

Data Table 6-17, Atmospheric Releases, 2009 - 2013 (Curies)						
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Radionuclide	2009	2010	2011	2012	2013	% Difference
Gases and Vapors						
H-3 (oxide)	3.13E+04	3.64E+04	2.38E+04	1.39E+04	2.11E+04	52%
H-3 (elem)	5.59E+03	4.10E+03	4.30E+03	2.77E+03	3.17E+03	14%
H-3 Total	3.69E+04	4.05E+04	2.81E+04	1.67E+04	2.43E+04	46%
C-14	6.69E-08	1.81E-02	1.30E-03	5.34E-02	1.14E-01	113%
Kr-85				8.91E+03	1.51E+04	69%
I-129	6.63E-03	6.12E-03	1.42E-03	1.65E-03	1.41E-03	-15%
I-131			1.44E-04			
Particles						
Ag-110m	4.07E-12	4.96E-12	1.57E-11	1.57E-11	1.48E-11	-6%
Am-241	5.79E-06	1.56E-05	3.19E-05	2.76E-05	1.60E-05	-42%
Am-242m	1.64E-07	9.41E-06				
Am-243	1.29E-09	7.81E-06	5.53E-07	2.14E-06		-100%
Ba-133				1.37E-04		-100%
Bi-212				1.06E-04		-100%
Bi-214				1.28E-03		-100%
Ce-141		2.34E-03	1.65E-04	1.61E-04	4.94E-11	-100%
Ce-144	1.01E-08	5.49E-03	3.87E-04	6.07E-04	2.00E-08	-100%
Cf-249				1.35E-04		-100%
Cf-251				3.74E-04		-100%
Cm-242		3.08E-05		2.14E-09	1.89E-16	-100%
Cm-244	5.47E-06	1.87E-05	1.38E-06	1.86E-06	3.66E-07	-80%
Cm-247				1.17E-06		-100%
Co-57				7.79E-05		-100%
Co-58	4.78E-11	4.78E-11		1.33E-05		-100%
Co-60	1.02E-05	2.27E-03	3.64E-04	3.20E-04	8.49E-06	-97%
Cs-134	3.00E-07	3.66E-07	4.57E-07	1.92E-05	4.31E-07	-98%
Cs-137	1.73E-02	7.47E-03	1.41E-02	1.21E-02	7.70E-02	538%
Eu-152		2.68E-03	1.89E-04	3.04E-04		-100%
Eu-154	8.27E-08	3.06E-04	7.10E-04	7.20E-04	3.55E-07	-100%
Eu-155		1.01E-07	9.14E-06	3.20E-04	1.18E-07	-100%
F-18			4.00E-02	3.20E-02	3.60E-02	13%
Mn-54		1.33E-04	9.37E-06	1.36E-05		-100%
Na-22		1.07E-04	7.87E-06	1.17E-05		-100%
Nb-94		1.21E-04	8.79E-06	1.38E-05	2.42E-07	-98%
Nb-95			2.70E-09	2.70E-09	3.63E-07	13327%
Ni-59		8.12E-04	6.01E-05	6.70E-05	5.76E-11	-100%
Ni-63	3.92E-10	6.25E-05	4.41E-06	3.70E-03	5.62E-09	-100%
Np-237	3.52E-06	2.16E-05	3.31E-06	4.08E-06	1.53E-06	-62%
Np-239	1.06E-07	4.95E-03	3.49E-04	5.87E-04		-100%
Pa-233	3.27E-06	3.98E-06	1.51E-06	1.99E-04	1.42E-06	-99%
Pb-212	3.51E-09	1.52E-03		1.69E-04	8.43E-07	-100%
Pb-214				2.07E-06		-100%
Pm-144		1.23E-04	8.67E-06	1.44E-05		-100%
Pm-146		1.58E-03	1.11E-04	1.77E-04		-100%
Pm-147	2.01E-06	2.45E-06	3.06E-06	3.29E-06	2.89E-06	-12%
Pm-148m			2.02E-12	2.02E-12	1.90E-12	-6%

Radioactive Atmospheric Releases, 2008 - 2013 (Curies)						
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Nuclide	2009	2010	2011	2012	2013	% Difference
Particles						
Pr-144			2.12E-08	2.12E-08	2.00E-08	-6%
Pu-236	1.51E-10	6.21E-10	3.80E-10			
Pu-238	8.81E-05	4.67E-03	1.95E-04	9.45E-05	1.48E-04	57%
Pu-239	9.14E-05	2.96E-04	1.07E-04	9.79E-04	8.58E-04	-12%
Pu-240	6.02E-06	2.15E-05	2.93E-05	2.91E-05	7.68E-06	-74%
Pu-241	1.75E-04	2.28E-03	3.91E-04	3.24E-04	2.07E-04	-36%
Pu-242	3.26E-08	3.31E-05	2.37E-06	2.54E-06	1.38E-08	-99%
Ra-226	6.22E-07	4.11E-07	8.67E-06	1.17E-06	3.01E-07	-74%
Ra-228	6.22E-07	4.11E-07	2.69E-07	3.44E-07	3.01E-07	-13%
Rh-106		9.83E-09	1.40E-08	1.40E-08	1.19E-08	-15%
Ru-103	1.17E-09	1.59E-03	1.12E-04	1.16E-04	5.11E-10	-100%
Ru-106	2.40E-08		4.20E-04	6.43E-04	3.04E-06	-100%
Sb-124	2.40E-08	1.13E-03	7.96E-05			
Sb-125	6.81E-08	3.12E-03	2.36E-04	1.59E-05	1.18E-06	-93%
Sb-126	4.78E-10			1.93E-04	1.70E-07	-100%
Se-79			5.19E-09	3.59E-06	4.90E-09	-100%
Sm-151		1.65E-07	3.07E-06	3.07E-06	2.89E-06	-6%
Sn-113				1.46E-04		-100%
Sn-123			7.06E-12	7.06E-12	6.66E-12	-6%
Sn-126			7.06E-12	1.93E-04	1.70E-07	-100%
Sr-89				4.36E-10	4.12E-10	-6%
Sr-89,90	8.19E-04	5.20E-04	9.86E-02	9.83E-02	4.88E-04	-100%
Tc-99	1.63E-06	3.76E-04	7.08E-04	1.58E-03	4.09E-07	-100%
Te-127			1.10E-11	1.10E-11	1.04E-11	-5%
Te-129			1.11E-12	1.11E-12	1.05E-12	-5%
Th-228	1.42E-10	1.42E-10		2.48E-10	1.71E-10	-31%
Th-229	7.31E-11	8.05E-10	7.70E-10			
Th-230	4.80E-11	7.00E-11	7.00E-11	6.32E-09	9.71E-08	1437%
Th-231				2.25E-04	2.12E-04	-6%
Th-232		4.39E-06		1.21E-09	1.04E-09	-14%
Tl-208				7.88E-05	1.41E-06	-98%
U-232	1.29E-09	1.51E-09	3.50E-09	3.39E-06	2.23E-10	-100%
U-233	3.27E-10	5.70E-05	4.02E-06	8.32E-05	3.47E-10	-100%
U-234	4.90E-05	3.94E-05	2.98E-05	5.94E-06	2.85E-05	380%
U-235	1.93E-06	2.24E-05	2.26E-04	2.42E-05	1.00E-06	-96%
U-236	3.34E-08	3.91E-08	3.19E-08	3.19E-08	3.01E-08	-6%
U-238	8.85E-05	9.07E-05	1.25E-05	8.90E-06	3.00E-05	237%
Y-88	2.55E-10	2.55E-10	1.01E-07	1.26E-05		-100%
Y-90				9.80E-02	4.78E-04	-100%
Y-91			8.46E-10	8.46E-10	7.98E-10	-6%
Zn-65			1.93E-07	3.15E-05		-100%
Zr-95	7.65E-10	7.65E-10	2.44E-07	2.59E-05	1.22E-07	-100%
Alpha	2.33E-04	3.07E-05	2.85E-05	1.52E-04	1.25E-03	722%
Beta-Gamma	1.05E-02	1.62E-02	7.97E-03	1.99E-02	4.17E-02	109%