ENVIRONMENTAL PROTECTION AGENCY

REPORT

ON RADIONUCLIDES DISCHARGED FROM NUCLEAR POWER REACTORS

LITHUANIA, 2017

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): 2016

Air volume released during the period (m^3) – $2,57*10^{10}$

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		0	
Co-58		0	
Fe-59		0	
Co-60	$9,5*10^{-3}$	$7,108*10^{6}$	
Zn-65		0	
Sr-89		0	
Sr-90	$5,6*10^{-5}$	$3,905*10^{6}$	
Zr-95		0	
Nb-94		$3,43*10^{3}$	
Nb-95		0	
Ag-110m		0	
Sb-122		0	
Sb-124		0	
Sb-125		-	Not measured
Cs-134		0	
Cs-137	$7,8*10^{-3}$	$4,623*10^{7}$	
Ba-140		0	
La-140		0	
Ce-141		0	
Ce-144		0	
Eu-152		0	
Eu-154		0	
Pu-238		-	Not measured
Pu-239+Pu-240		-	Not measured
Am-241		-	Not measured

Category/Radionucklides	Highest value of detection limit actually achieved for key nuclides (Bq/m^3)	Activity discharged per year (Bq)	Commentary
Cm-242		-	Not measured
Cm-243		-	Not measured
Cm-244		-	Not measured
Total-alpha	$2,10*10^{-6}$	0	
Iodines			
I-131		0	
I-132		0	
I-133		0	
I-135		0	
Tritium	$9,5*10^{-1}$	$3,862*10^{9}$	
Carbon-14	$5,8*10^{-1}$	$1,245*10^{9}$	

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): 2016
Water volume released during the period (m^3): $1,2*10^{7}$	

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m^3)	Activity discharged per year (Bq)	Commentary
Tritium	4900	$6,14*10^{10}$	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	6	$0,51*10^{6}$	
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	

Category/Radionuclide	Highest value of detection limit actually achieved for key nuclides (Bq/m^3)	Activity discharged per year (Bq)	Commentary
Sb-125		0	
I-131		0	
Cs-134			
Cs-137	3	$3{,}593*10^7$	
Ba-140		0	
La-140		0	
Ce-141		0	
Ce-144		0	
Pu-238		0	
Pu-239 + Pu-240		0	
Am-241		-	Not measured
Cm-242		-	Not measured
Cm-243		-	Not measured
Cm-244		-	Not measured
Total-Alpha		0	