



**ENVIRONMENTAL PROTECTION
AGENCY**

REPORT

**ON RADIONUCLIDES DISCHARGED FROM NUCLEAR POWER
REACTORS**

LITHUANIA, 2013

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

A. 1

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): 2012
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Air volume released during the period (m³) – 2,771*10¹⁰

Category/Radionuclides	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
<i>Noble gases</i>			
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	
<i>Particulates (excluding iodines)</i>			
Cr-51		0	
Mn-54		4,00*10 ³	
Co-58		0	
Fe-59		0	
Co-60	7,1*10 ⁻³	3,316*10 ⁷	
Zn-65		0	
Sr-89		2,193*10 ⁶	
Sr-90	2,0*10 ⁻⁵	2,282*10 ⁶	
Zr-95		0	
Nb-95		0	
Ag-110m		0	
Sb-122		0	
Sb-124		0	
Sb-125		-	Not measured
Cs-134		1,70*10 ⁵	
Cs-137	5,5*10 ⁻³	7,4*10 ⁶	
Ba-140		0	
La-140		0	
Ce-141		0	
Ce-144		0	
Pu-238		-	Not measured
Pu-239+Pu-240		-	Not measured
Am-241		-	Not measured
Cm-242		-	Not measured
Cm-243		-	Not measured

Category/Radionuclides	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	
<i>Iodines</i>			
I-131		0	
I-132		0	
I-133		0	
I-135		0	
Tritium	8,0*10 ⁻¹	4,82*10 ⁹	
Carbon-14	5,0*10 ⁻¹	2,069*10 ⁹	

A.2.

Compilation sheet for reporting liquid discharges from nuclear power reactors

Reactor site (name/type): RBMK-1500, Ignalina Nuclear Power Plant, Lithuania	Period (year of discharge): 2012
Water volume released during the period (m ³): 5,9*10 ⁷	

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
<i>Tritium</i>	3300	2,114*10 ¹⁰	Measured H-3 in water form

Other radionuclides (excluding H-3)

S-35 ⁽¹⁾			Not measured
Cr-51		0	
Mn-54		0	
Fe-55		-	Not measured
Fe-59		0	
Co-58		0	
Co-60	20	4,65*10 ⁶	
Ni-63		-	Not measured
Zn-65		0	
Sr-89		-	Not measured
Sr-90		0	
Zr-95		0	
Nb-95		0	
Ru-103		0	
Ru-106		0	
Ag-110m		0	
Sb-122		0	
Te-123m		0	
Sb-124		0	
Sb-125		0	
I-131		0	

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m ³)	Activity discharged per year (Bq)	Commentary
Cs-134		0	
Cs-137	20	4,889*10 ⁵	
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	