb-122 Te-123m Sb-124 Sb-125 I-131	20	$ \begin{array}{c} 0\\ 0\\ -\\ 0\\ 0\\ 5,08*10^{6}\\ -\\ 0\\ -\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\ 0\\$	Not measured Not measured Not measured

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
Cs-134	(-4)	0	
Cs-137	20	$1,01*10^7$	
Ba-140		0	
La-140		0	
Ce-141		0	
Ce-144		0	
Pu-238		0	
Pu-239 + Pu-240	2000	0	
Am-241		-	Not measured
Cm-242		-	Not measured
Cm-243		-	Not measured
Cm-244		-	Not measured
Total-Alpha	11	0	
