Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Ac-223	-	-	-	-	-	-	-
Ac-223+D	-	-	-	-	-	-	-
Ac-224	S	5.59E-12	4.07E-10	9.47E+00	-	9.47E+00	1.97E-15
Ac-225	S	1.89E-10	2.86E-08	2.80E-01	-	2.80E-01	4.83E-15
Ac-225+D	S	-	-	-	-	-	-
Ac-226	S	6.92E-11	4.33E-09	7.65E-01	-	7.65E-01	1.60E-15
Ac-227	S	2.01E-10	1.49E-07	2.63E-01	-	2.63E-01	3.64E-12
Ac-228	S	1.99E-12	4.92E-11	2.66E+01	-	2.66E+01	1.19E-14
Ag-102	M	7.25E-14	2.56E-14	7.30E+02	-	7.30E+02	5.12E-15
Ag-103	M	1.20E-13	6.07E-14	4.41E+02	-	4.41E+02	1.59E-14
Ag-104	M	1.65E-13	6.25E-14	3.21E+02	-	3.21E+02	1.23E-14
Ag-104m	M	1.21E-13	4.92E-14	4.37E+02	-	4.37E+02	8.12E-15
Ag-105	M	1.77E-12	2.83E-12	2.99E+01	-	2.99E+01	9.87E-13
Ag-106	M	5.92E-14	2.72E-14	8.94E+02	-	8.94E+02	1.21E-14
Ag-106m	M	4.81E-12	3.54E-12	1.10E+01	-	1.10E+01	7.52E-14
Ag-108	-	-	-	-	-	-	-
Ag-108m	M	8.14E-12	2.67E-11	6.50E+00	-	6.50E+00	2.50E-10
Ag-109m	-	-	-	-	-	-	-
Ag-110	-	-	-	-	-	-	-
Ag-110m	M	9.88E-12	2.83E-11	5.36E+00	-	5.36E+00	1.13E-12
Ag-111	M	8.21E-12	6.66E-12	6.44E+00	-	6.44E+00	4.09E-14
Ag-112	M	1.99E-12	7.25E-13	2.66E+01	-	2.66E+01	2.97E-15
Ag-115	M	1.40E-13	6.81E-14	3.78E+02	-	3.78E+02	4.63E-15
Al-26	M	1.73E-11	6.92E-11	3.06E+00	-	3.06E+00	1.59E-07
Al-28	-	-	-	-	-	-	-
Am-237	M	5.07E-14	5.77E-14	1.04E+03	-	1.04E+03	9.62E-14
Am-238	M	9.62E-14	9.51E-14	5.50E+02	-	5.50E+02	6.83E-14
Am-239	M	1.38E-12	8.40E-13	3.83E+01	-	3.83E+01	3.49E-14
Am-240	M	2.59E-12	1.41E-12	2.04E+01	-	2.04E+01	7.96E-14
Am-241	M	1.04E-10	2.81E-08	5.09E-01	-	5.09E-01	1.48E-10
Am-242	M	1.79E-12	5.03E-11	2.96E+01	-	2.96E+01	3.66E-14
Am-242m	M	7.07E-11	1.56E-08	7.48E-01	-	7.48E-01	7.15E-11
Am-242m+D	M	1.04E-10	2.81E-08	5.09E-01	-	5.09E-01	4.86E-11
Am-243	M	1.03E-10	2.70E-08	5.14E-01	-	5.14E-01	2.58E-09
Am-243+D	M	1.08E-10	2.70E-08	4.90E-01	-	4.90E-01	2.46E-09
Am-244	M	2.52E-12	3.09E-12	2.10E+01	-	2.10E+01	1.65E-14
Am-244m	M	5.11E-14	1.02E-13	1.04E+03	-	1.04E+03	3.50E-14
Am-245	M	2.22E-13	1.56E-13	2.38E+02	-	2.38E+02	3.83E-14
Am-246	M	1.23E-13	1.31E-13	4.30E+02	-	4.30E+02	2.20E-14
Am-246m	M	6.59E-14	3.96E-14	8.03E+02	-	8.03E+02	2.63E-14
Ar-37	-	-	-	-	-	-	-
Ar-39	-	-	-	-	-	-	-
Ar-41	-	-	-	-	-	-	-
As-69	M	1.05E-13	4.29E-14	5.04E+02	-	5.04E+02	2.82E-15
As-69+D	M	-	-	-	-	-	-
As-70	M	3.20E-13	1.37E-13	1.65E+02	-	1.65E+02	3.24E-15
As-71	M	2.28E-12	1.52E-12	2.32E+01	-	2.32E+01	3.41E-14
As-72	M	1.02E-11	4.29E-12	5.19E+00	-	5.19E+00	3.10E-15
As-73	M	1.56E-12	3.88E-12	3.39E+01	-	3.39E+01	1.53E-12
As-74	M	6.70E-12	8.44E-12	7.90E+00	-	7.90E+00	7.96E-14
As-76	M	9.66E-12	4.14E-12	5.48E+00	-	5.48E+00	3.50E-15

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
As-77	M	2.50E-12	1.76E-12	2.12E+01	-	2.12E+01	2.02E-14
As-78	M	6.33E-13	2.69E-13	8.36E+01	-	8.36E+01	3.15E-15
At-207	M	6.96E-13	7.77E-12	7.60E+01	-	7.60E+01	9.05E-15
At-211	M	3.37E-11	3.58E-10	1.57E+00	-	1.57E+00	7.64E-16
At-211+D	M	-	-	-	-	-	-
At-215	-	-	-	-	-	-	-
At-216	-	-	-	-	-	-	-
At-217	-	-	-	-	-	-	-
At-218	-	-	-	-	-	-	-
Au-193	S	7.36E-13	4.55E-13	7.19E+01	-	7.19E+01	7.83E-14
Au-194	S	1.66E-12	7.92E-13	3.19E+01	-	3.19E+01	7.81E-14
Au-195	S	1.50E-12	6.48E-12	3.53E+01	-	3.53E+01	9.66E-12
Au-195m	-	-	-	-	-	-	-
Au-198	S	6.29E-12	4.00E-12	8.41E+00	-	8.41E+00	3.44E-14
Au-198m	S	7.44E-12	7.77E-12	7.11E+00	-	7.11E+00	2.48E-14
Au-199	S	2.78E-12	3.12E-12	1.90E+01	-	1.90E+01	9.12E-14
Au-200	S	1.55E-13	8.55E-14	3.41E+02	-	3.41E+02	1.76E-14
Au-200m	S	5.44E-12	2.81E-12	9.73E+00	-	9.73E+00	1.16E-14
Au-201	S	4.33E-14	3.30E-14	1.22E+03	-	1.22E+03	3.45E-14
Ba-126	M	8.51E-13	3.49E-13	6.22E+01	-	6.22E+01	4.03E-15
Ba-128	M	1.52E-11	7.22E-12	3.48E+00	-	3.48E+00	8.31E-15
Ba-131	M	2.00E-12	2.91E-12	2.65E+01	-	2.65E+01	3.14E-13
Ba-131m	M	9.25E-15	1.69E-14	5.72E+03	-	5.72E+03	5.83E-14
Ba-133	M	6.81E-12	1.16E-11	7.77E+00	-	7.77E+00	3.11E-11
Ba-133m	M	3.19E-12	2.04E-12	1.66E+01	-	1.66E+01	2.74E-14
Ba-135m	M	2.56E-12	1.61E-12	2.07E+01	-	2.07E+01	2.56E-14
Ba-137m	-	-	-	-	-	-	-
Ba-139	M	3.70E-13	1.79E-13	1.43E+02	-	1.43E+02	8.76E-15
Ba-140	M	1.49E-11	2.03E-11	3.55E+00	-	3.55E+00	4.86E-14
Ba-141	M	2.14E-13	9.69E-14	2.47E+02	-	2.47E+02	3.39E-15
Ba-142	M	9.29E-14	4.55E-14	5.70E+02	-	5.70E+02	4.57E-15
Be-10	S	7.03E-12	9.40E-11	7.53E+00	-	7.53E+00	3.37E-07
Be-7	S	8.66E-14	2.13E-13	6.11E+02	-	6.11E+02	1.75E-12
Bi-200	M	1.52E-13	7.55E-14	3.48E+02	-	3.48E+02	1.35E-14
Bi-201	M	4.22E-13	1.90E-13	1.25E+02	-	1.25E+02	1.45E-14
Bi-202	M	2.65E-13	1.12E-13	2.00E+02	-	2.00E+02	2.15E-14
Bi-203	M	1.92E-12	8.21E-13	2.76E+01	-	2.76E+01	2.10E-14
Bi-205	M	3.32E-12	3.24E-12	1.59E+01	-	1.59E+01	3.84E-13
Bi-206	M	7.73E-12	5.85E-12	6.84E+00	-	6.84E+00	6.75E-14
Bi-207	M	5.66E-12	2.10E-11	9.35E+00	-	9.35E+00	2.06E-10
Bi-210	M	8.92E-12	3.17E-10	5.93E+00	-	5.93E+00	4.79E-14
Bi-210m	M	5.51E-11	1.17E-08	9.60E-01	-	9.60E-01	1.69E-06
Bi-211	M	-	-	-	-	-	-
Bi-212	M	7.10E-13	7.77E-11	7.45E+01	-	7.45E+01	5.10E-15
Bi-212+D	M	-	-	-	-	-	-
Bi-213	M	5.11E-13	6.85E-11	1.04E+02	-	1.04E+02	5.36E-15
Bi-213+D	M	-	-	-	-	-	-
Bi-214	M	1.92E-13	2.90E-11	2.76E+02	-	2.76E+02	6.25E-15
Bk-245	M	3.43E-12	7.22E-12	1.54E+01	-	1.54E+01	1.43E-13
Bk-246	M	2.01E-12	9.25E-13	2.63E+01	-	2.63E+01	9.09E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Bk-247	M	1.24E-10	3.26E-08	4.27E-01	-	4.27E-01	4.07E-10
Bk-249	M	1.11E-12	5.14E-11	4.77E+01	-	4.77E+01	2.91E-11
Bk-250	M	5.66E-13	1.03E-12	9.35E+01	-	9.35E+01	2.41E-14
Br-74	M	1.50E-13	6.44E-14	3.53E+02	-	3.53E+02	3.52E-15
Br-74m	M	2.46E-13	1.15E-13	2.15E+02	-	2.15E+02	3.52E-15
Br-75	M	1.57E-13	1.13E-13	3.37E+02	-	3.37E+02	1.32E-14
Br-76	M	1.45E-12	1.10E-12	3.65E+01	-	3.65E+01	1.44E-14
Br-77	M	3.01E-13	2.06E-13	1.76E+02	-	1.76E+02	2.42E-13
Br-80	M	4.70E-14	1.80E-14	1.13E+03	-	1.13E+03	8.35E-15
Br-80m	M	2.82E-13	2.43E-13	1.88E+02	-	1.88E+02	2.12E-14
Br-82	M	1.71E-12	1.66E-12	3.09E+01	-	3.09E+01	2.86E-14
Br-83	M	8.44E-14	1.21E-13	6.27E+02	-	6.27E+02	3.97E-14
Br-84	M	1.48E-13	7.18E-14	3.58E+02	-	3.58E+02	5.09E-15
C-11	M	4.07E-14	2.78E-14	1.30E+03	-	1.30E+03	1.55E-15
C-14	M	1.55E-12	7.07E-12	3.41E+01	1.50E+00	1.43E+00	3.22E-10
Ca-41	M	3.53E-13	2.09E-13	1.50E+02	-	1.50E+02	2.41E-06
Ca-45	M	2.47E-12	9.40E-12	2.14E+01	-	2.14E+01	1.21E-12
Ca-47	M	7.55E-12	7.88E-12	7.01E+00	-	7.01E+00	1.14E-14
Ca-49	M	-	-	-	-	-	-
Cd-104	S	1.72E-13	7.66E-14	3.08E+02	-	3.08E+02	9.83E-15
Cd-107	S	3.50E-13	3.10E-13	1.51E+02	-	1.51E+02	3.36E-14
Cd-109	S	5.00E-12	2.19E-11	1.06E+01	-	1.06E+01	4.11E-12
Cd-113	F	2.28E-11	1.12E-10	2.32E+00	-	2.32E+00	6.83E+03
Cd-113m	F	2.87E-11	1.30E-10	1.84E+00	-	1.84E+00	7.93E-12
Cd-115	S	8.66E-12	5.14E-12	6.11E+00	-	6.11E+00	1.20E-14
Cd-115m	S	1.70E-11	2.92E-11	3.11E+00	-	3.11E+00	1.22E-13
Cd-117	S	1.37E-12	6.51E-13	3.86E+01	-	3.86E+01	3.60E-15
Cd-117m	S	1.22E-12	6.55E-13	4.34E+01	-	4.34E+01	5.45E-15
Ce-134	M	1.59E-11	6.96E-12	3.33E+00	-	3.33E+00	1.03E-14
Ce-135	M	3.81E-12	1.75E-12	1.39E+01	-	1.39E+01	1.05E-14
Ce-137	M	1.31E-13	4.11E-14	4.04E+02	-	4.04E+02	1.59E-13
Ce-137m	M	3.47E-12	1.94E-12	1.52E+01	-	1.52E+01	2.30E-14
Ce-139	M	1.35E-12	5.66E-12	3.92E+01	-	3.92E+01	5.75E-12
Ce-141	M	4.63E-12	1.14E-11	1.14E+01	-	1.14E+01	4.02E-13
Ce-143	M	7.10E-12	3.74E-12	7.45E+00	-	7.45E+00	1.12E-14
Ce-144	M	3.52E-11	1.10E-10	1.50E+00	-	1.50E+00	4.72E-13
Ce-144+D	M	3.53E-11	1.10E-10	1.50E+00	-	1.50E+00	4.71E-13
Cf-244	M	1.25E-13	2.96E-11	4.23E+02	-	4.23E+02	1.07E-14
Cf-246	M	2.11E-11	1.47E-09	2.51E+00	-	2.51E+00	7.04E-15
Cf-248	M	4.44E-11	1.81E-08	1.19E+00	-	1.19E+00	7.56E-13
Cf-249	M	1.27E-10	3.40E-08	4.17E-01	-	4.17E-01	1.02E-10
Cf-250	M	8.62E-11	2.66E-08	6.14E-01	-	6.14E-01	5.62E-12
Cf-251	M	1.32E-10	3.40E-08	4.01E-01	-	4.01E-01	2.53E-10
Cf-252	-	1.34E-10	1.89E-08	3.95E-01	-	3.95E-01	7.35E-13
Cf-253	M	4.26E-12	4.22E-09	1.24E+01	-	1.24E+01	4.29E-13
Cf-254	M	2.14E-09	1.21E-07	2.47E-02	-	2.47E-02	2.91E-15
Cl-36	M	3.30E-12	2.50E-11	1.60E+01	-	1.60E+01	4.86E-07
Cl-38	M	1.93E-13	9.40E-14	2.74E+02	-	2.74E+02	2.07E-15
Cl-39	M	1.52E-13	9.36E-14	3.48E+02	-	3.48E+02	4.02E-15
Cm-238	M	3.28E-13	1.35E-11	1.61E+02	-	1.61E+02	2.95E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Cm-240	M	3.49E-11	9.51E-09	1.52E+00	-	1.52E+00	7.54E-14
Cm-241	M	4.85E-12	1.01E-10	1.09E+01	-	1.09E+01	6.62E-13
Cm-242	M	3.85E-11	1.51E-08	1.37E+00	-	1.37E+00	4.15E-13
Cm-243	M	9.47E-11	2.69E-08	5.59E-01	-	5.59E-01	1.08E-11
Cm-244	M	8.36E-11	2.53E-08	6.33E-01	-	6.33E-01	7.83E-12
Cm-245	M	1.04E-10	2.77E-08	5.09E-01	-	5.09E-01	2.97E-09
Cm-246	M	1.02E-10	2.77E-08	5.19E-01	-	5.19E-01	1.69E-09
Cm-247	M	9.95E-11	2.50E-08	5.32E-01	-	5.32E-01	5.74E-06
Cm-248	-	4.66E-10	9.58E-08	1.14E-01	-	1.14E-01	2.74E-08
Cm-249	M	8.40E-14	7.25E-14	6.30E+02	-	6.30E+02	5.36E-14
Cm-250	M	3.43E-09	4.37E-07	1.54E-02	-	1.54E-02	1.05E-10
Cm-250+D	M	-	-	-	-	-	-
Co-55	M	4.63E-12	2.07E-12	1.14E+01	-	1.14E+01	3.52E-15
Co-56	M	1.01E-11	1.85E-11	5.24E+00	-	5.24E+00	1.77E-13
Co-57	M	1.04E-12	2.09E-12	5.09E+01	-	5.09E+01	6.03E-12
Co-58	M	2.95E-12	5.99E-12	1.79E+01	-	1.79E+01	5.65E-13
Co-58m	M	1.26E-13	6.88E-14	4.20E+02	-	4.20E+02	7.12E-14
Co-60	M	1.57E-11	3.58E-11	3.37E+00	-	3.37E+00	2.98E-12
Co-60m	M	2.66E-15	3.96E-15	1.99E+04	-	1.99E+04	6.66E-14
Co-61	M	2.43E-13	1.43E-13	2.18E+02	-	2.18E+02	7.00E-15
Co-62m	M	8.25E-14	3.17E-14	6.41E+02	-	6.41E+02	2.95E-15
Cr-48	S	7.44E-13	7.51E-13	7.11E+01	-	7.11E+01	2.51E-14
Cr-49	S	1.35E-13	7.36E-14	3.92E+02	-	3.92E+02	4.31E-15
Cr-51	S	1.85E-13	1.67E-13	2.86E+02	-	2.86E+02	3.10E-12
Cs-125	F	5.96E-14	1.64E-14	8.88E+02	-	8.88E+02	2.66E-14
Cs-126	-	-	-	-	-	-	-
Cs-127	F	6.51E-14	2.47E-14	8.13E+02	-	8.13E+02	2.06E-13
Cs-128	F	-	-	-	-	-	-
Cs-129	F	1.85E-13	7.44E-14	2.86E+02	-	2.86E+02	3.78E-13
Cs-130	F	4.74E-14	1.24E-14	1.12E+03	-	1.12E+03	2.31E-14
Cs-131	F	1.86E-13	7.51E-14	2.84E+02	-	2.84E+02	2.77E-12
Cs-132	F	1.46E-12	5.92E-13	3.62E+01	-	3.62E+01	2.38E-13
Cs-134	F	4.22E-11	1.65E-11	1.25E+00	-	1.25E+00	9.70E-13
Cs-134m	F	4.14E-14	1.99E-14	1.28E+03	-	1.28E+03	1.59E-13
Cs-135	F	4.74E-12	1.86E-12	1.12E+01	-	1.12E+01	9.70E-06
Cs-135m	F	4.51E-14	1.32E-14	1.17E+03	-	1.17E+03	4.47E-14
Cs-136	F	8.66E-12	3.49E-12	6.11E+00	-	6.11E+00	8.35E-14
Cs-137	F	3.04E-11	1.19E-11	1.74E+00	-	1.74E+00	2.00E-11
Cs-137+D	F	3.04E-11	1.19E-11	1.74E+00	-	1.74E+00	2.00E-11
Cs-138	F	1.58E-13	4.00E-14	3.35E+02	-	3.35E+02	7.93E-15
Cu-60	S	1.37E-13	5.77E-14	3.86E+02	-	3.86E+02	2.86E-15
Cu-61	S	4.63E-13	2.41E-13	1.14E+02	-	1.14E+02	7.59E-15
Cu-62	-	-	-	-	-	-	-
Cu-64	S	6.40E-13	4.33E-13	8.27E+01	-	8.27E+01	2.15E-14
Cu-66	-	-	-	-	-	-	-
Cu-67	S	1.94E-12	2.35E-12	2.73E+01	-	2.73E+01	3.61E-14
Dy-155	M	5.25E-13	2.45E-13	1.01E+02	-	1.01E+02	4.99E-14
Dy-157	M	2.26E-13	8.33E-14	2.34E+02	-	2.34E+02	9.52E-14
Dy-159	M	5.29E-13	1.28E-12	1.00E+02	-	1.00E+02	1.76E-11
Dy-165	M	4.14E-13	2.10E-13	1.28E+02	-	1.28E+02	1.57E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Dy-166	M	1.11E-11	8.36E-12	4.77E+00	-	4.77E+00	2.06E-14
Er-161	M	3.15E-13	1.34E-13	1.68E+02	-	1.68E+02	2.80E-14
Er-165	M	8.95E-14	3.13E-14	5.91E+02	-	5.91E+02	3.23E-13
Er-169	M	2.53E-12	3.85E-12	2.09E+01	-	2.09E+01	2.52E-13
Er-171	M	2.02E-12	9.40E-13	2.62E+01	-	2.62E+01	1.08E-14
Er-172	M	5.99E-12	4.74E-12	8.83E+00	-	8.83E+00	2.39E-14
Es-250	M	5.96E-14	5.07E-13	8.88E+02	-	8.88E+02	1.49E-13
Es-251	M	1.02E-12	6.40E-12	5.19E+01	-	5.19E+01	1.37E-13
Es-253	M	3.49E-11	8.84E-09	1.52E+00	-	1.52E+00	6.02E-14
Es-254	M	5.51E-11	1.85E-08	9.60E-01	-	9.60E-01	5.16E-13
Es-254+D	M	-	-	-	-	-	-
Es-254m	M	2.73E-11	1.53E-09	1.94E+00	-	1.94E+00	6.18E-15
Eu-145	M	2.73E-12	1.81E-12	1.94E+01	-	1.94E+01	1.28E-13
Eu-146	M	4.55E-12	2.59E-12	1.16E+01	-	1.16E+01	6.00E-14
Eu-147	M	2.02E-12	3.85E-12	2.62E+01	-	2.62E+01	7.09E-13
Eu-148	M	4.29E-12	9.92E-12	1.23E+01	-	1.23E+01	7.63E-13
Eu-149	M	5.14E-13	1.07E-12	1.03E+02	-	1.03E+02	1.10E-11
Eu-150	M	4.33E-12	1.12E-10	1.22E+01	-	1.22E+01	1.76E-10
Eu-150m	M	2.38E-12	1.03E-12	2.22E+01	-	2.22E+01	1.35E-14
Eu-152	M	6.07E-12	9.10E-11	8.72E+00	-	8.72E+00	4.95E-11
Eu-152m	M	2.98E-12	1.12E-12	1.78E+01	-	1.78E+01	8.04E-15
Eu-154	M	1.03E-11	1.15E-10	5.14E+00	-	5.14E+00	1.95E-11
Eu-155	M	1.90E-12	1.48E-11	2.78E+01	-	2.78E+01	5.99E-11
Eu-156	M	1.27E-11	1.37E-11	4.17E+00	-	4.17E+00	7.57E-14
Eu-157	M	3.70E-12	1.57E-12	1.43E+01	-	1.43E+01	1.09E-14
Eu-158	M	2.14E-13	1.10E-13	2.47E+02	-	2.47E+02	9.55E-15
F-18	M	9.73E-14	1.21E-13	5.44E+02	-	5.44E+02	5.72E-15
Fe-52	M	7.07E-12	2.73E-12	7.48E+00	-	7.48E+00	1.03E-15
Fe-55	M	8.62E-13	7.99E-13	6.14E+01	-	6.14E+01	2.55E-11
Fe-59	M	7.88E-12	1.33E-11	6.71E+00	-	6.71E+00	1.35E-13
Fe-60	M	1.80E-10	1.84E-10	2.94E-01	-	2.94E-01	4.94E-09
Fe-60+D	M	-	-	-	-	-	-
Fm-252	M	1.69E-11	1.03E-09	3.13E+00	-	3.13E+00	5.72E-15
Fm-253	M	5.14E-12	1.28E-09	1.03E+01	-	1.03E+01	5.99E-14
Fm-254	M	2.15E-12	1.98E-10	2.46E+01	-	2.46E+01	6.47E-15
Fm-255	M	1.65E-11	8.84E-10	3.21E+00	-	3.21E+00	5.25E-15
Fm-257	M	4.40E-11	2.04E-08	1.20E+00	-	1.20E+00	2.38E-13
Fr-219	-	-	-	-	-	-	-
Fr-220	-	-	-	-	-	-	-
Fr-220+D	-	-	-	-	-	-	-
Fr-221	-	-	-	-	-	-	-
Fr-221+D	-	-	-	-	-	-	-
Fr-222	F	1.48E-12	2.42E-11	3.58E+01	-	3.58E+01	6.09E-16
Fr-223	F	7.29E-12	3.06E-12	7.26E+00	-	7.26E+00	1.88E-16
Ga-65	M	6.33E-14	2.84E-14	8.36E+02	-	8.36E+02	4.40E-15
Ga-66	M	6.40E-12	2.18E-12	8.27E+00	-	8.27E+00	1.64E-15
Ga-67	M	1.04E-12	9.55E-13	5.09E+01	-	5.09E+01	8.53E-14
Ga-68	M	2.83E-13	1.28E-13	1.87E+02	-	1.87E+02	4.61E-15
Ga-70	M	5.22E-14	2.92E-14	1.01E+03	-	1.01E+03	7.99E-15
Ga-72	M	5.59E-12	2.17E-12	9.47E+00	-	9.47E+00	3.07E-15

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Ga-73	M	1.39E-12	6.14E-13	3.81E+01	-	3.81E+01	4.36E-15
Gd-145	M	8.92E-14	3.63E-14	5.93E+02	-	5.93E+02	1.05E-14
Gd-146	M	5.03E-12	2.27E-11	1.05E+01	-	1.05E+01	5.69E-13
Gd-147	M	2.46E-12	1.34E-12	2.15E+01	-	2.15E+01	3.85E-14
Gd-148	F	4.22E-11	1.26E-08	1.25E+00	-	1.25E+00	4.83E-11
Gd-149	M	2.23E-12	2.76E-12	2.37E+01	-	2.37E+01	2.55E-13
Gd-151	M	1.14E-12	2.92E-12	4.64E+01	-	4.64E+01	6.45E-12
Gd-152	F	2.97E-11	9.10E-09	1.78E+00	-	1.78E+00	8.19E+01
Gd-153	M	1.52E-12	6.55E-12	3.48E+01	-	3.48E+01	9.89E-12
Gd-159	M	3.19E-12	1.46E-12	1.66E+01	-	1.66E+01	1.56E-14
Ge-66	M	3.70E-13	2.50E-13	1.43E+02	-	1.43E+02	6.85E-15
Ge-67	M	1.06E-13	4.59E-14	4.99E+02	-	4.99E+02	3.33E-15
Ge-68	M	6.96E-12	4.88E-11	7.60E+00	-	7.60E+00	1.14E-12
Ge-68+D	M	-	-	-	-	-	-
Ge-69	M	9.84E-13	8.81E-13	5.38E+01	-	5.38E+01	4.63E-14
Ge-71	M	6.48E-14	5.18E-14	8.17E+02	-	8.17E+02	5.25E-12
Ge-75	M	8.66E-14	8.44E-14	6.11E+02	-	6.11E+02	2.02E-14
Ge-77	M	1.22E-12	1.15E-12	4.34E+01	-	4.34E+01	1.21E-14
Ge-78	M	3.09E-13	2.48E-13	1.71E+02	-	1.71E+02	6.19E-15
H-3	V	5.07E-14	5.62E-14	1.04E+03	1.88E+02	1.60E+02	1.65E-11
Hf-170	M	2.19E-12	1.20E-12	2.42E+01	-	2.42E+01	2.10E-14
Hf-172	F	4.96E-12	6.92E-11	1.07E+01	-	1.07E+01	9.61E-12
Hf-173	M	1.06E-12	5.92E-13	4.99E+01	-	4.99E+01	6.62E-14
Hf-175	M	1.96E-12	4.29E-12	2.70E+01	-	2.70E+01	2.54E-12
Hf-177m	M	2.01E-13	1.81E-13	2.63E+02	-	2.63E+02	1.28E-14
Hf-178m	F	1.51E-11	3.70E-10	3.50E+00	-	3.50E+00	5.41E-11
Hf-179m	M	6.55E-12	1.38E-11	8.08E+00	-	8.08E+00	2.78E-13
Hf-180m	M	7.18E-13	4.14E-13	7.37E+01	-	7.37E+01	2.33E-14
Hf-181	M	6.36E-12	1.76E-11	8.32E+00	-	8.32E+00	4.90E-13
Hf-182	F	5.37E-12	3.41E-10	9.85E+00	-	9.85E+00	4.52E-05
Hf-182+D	F	-	-	-	-	-	-
Hf-182m	M	1.11E-13	1.04E-13	4.77E+02	-	4.77E+02	2.84E-14
Hf-183	M	2.39E-13	1.65E-13	2.21E+02	-	2.21E+02	1.38E-14
Hf-184	M	2.91E-12	1.38E-12	1.82E+01	-	1.82E+01	4.41E-15
Hg-193	M	4.11E-13	2.53E-13	1.29E+02	-	1.29E+02	2.78E-14
Hg-193m	M	1.97E-12	9.40E-13	2.69E+01	-	2.69E+01	1.84E-14
Hg-194	M	8.07E-11	2.88E-11	6.56E-01	-	6.56E-01	9.26E-11
Hg-194+D	M	-	-	-	-	-	-
Hg-195	M	5.07E-13	2.84E-13	1.04E+02	-	1.04E+02	6.44E-14
Hg-195m	M	3.36E-12	2.33E-12	1.57E+01	-	1.57E+01	4.08E-14
Hg-197	M	1.43E-12	1.25E-12	3.70E+01	-	3.70E+01	1.49E-13
Hg-197m	M	3.00E-12	2.28E-12	1.76E+01	-	1.76E+01	2.64E-14
Hg-199m	M	6.70E-14	6.33E-14	7.90E+02	-	7.90E+02	3.57E-14
Hg-203	M	5.70E-12	8.95E-12	9.28E+00	-	9.28E+00	6.74E-13
Ho-155	M	1.05E-13	5.29E-14	5.04E+02	-	5.04E+02	2.00E-14
Ho-157	M	1.54E-14	7.36E-15	3.44E+03	-	3.44E+03	3.62E-14
Ho-159	M	1.78E-14	1.22E-14	2.97E+03	-	2.97E+03	8.31E-14
Ho-161	M	4.96E-14	1.98E-14	1.07E+03	-	1.07E+03	1.37E-13
Ho-162	M	5.96E-15	5.40E-15	8.88E+03	-	8.88E+03	1.15E-13
Ho-162m	M	7.47E-14	5.18E-14	7.08E+02	-	7.08E+02	4.16E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Ho-164	M	1.75E-14	1.65E-14	3.02E+03	-	3.02E+03	7.66E-14
Ho-164m	M	4.14E-14	3.48E-14	1.28E+03	-	1.28E+03	4.19E-14
Ho-166	M	9.21E-12	3.85E-12	5.74E+00	-	5.74E+00	8.17E-15
Ho-166m	M	8.03E-12	3.09E-10	6.59E+00	-	6.59E+00	3.68E-09
Ho-167	M	3.64E-13	2.25E-13	1.45E+02	-	1.45E+02	2.41E-14
I-120	F	9.03E-13	3.89E-13	5.86E+01	-	5.86E+01	3.03E-15
I-120m	F	5.03E-13	1.98E-13	1.05E+02	-	1.05E+02	3.56E-15
I-121	F	2.27E-13	9.81E-14	2.33E+02	-	2.33E+02	1.91E-14
I-122	-	-	-	-	-	-	-
I-123	F	6.96E-13	3.03E-13	7.60E+01	-	7.60E+01	3.95E-14
I-124	F	4.14E-11	1.76E-11	1.28E+00	-	1.28E+00	5.08E-15
I-125	F	2.54E-11	1.06E-11	2.08E+00	-	2.08E+00	1.20E-13
I-126	F	8.73E-11	3.70E-11	6.06E-01	-	6.06E-01	7.63E-15
I-128	F	8.14E-14	3.04E-14	6.50E+02	-	6.50E+02	1.11E-14
I-129	F	1.48E-10	6.07E-11	3.58E-01	-	3.58E-01	2.03E-06
I-130	F	6.36E-12	2.76E-12	8.32E+00	-	8.32E+00	4.27E-15
I-131	F	4.55E-11	1.95E-11	1.16E+00	-	1.16E+00	9.40E-15
I-132	F	8.44E-13	3.74E-13	6.27E+01	-	6.27E+01	6.08E-15
I-132m	F	6.11E-13	2.70E-13	8.66E+01	-	8.66E+01	5.09E-15
I-133	F	1.44E-11	6.25E-12	3.67E+00	-	3.67E+00	3.25E-15
I-134	F	2.50E-13	1.02E-13	2.12E+02	-	2.12E+02	7.95E-15
I-135	F	3.05E-12	1.34E-12	1.73E+01	-	1.73E+01	4.95E-15
In-109	M	2.46E-13	1.11E-13	2.15E+02	-	2.15E+02	3.15E-14
In-110	M	7.59E-13	2.65E-13	6.97E+01	-	6.97E+01	1.20E-14
In-110m	M	2.81E-13	1.17E-13	1.88E+02	-	1.88E+02	7.62E-15
In-111	M	1.29E-12	8.03E-13	4.10E+01	-	4.10E+01	9.88E-14
In-112	M	1.68E-14	1.10E-14	3.15E+03	-	3.15E+03	2.71E-14
In-113m	M	9.47E-14	5.18E-14	5.59E+02	-	5.59E+02	3.35E-14
In-114	-	-	-	-	-	-	-
In-114m	M	2.48E-11	3.00E-11	2.13E+00	-	2.13E+00	9.24E-14
In-115	F	3.38E-11	4.03E-10	1.57E+00	-	1.57E+00	2.57E+03
In-115m	M	4.40E-13	2.15E-13	1.20E+02	-	1.20E+02	1.98E-14
In-116m	M	1.62E-13	8.77E-14	3.27E+02	-	3.27E+02	1.09E-14
In-117	M	7.03E-14	5.59E-14	7.53E+02	-	7.53E+02	2.05E-14
In-117m	M	4.44E-13	2.33E-13	1.19E+02	-	1.19E+02	8.65E-15
In-119	-	-	-	-	-	-	-
In-119m	M	7.55E-14	3.34E-14	7.01E+02	-	7.01E+02	8.00E-15
Ir-182	S	9.95E-14	5.03E-14	5.32E+02	-	5.32E+02	7.73E-15
Ir-184	S	6.44E-13	3.30E-13	8.22E+01	-	8.22E+01	1.46E-14
Ir-185	S	1.32E-12	7.25E-13	4.01E+01	-	4.01E+01	3.32E-14
Ir-186	S	2.08E-12	1.06E-12	2.54E+01	-	2.54E+01	2.39E-14
Ir-186m	S	2.00E-13	1.11E-13	2.65E+02	-	2.65E+02	2.75E-14
Ir-187	S	5.77E-13	2.87E-13	9.17E+01	-	9.17E+01	5.76E-14
Ir-188	S	2.52E-12	1.38E-12	2.10E+01	-	2.10E+01	5.24E-14
Ir-189	S	1.51E-12	2.33E-12	3.50E+01	-	3.50E+01	6.76E-13
Ir-190	S	5.66E-12	8.81E-12	9.35E+00	-	9.35E+00	1.65E-13
Ir-190m	S	3.17E-14	3.89E-14	1.67E+03	-	1.67E+03	1.22E-13
Ir-190n	S	4.26E-13	2.14E-13	1.24E+02	-	1.24E+02	2.34E-14
Ir-191m	-	-	-	-	-	-	-
Ir-192	S	7.36E-12	2.41E-11	7.19E+00	-	7.19E+00	7.84E-13

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Ir-192m	S	9.81E-13	1.02E-10	5.39E+01	-	5.39E+01	6.99E-09
Ir-194	S	8.62E-12	3.40E-12	6.14E+00	-	6.14E+00	7.29E-15
Ir-194m	S	8.88E-12	4.59E-11	5.96E+00	-	5.96E+00	1.52E-12
Ir-195	S	3.96E-13	2.39E-13	1.34E+02	-	1.34E+02	2.08E-14
Ir-195m	S	1.03E-12	5.96E-13	5.14E+01	-	5.14E+01	1.22E-14
K-38	-	-	-	-	-	-	-
K-40	F	2.47E-11	1.03E-11	2.14E+00	-	2.14E+00	3.07E-04
K-42	F	1.26E-12	4.33E-13	4.20E+01	-	4.20E+01	6.97E-15
K-43	F	7.88E-13	3.09E-13	6.71E+01	-	6.71E+01	2.09E-14
K-44	F	1.39E-13	3.39E-14	3.81E+02	-	3.81E+02	1.97E-15
K-45	F	8.95E-14	2.33E-14	5.91E+02	-	5.91E+02	2.83E-15
Kr-74	-	-	-	-	-	-	-
Kr-76	-	-	-	-	-	-	-
Kr-77	-	-	-	-	-	-	-
Kr-79	-	-	-	-	-	-	-
Kr-81	-	-	-	-	-	-	-
Kr-81m	-	-	-	-	-	-	-
Kr-83m	-	-	-	-	-	-	-
Kr-85	-	-	-	-	-	-	-
Kr-85m	-	-	-	-	-	-	-
Kr-87	-	-	-	-	-	-	-
Kr-88	-	-	-	-	-	-	-
La-131	M	9.32E-14	5.48E-14	5.68E+02	-	5.68E+02	2.34E-14
La-132	M	1.78E-12	6.25E-13	2.97E+01	-	2.97E+01	6.02E-15
La-134	-	-	-	-	-	-	-
La-135	M	1.46E-13	5.03E-14	3.62E+02	-	3.62E+02	3.05E-13
La-137	F	3.48E-13	1.39E-11	1.52E+02	-	1.52E+02	3.50E-06
La-138	F	3.53E-12	3.05E-10	1.50E+01	-	1.50E+01	7.82E-01
La-140	M	1.10E-11	4.77E-12	4.81E+00	-	4.81E+00	8.67E-15
La-141	M	1.88E-12	7.44E-13	2.81E+01	-	2.81E+01	4.98E-15
La-142	M	5.77E-13	2.42E-13	9.17E+01	-	9.17E+01	6.42E-15
La-143	M	1.26E-13	5.66E-14	4.20E+02	-	4.20E+02	4.55E-15
Lu-169	S	1.94E-12	1.33E-12	2.73E+01	-	2.73E+01	5.02E-14
Lu-170	S	4.14E-12	2.25E-12	1.28E+01	-	1.28E+01	3.33E-14
Lu-171	S	3.27E-12	3.50E-12	1.62E+01	-	1.62E+01	1.74E-13
Lu-172	S	5.59E-12	6.03E-12	9.47E+00	-	9.47E+00	8.37E-14
Lu-173	S	1.35E-12	8.70E-12	3.92E+01	-	3.92E+01	2.60E-11
Lu-174	S	1.46E-12	1.42E-11	3.62E+01	-	3.62E+01	5.84E-11
Lu-174m	S	3.38E-12	1.51E-11	1.57E+01	-	1.57E+01	2.97E-12
Lu-176	S	9.29E-12	1.41E-10	5.70E+00	-	5.70E+00	1.01E-01
Lu-176m	S	8.55E-13	4.55E-13	6.19E+01	-	6.19E+01	1.28E-14
Lu-177	S	3.53E-12	4.66E-12	1.50E+01	-	1.50E+01	1.37E-13
Lu-177m	S	9.36E-12	5.70E-11	5.65E+00	-	5.65E+00	1.23E-12
Lu-178	S	8.62E-14	5.29E-14	6.14E+02	-	6.14E+02	1.65E-14
Lu-178m	S	7.10E-14	5.85E-14	7.45E+02	-	7.45E+02	1.60E-14
Lu-179	S	1.12E-12	5.14E-13	4.72E+01	-	4.72E+01	1.24E-14
Md-257	M	5.88E-13	7.70E-11	9.00E+01	-	9.00E+01	3.84E-14
Md-258	M	4.33E-11	1.68E-08	1.22E+00	-	1.22E+00	1.33E-13
Mg-28	M	1.14E-11	5.14E-12	4.64E+00	-	4.64E+00	8.69E-16
Mn-51	M	2.09E-13	9.55E-14	2.53E+02	-	2.53E+02	3.18E-15

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Mn-52	M	6.44E-12	4.40E-12	8.22E+00	-	8.22E+00	1.83E-14
Mn-52m	M	1.27E-13	5.07E-14	4.17E+02	-	4.17E+02	2.44E-15
Mn-53	M	1.56E-13	2.17E-13	3.39E+02	-	3.39E+02	1.86E-04
Mn-54	M	2.28E-12	5.88E-12	2.32E+01	-	2.32E+01	3.00E-12
Mn-56	M	1.03E-12	4.14E-13	5.14E+01	-	5.14E+01	2.37E-15
Mo-101	M	6.88E-14	4.33E-14	7.69E+02	-	7.69E+02	6.05E-15
Mo-90	M	6.59E-13	1.24E-12	8.03E+01	-	8.03E+01	1.31E-14
Mo-93	M	3.35E-12	1.27E-12	1.58E+01	-	1.58E+01	1.44E-08
Mo-93m	M	3.20E-13	4.33E-13	1.65E+02	-	1.65E+02	3.37E-14
Mo-99	M	1.60E-12	4.29E-12	3.31E+01	-	3.31E+01	6.91E-14
N-13	-	-	-	-	-	-	-
Na-22	F	9.62E-12	3.89E-12	5.50E+00	-	5.50E+00	8.82E-13
Na-24	F	1.23E-12	4.74E-13	4.30E+01	-	4.30E+01	4.95E-15
Nb-88	M	1.13E-13	4.51E-14	4.68E+02	-	4.68E+02	3.14E-15
Nb-89	M	1.04E-12	4.07E-13	5.09E+01	-	5.09E+01	2.94E-15
Nb-89m	M	4.00E-13	1.74E-13	1.32E+02	-	1.32E+02	4.14E-15
Nb-90	M	5.70E-12	2.27E-12	9.28E+00	-	9.28E+00	3.90E-15
Nb-93m	M	8.03E-13	1.90E-12	6.59E+01	-	6.59E+01	2.33E-10
Nb-94	M	7.77E-12	3.77E-11	6.81E+00	-	6.81E+00	3.64E-08
Nb-95	M	2.45E-12	5.44E-12	2.16E+01	-	2.16E+01	5.53E-13
Nb-95m	M	3.66E-12	3.27E-12	1.45E+01	-	1.45E+01	3.80E-14
Nb-96	M	5.03E-12	2.28E-12	1.05E+01	-	1.05E+01	7.54E-15
Nb-97	M	1.96E-13	1.07E-13	2.70E+02	-	2.70E+02	1.01E-14
Nb-97m	-	-	-	-	-	-	-
Nb-98	M	2.80E-13	1.23E-13	1.89E+02	-	1.89E+02	5.08E-15
Nd-136	S	2.70E-13	1.34E-13	1.96E+02	-	1.96E+02	7.19E-15
Nd-138	S	3.42E-12	1.24E-12	1.55E+01	-	1.55E+01	3.44E-15
Nd-139	S	4.96E-14	2.37E-14	1.07E+03	-	1.07E+03	2.35E-14
Nd-139m	S	1.08E-12	4.96E-13	4.90E+01	-	4.90E+01	1.20E-14
Nd-141	S	3.09E-14	1.34E-14	1.71E+03	-	1.71E+03	1.92E-13
Nd-141m	-	-	-	-	-	-	-
Nd-147	S	6.96E-12	9.36E-12	7.60E+00	-	7.60E+00	9.41E-14
Nd-149	S	5.44E-13	3.19E-13	9.73E+01	-	9.73E+01	8.01E-15
Nd-151	S	7.36E-14	3.92E-14	7.19E+02	-	7.19E+02	7.19E-15
Ne-19	-	-	-	-	-	-	-
Ni-56	M	2.83E-12	2.88E-12	1.87E+01	-	1.87E+01	4.90E-14
Ni-57	M	3.89E-12	1.78E-12	1.36E+01	-	1.36E+01	8.94E-15
Ni-59	M	2.74E-13	4.66E-13	1.93E+02	-	1.93E+02	2.39E-06
Ni-63	M	6.70E-13	1.64E-12	7.90E+01	-	7.90E+01	1.34E-09
Ni-65	M	6.96E-13	3.03E-13	7.60E+01	-	7.60E+01	3.98E-15
Ni-66	M	2.00E-11	8.99E-12	2.65E+00	-	2.65E+00	3.05E-15
Np-232	M	1.97E-14	3.17E-14	2.69E+03	-	2.69E+03	4.88E-14
Np-233	M	5.03E-15	2.49E-15	1.05E+04	-	1.05E+04	4.73E-13
Np-234	M	3.40E-12	1.86E-12	1.56E+01	-	1.56E+01	1.23E-13
Np-235	M	3.46E-13	1.15E-12	1.53E+02	-	1.53E+02	1.09E-10
Np-236	M	1.05E-11	9.77E-10	5.04E+00	-	5.04E+00	3.83E-07
Np-236m	M	1.11E-12	8.07E-12	4.77E+01	-	4.77E+01	8.09E-14
Np-237	M	6.18E-11	1.77E-08	8.56E-01	-	8.56E-01	1.22E-06
Np-237+D	M	6.74E-11	1.77E-08	7.85E-01	-	7.85E-01	1.11E-06
Np-238	M	5.40E-12	4.18E-12	9.80E+00	-	9.80E+00	3.79E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Np-239	M	5.14E-12	4.00E-12	1.03E+01	-	1.03E+01	4.44E-14
Np-240	M	2.23E-13	1.95E-13	2.37E+02	-	2.37E+02	1.97E-14
Np-240m	-	-	-	-	-	-	-
O-15	-	-	-	-	-	-	-
Os-180	M	3.63E-14	2.62E-14	1.46E+03	-	1.46E+03	3.07E-14
Os-181	M	3.54E-13	1.95E-13	1.49E+02	-	1.49E+02	1.51E-14
Os-182	M	2.59E-12	1.45E-12	2.04E+01	-	2.04E+01	2.61E-14
Os-185	M	1.92E-12	6.14E-12	2.76E+01	-	2.76E+01	3.68E-12
Os-189m	M	1.02E-13	3.44E-14	5.19E+02	-	5.19E+02	1.88E-13
Os-190m	M	-	-	-	-	-	-
Os-191	M	3.64E-12	7.10E-12	1.45E+01	-	1.45E+01	3.28E-13
Os-191m	M	6.11E-13	6.36E-13	8.66E+01	-	8.66E+01	6.89E-14
Os-193	M	5.29E-12	2.71E-12	1.00E+01	-	1.00E+01	1.85E-14
Os-194	M	1.53E-11	2.55E-10	3.46E+00	-	3.46E+00	1.13E-11
Os-194+D	M	-	-	-	-	-	-
P-30	-	-	-	-	-	-	-
P-32	M	8.95E-12	1.22E-11	5.91E+00	-	5.91E+00	2.07E-14
P-33	M	9.81E-13	5.11E-12	5.39E+01	-	5.39E+01	3.47E-13
Pa-227	S	9.69E-13	2.12E-10	5.46E+01	-	5.46E+01	2.53E-15
Pa-228	S	3.60E-12	2.33E-10	1.47E+01	-	1.47E+01	2.36E-14
Pa-230	S	3.77E-12	2.58E-09	1.40E+01	-	1.40E+01	4.31E-13
Pa-231	S	1.73E-10	4.55E-08	3.06E-01	-	3.06E-01	6.48E-09
Pa-232	S	3.48E-12	6.81E-12	1.52E+01	-	1.52E+01	3.54E-14
Pa-233	S	5.55E-12	1.42E-11	9.53E+00	-	9.53E+00	4.60E-13
Pa-234	S	2.56E-12	1.46E-12	2.07E+01	-	2.07E+01	1.04E-14
Pa-234m	-	-	-	-	-	-	-
Pb-195m	M	5.48E-14	4.37E-14	9.66E+02	-	9.66E+02	1.58E-14
Pb-198	M	2.60E-13	1.43E-13	2.04E+02	-	2.04E+02	3.09E-14
Pb-199	M	1.42E-13	7.44E-14	3.73E+02	-	3.73E+02	3.56E-14
Pb-200	M	1.58E-12	1.16E-12	3.35E+01	-	3.35E+01	4.60E-14
Pb-201	M	5.92E-13	3.50E-13	8.94E+01	-	8.94E+01	5.40E-14
Pb-202	M	2.22E-11	1.43E-11	2.38E+00	-	2.38E+00	4.04E-07
Pb-202+D	M	-	-	-	-	-	-
Pb-202m	M	4.18E-13	2.25E-13	1.27E+02	-	1.27E+02	2.96E-14
Pb-203	M	1.02E-12	7.55E-13	5.19E+01	-	5.19E+01	1.75E-13
Pb-205	M	6.33E-13	6.44E-13	8.36E+01	-	8.36E+01	6.86E-04
Pb-209	M	2.41E-13	1.90E-13	2.20E+02	-	2.20E+02	4.77E-14
Pb-210	M	8.81E-10	2.77E-09	6.01E-02	-	6.01E-02	7.87E-13
Pb-211	M	4.11E-13	3.70E-11	1.29E+02	-	1.29E+02	5.22E-15
Pb-212	M	2.50E-11	5.77E-10	2.12E+00	-	2.12E+00	1.53E-15
Pb-214	M	3.44E-13	3.63E-11	1.54E+02	-	1.54E+02	4.70E-15
Pd-100	S	4.03E-12	3.10E-12	1.31E+01	-	1.31E+01	3.66E-14
Pd-101	S	4.22E-13	1.97E-13	1.25E+02	-	1.25E+02	3.35E-14
Pd-103	S	1.25E-12	1.77E-12	4.23E+01	-	4.23E+01	5.67E-13
Pd-107	S	2.50E-13	1.69E-12	2.12E+02	-	2.12E+02	4.12E-04
Pd-109	S	3.50E-12	1.85E-12	1.51E+01	-	1.51E+01	7.07E-15
Pm-141	S	6.66E-14	2.85E-14	7.94E+02	-	7.94E+02	1.25E-14
Pm-142	-	-	-	-	-	-	-
Pm-143	S	8.73E-13	5.37E-12	6.06E+01	-	6.06E+01	1.76E-11
Pm-144	S	3.34E-12	2.76E-11	1.58E+01	-	1.58E+01	6.35E-12

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Pm-145	S	5.59E-13	6.59E-12	9.47E+01	-	9.47E+01	6.80E-10
Pm-146	S	4.18E-12	5.40E-11	1.27E+01	-	1.27E+01	2.86E-11
Pm-147	S	1.69E-12	1.61E-11	3.13E+01	-	3.13E+01	3.38E-11
Pm-148	S	1.72E-11	1.05E-11	3.08E+00	-	3.08E+00	1.88E-14
Pm-148m	S	7.99E-12	2.12E-11	6.62E+00	-	6.62E+00	3.11E-13
Pm-149	S	6.66E-12	3.66E-12	7.94E+00	-	7.94E+00	2.01E-14
Pm-150	S	1.08E-12	4.63E-13	4.90E+01	-	4.90E+01	6.29E-15
Pm-151	S	4.51E-12	2.36E-12	1.17E+01	-	1.17E+01	1.61E-14
Po-203	M	1.63E-13	7.73E-14	3.25E+02	-	3.25E+02	1.29E-14
Po-205	M	1.81E-13	1.72E-13	2.92E+02	-	2.92E+02	3.45E-14
Po-207	M	5.18E-13	1.99E-13	1.02E+02	-	1.02E+02	3.94E-14
Po-210	M	3.77E-10	1.08E-08	1.40E-01	-	1.40E-01	3.13E-14
Po-211	-	-	-	-	-	-	-
Po-212	-	-	-	-	-	-	-
Po-213	-	-	-	-	-	-	-
Po-214	-	-	-	-	-	-	-
Po-215	-	-	-	-	-	-	-
Po-216	-	-	-	-	-	-	-
Po-218	-	-	-	-	-	-	-
Pr-136	S	5.88E-14	2.15E-14	9.00E+02	-	9.00E+02	8.54E-15
Pr-137	S	1.25E-13	5.55E-14	4.23E+02	-	4.23E+02	2.37E-14
Pr-138	-	-	-	-	-	-	-
Pr-138m	S	4.18E-13	1.76E-13	1.27E+02	-	1.27E+02	1.17E-14
Pr-139	S	1.47E-13	6.96E-14	3.60E+02	-	3.60E+02	7.21E-14
Pr-142	S	8.58E-12	3.38E-12	6.17E+00	-	6.17E+00	5.35E-15
Pr-142m	S	1.10E-13	4.33E-14	4.81E+02	-	4.81E+02	5.31E-15
Pr-143	S	7.92E-12	9.73E-12	6.68E+00	-	6.68E+00	9.94E-14
Pr-144	S	8.10E-14	3.58E-14	6.53E+02	-	6.53E+02	8.66E-15
Pr-144m	-	-	-	-	-	-	-
Pr-145	S	2.29E-12	9.25E-13	2.31E+01	-	2.31E+01	6.40E-15
Pr-147	S	5.85E-14	3.59E-14	9.04E+02	-	9.04E+02	9.63E-15
Pt-186	F	3.92E-13	8.25E-14	1.35E+02	-	1.35E+02	1.60E-14
Pt-188	F	3.77E-12	1.88E-12	1.40E+01	-	1.40E+01	2.06E-13
Pt-189	F	5.92E-13	1.32E-13	8.94E+01	-	8.94E+01	5.87E-14
Pt-191	F	1.76E-12	4.63E-13	3.01E+01	-	3.01E+01	1.23E-13
Pt-193	F	2.11E-13	1.11E-13	2.51E+02	-	2.51E+02	6.78E-09
Pt-193m	F	3.03E-12	7.73E-13	1.75E+01	-	1.75E+01	1.12E-13
Pt-195m	F	4.11E-12	1.05E-12	1.29E+01	-	1.29E+01	7.74E-14
Pt-197	F	2.62E-12	5.22E-13	2.02E+01	-	2.02E+01	2.33E-14
Pt-197m	F	4.00E-13	8.66E-14	1.32E+02	-	1.32E+02	1.31E-14
Pt-199	F	8.84E-14	2.48E-14	5.99E+02	-	5.99E+02	1.95E-14
Pt-200	F	7.73E-12	1.48E-12	6.84E+00	-	6.84E+00	5.47E-15
Pu-234	M	8.58E-13	6.85E-11	6.17E+01	-	6.17E+01	4.06E-14
Pu-235	M	4.37E-15	2.39E-15	1.21E+04	-	1.21E+04	3.83E-13
Pu-236	M	7.47E-11	2.28E-08	7.08E-01	-	7.08E-01	1.33E-12
Pu-237	M	5.77E-13	1.27E-12	9.17E+01	-	9.17E+01	7.55E-12
Pu-238	M	1.31E-10	3.36E-08	4.04E-01	-	4.04E-01	2.36E-11
Pu-239	M	1.35E-10	3.33E-08	3.92E-01	-	3.92E-01	6.31E-09
Pu-240	M	1.35E-10	3.33E-08	3.92E-01	-	3.92E-01	1.72E-09
Pu-241	M	1.76E-12	3.34E-10	3.01E+01	-	3.01E+01	2.92E-10

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Pu-242	M	1.28E-10	3.13E-08	4.13E-01	-	4.13E-01	1.05E-07
Pu-243	M	4.74E-13	2.94E-13	1.12E+02	-	1.12E+02	4.30E-14
Pu-244	M	1.44E-10	3.04E-08	3.67E-01	-	3.67E-01	2.01E-05
Pu-244+D	M	1.44E-10	2.93E-08	3.67E-01	-	3.67E-01	2.01E-05
Pu-245	M	4.48E-12	2.07E-12	1.18E+01	-	1.18E+01	9.71E-15
Pu-246	M	1.73E-11	1.73E-11	3.06E+00	-	3.06E+00	6.26E-14
Ra-222	-	-	-	-	-	-	-
Ra-223	M	2.38E-10	2.50E-08	2.22E-01	-	2.22E-01	4.35E-15
Ra-223+D	M	-	-	-	-	-	-
Ra-224	M	1.67E-10	9.99E-09	3.17E-01	1.06E-03	1.06E-03	6.64E-18
Ra-224+D	M	-	-	-	-	-	-
Ra-225	M	1.14E-10	2.10E-08	4.64E-01	-	4.64E-01	1.19E-14
Ra-225+D	M	-	-	-	-	-	-
Ra-226	M	3.85E-10	1.15E-08	1.37E-01	9.20E-04	9.14E-04	9.25E-13
Ra-226+D	M	3.86E-10	1.16E-08	1.37E-01	9.12E-04	9.06E-04	9.18E-13
Ra-227	M	1.05E-13	3.13E-13	5.04E+02	-	5.04E+02	2.57E-14
Ra-227+D	M	-	-	-	-	-	-
Ra-228	M	1.04E-09	5.18E-09	5.09E-02	-	5.09E-02	1.87E-13
Ra-228+D	M	1.04E-09	5.23E-09	5.09E-02	-	5.09E-02	1.87E-13
Rb-79	F	8.36E-14	2.37E-14	6.33E+02	-	6.33E+02	6.10E-15
Rb-80	-	-	-	-	-	-	-
Rb-81	F	1.28E-13	4.63E-14	4.13E+02	-	4.13E+02	4.90E-14
Rb-81m	F	2.05E-14	1.10E-14	2.58E+03	-	2.58E+03	3.56E-14
Rb-82	-	-	-	-	-	-	-
Rb-82m	F	3.51E-13	1.35E-13	1.51E+02	-	1.51E+02	2.45E-14
Rb-83	F	5.70E-12	2.32E-12	9.28E+00	-	9.28E+00	5.09E-13
Rb-84	F	8.81E-12	3.59E-12	6.01E+00	-	6.01E+00	1.27E-13
Rb-86	F	9.88E-12	4.00E-12	5.36E+00	-	5.36E+00	6.59E-14
Rb-87	F	5.22E-12	2.14E-12	1.01E+01	-	1.01E+01	1.16E-01
Rb-88	F	1.40E-13	3.17E-14	3.78E+02	-	3.78E+02	3.15E-15
Rb-89	F	7.88E-14	2.09E-14	6.71E+02	-	6.71E+02	4.84E-15
Re-177	M	4.55E-14	2.97E-14	1.16E+03	-	1.16E+03	1.54E-14
Re-178	M	4.26E-14	2.33E-14	1.24E+03	-	1.24E+03	1.55E-14
Re-180	-	-	-	-	-	-	-
Re-181	M	1.41E-12	7.96E-13	3.75E+01	-	3.75E+01	4.34E-14
Re-182	M	4.96E-12	4.44E-12	1.07E+01	-	1.07E+01	3.97E-14
Re-182m	M	8.70E-13	5.51E-13	6.08E+01	-	6.08E+01	4.49E-14
Re-184	M	3.16E-12	6.73E-12	1.67E+01	-	1.67E+01	8.98E-13
Re-184m	M	4.88E-12	2.26E-11	1.08E+01	-	1.08E+01	2.53E-12
Re-186	M	5.59E-12	4.26E-12	9.47E+00	-	9.47E+00	5.10E-14
Re-186m	M	7.33E-12	4.18E-11	7.22E+00	-	7.22E+00	7.52E-07
Re-186m+D	M	-	-	-	-	-	-
Re-187	M	1.79E-14	2.51E-14	2.96E+03	-	2.96E+03	7.74E+01
Re-188	M	4.88E-12	2.22E-12	1.08E+01	-	1.08E+01	1.11E-14
Re-188m	M	9.92E-14	5.07E-14	5.33E+02	-	5.33E+02	9.94E-15
Re-189	M	2.86E-12	1.73E-12	1.85E+01	-	1.85E+01	2.72E-14
Rh-100	S	2.65E-12	1.04E-12	2.00E+01	-	2.00E+01	1.33E-14
Rh-101	S	2.15E-12	1.81E-11	2.46E+01	-	2.46E+01	2.23E-11
Rh-101m	S	9.40E-13	7.14E-13	5.63E+01	-	5.63E+01	1.89E-13
Rh-102	S	7.70E-12	5.99E-11	6.87E+00	-	6.87E+00	5.69E-12

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Rh-102m	S	6.07E-12	2.56E-11	8.72E+00	-	8.72E+00	1.41E-12
Rh-103m	S	9.40E-15	9.14E-15	5.63E+03	-	5.63E+03	1.73E-13
Rh-105	S	2.34E-12	1.59E-12	2.26E+01	-	2.26E+01	2.68E-14
Rh-106	-	-	-	-	-	-	-
Rh-106m	S	5.48E-13	2.71E-13	9.66E+01	-	9.66E+01	7.20E-15
Rh-107	S	4.18E-14	2.88E-14	1.27E+03	-	1.27E+03	1.57E-14
Rh-99	S	2.21E-12	3.33E-12	2.39E+01	-	2.39E+01	2.91E-13
Rh-99m	S	2.42E-13	9.99E-14	2.19E+02	-	2.19E+02	3.25E-14
Rn-218	-	-	-	-	-	-	-
Rn-219	-	-	-	-	-	-	-
Rn-219+D	-	-	-	-	-	-	-
Rn-220	-	-	-	-	-	-	-
Rn-222	-	-	-	-	-	-	-
Rn-222+D	-	-	1.80E-11	-	5.88E-01	5.88E-01	3.83E-15
Ru-103	M	3.85E-12	8.92E-12	1.37E+01	-	1.37E+01	4.27E-13
Ru-105	M	1.35E-12	6.48E-13	3.92E+01	-	3.92E+01	5.84E-15
Ru-106	M	4.22E-11	1.02E-10	1.25E+00	-	1.25E+00	3.75E-13
Ru-106+D	M	4.22E-11	1.02E-10	1.25E+00	-	1.25E+00	3.75E-13
Ru-94	M	3.06E-13	1.23E-13	1.73E+02	-	1.73E+02	4.49E-15
Ru-97	M	6.36E-13	3.36E-13	8.32E+01	-	8.32E+01	1.80E-13
S-35	M	5.14E-13	5.03E-12	1.03E+02	-	1.03E+02	2.42E-12
Sb-115	M	5.14E-14	2.33E-14	1.03E+03	-	1.03E+03	2.01E-14
Sb-116	M	4.96E-14	1.88E-14	1.07E+03	-	1.07E+03	1.04E-14
Sb-116m	M	1.76E-13	8.81E-14	3.01E+02	-	3.01E+02	1.12E-14
Sb-117	M	6.59E-14	4.07E-14	8.03E+02	-	8.03E+02	8.41E-14
Sb-118m	M	6.99E-13	2.64E-13	7.57E+01	-	7.57E+01	1.43E-14
Sb-119	M	4.77E-13	1.74E-13	1.11E+02	-	1.11E+02	1.61E-13
Sb-120	M	2.48E-14	1.12E-14	2.13E+03	-	2.13E+03	2.17E-14
Sb-120m	M	4.44E-12	3.30E-12	1.19E+01	-	1.19E+01	6.32E-14
Sb-122	M	1.06E-11	5.48E-12	4.99E+00	-	4.99E+00	1.26E-14
Sb-124	M	1.29E-11	2.43E-11	4.10E+00	-	4.10E+00	2.35E-13
Sb-124m	M	-	-	-	-	-	-
Sb-124n	M	1.67E-14	1.15E-14	3.17E+03	-	3.17E+03	4.23E-14
Sb-125	M	4.37E-12	1.66E-11	1.21E+01	-	1.21E+01	1.17E-11
Sb-126	M	1.11E-11	1.15E-11	4.77E+00	-	4.77E+00	5.71E-14
Sb-126m	M	6.66E-14	3.16E-14	7.94E+02	-	7.94E+02	1.01E-14
Sb-127	M	1.01E-11	7.51E-12	5.24E+00	-	5.24E+00	1.96E-14
Sb-128	M	3.45E-12	1.44E-12	1.53E+01	-	1.53E+01	5.65E-15
Sb-128m	M	5.51E-14	2.12E-14	9.60E+02	-	9.60E+02	6.81E-15
Sb-129	M	2.19E-12	9.62E-13	2.42E+01	-	2.42E+01	4.30E-15
Sb-130	M	2.07E-13	9.73E-14	2.56E+02	-	2.56E+02	7.08E-15
Sb-131	M	2.56E-13	9.73E-14	2.07E+02	-	2.07E+02	3.32E-15
Sc-43	S	8.18E-13	3.81E-13	6.47E+01	-	6.47E+01	3.46E-15
Sc-44	S	1.56E-12	6.44E-13	3.39E+01	-	3.39E+01	1.87E-15
Sc-44m	S	1.38E-11	6.96E-12	3.83E+00	-	3.83E+00	3.16E-15
Sc-46	S	6.22E-12	2.47E-11	8.51E+00	-	8.51E+00	2.52E-13
Sc-47	S	3.49E-12	3.05E-12	1.52E+01	-	1.52E+01	1.83E-14
Sc-48	S	7.33E-12	3.96E-12	7.22E+00	-	7.22E+00	4.84E-15
Sc-49	S	2.05E-13	1.07E-13	2.58E+02	-	2.58E+02	3.87E-15
Se-70	F	2.95E-13	7.36E-14	1.79E+02	-	1.79E+02	2.74E-15

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Se-73	F	7.96E-13	1.99E-13	6.65E+01	-	6.65E+01	1.11E-14
Se-73m	F	8.29E-14	2.06E-14	6.38E+02	-	6.38E+02	9.68E-15
Se-75	F	8.14E-12	3.77E-12	6.50E+00	-	6.50E+00	4.48E-13
Se-77m	-	-	-	-	-	-	-
Se-79	F	7.29E-12	3.33E-12	7.26E+00	-	7.26E+00	1.04E-07
Se-81	F	4.29E-14	1.27E-14	1.23E+03	-	1.23E+03	9.85E-15
Se-81m	F	1.30E-13	3.54E-14	4.07E+02	-	4.07E+02	1.01E-14
Se-83	F	1.02E-13	2.72E-14	5.19E+02	-	5.19E+02	5.16E-15
Si-31	S	6.48E-13	3.05E-13	8.17E+01	-	8.17E+01	2.12E-15
Si-32	S	3.44E-12	2.93E-10	1.54E+01	-	1.54E+01	6.20E-10
Si-32+D	S	-	-	-	-	-	-
Sm-141	M	7.10E-14	2.79E-14	7.45E+02	-	7.45E+02	5.71E-15
Sm-141m	M	1.40E-13	6.29E-14	3.78E+02	-	3.78E+02	6.42E-15
Sm-142	M	5.37E-13	2.13E-13	9.85E+01	-	9.85E+01	5.40E-15
Sm-145	M	1.17E-12	4.51E-12	4.52E+01	-	4.52E+01	1.71E-11
Sm-146	M	4.11E-11	7.88E-09	1.29E+00	-	1.29E+00	5.42E-05
Sm-147	M	3.74E-11	6.88E-09	1.41E+00	-	1.41E+00	6.17E-02
Sm-151	M	5.55E-13	4.88E-12	9.53E+01	-	9.53E+01	3.63E-09
Sm-153	M	4.85E-12	2.95E-12	1.09E+01	-	1.09E+01	2.49E-14
Sm-155	M	4.96E-14	3.15E-14	1.07E+03	-	1.07E+03	1.95E-14
Sm-156	M	1.49E-12	9.69E-13	3.55E+01	-	3.55E+01	1.66E-14
Sn-110	M	1.87E-12	6.70E-13	2.83E+01	-	2.83E+01	3.98E-15
Sn-111	M	5.51E-14	2.83E-14	9.60E+02	-	9.60E+02	2.00E-14
Sn-113	M	4.33E-12	1.00E-11	1.22E+01	-	1.22E+01	1.22E-12
Sn-117m	M	4.37E-12	8.84E-12	1.21E+01	-	1.21E+01	1.48E-13
Sn-119m	M	2.21E-12	7.81E-12	2.39E+01	-	2.39E+01	6.40E-12
Sn-121	M	1.50E-12	1.02E-12	3.53E+01	-	3.53E+01	3.69E-14
Sn-121m	M	2.34E-12	1.54E-11	2.26E+01	-	2.26E+01	4.21E-10
Sn-121m+D	M	-	-	-	-	-	-
Sn-123	M	1.40E-11	3.03E-11	3.78E+00	-	3.78E+00	4.61E-13
Sn-123m	M	7.96E-14	5.62E-14	6.65E+02	-	6.65E+02	1.75E-14
Sn-125	M	2.01E-11	1.41E-11	2.63E+00	-	2.63E+00	2.43E-14
Sn-126	M	2.56E-11	9.95E-11	2.07E+00	-	2.07E+00	7.29E-08
Sn-126+D	M	-	-	-	-	-	-
Sn-127	M	8.25E-13	4.40E-13	6.41E+01	-	6.41E+01	5.47E-15
Sn-128	M	4.33E-13	2.29E-13	1.22E+02	-	1.22E+02	4.92E-15
Sr-80	M	1.09E-12	4.51E-13	4.85E+01	-	4.85E+01	2.07E-15
Sr-81	M	1.71E-13	8.07E-14	3.09E+02	-	3.09E+02	3.40E-15
Sr-82	M	3.13E-11	3.69E-11	1.69E+00	-	1.69E+00	2.66E-14
Sr-82+D	M	-	-	-	-	-	-
Sr-83	M	2.21E-12	1.26E-12	2.39E+01	-	2.39E+01	2.06E-14
Sr-85	M	2.26E-12	2.56E-12	2.34E+01	-	2.34E+01	9.90E-13
Sr-85m	M	1.67E-14	8.32E-15	3.17E+03	-	3.17E+03	9.97E-14
Sr-87m	M	1.07E-13	5.62E-14	4.94E+02	-	4.94E+02	3.86E-14
Sr-89	M	1.28E-11	2.34E-11	4.13E+00	-	4.13E+00	1.43E-13
Sr-90	M	5.59E-11	1.05E-10	9.47E-01	-	9.47E-01	6.95E-12
Sr-90+D	M	7.40E-11	1.13E-10	7.15E-01	-	7.15E-01	5.25E-12
Sr-91	M	3.22E-12	1.70E-12	1.64E+01	-	1.64E+01	4.54E-15
Sr-92	M	2.25E-12	1.03E-12	2.35E+01	-	2.35E+01	1.87E-15
Ta-172	S	1.14E-13	7.22E-14	4.64E+02	-	4.64E+02	1.56E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Ta-173	S	9.03E-13	4.44E-13	5.86E+01	-	5.86E+01	1.18E-14
Ta-174	S	1.62E-13	1.11E-13	3.27E+02	-	3.27E+02	2.18E-14
Ta-175	S	8.70E-13	4.37E-13	6.08E+01	-	6.08E+01	3.57E-14
Ta-176	S	1.25E-12	5.96E-13	4.23E+01	-	4.23E+01	1.92E-14
Ta-177	S	5.88E-13	4.44E-13	9.00E+01	-	9.00E+01	2.88E-13
Ta-178	-	-	-	-	-	-	-
Ta-178m	S	2.49E-13	1.79E-13	2.12E+02	-	2.12E+02	2.66E-14
Ta-179	S	3.44E-13	2.05E-12	1.54E+02	-	1.54E+02	1.40E-10
Ta-180	S	4.44E-12	7.25E-11	1.19E+01	-	1.19E+01	6.01E+01
Ta-180m	S	3.03E-13	1.86E-13	1.75E+02	-	1.75E+02	8.14E-14
Ta-182	S	7.96E-12	3.74E-11	6.65E+00	-	6.65E+00	1.07E-12
Ta-182m	S	1.99E-14	3.41E-14	2.66E+03	-	2.66E+03	4.08E-14
Ta-183	S	8.33E-12	8.81E-12	6.35E+00	-	6.35E+00	4.55E-14
Ta-184	S	3.53E-12	1.73E-12	1.50E+01	-	1.50E+01	7.67E-15
Ta-185	S	1.57E-13	1.18E-13	3.37E+02	-	3.37E+02	1.63E-14
Ta-186	S	5.51E-14	2.69E-14	9.60E+02	-	9.60E+02	9.99E-15
Tb-147	M	5.33E-13	2.26E-13	9.93E+01	-	9.93E+01	7.70E-15
Tb-149	M	1.08E-12	1.65E-11	4.90E+01	-	4.90E+01	9.68E-15
Tb-150	M	1.08E-12	3.88E-13	4.90E+01	-	4.90E+01	7.68E-15
Tb-151	M	1.49E-12	7.73E-13	3.55E+01	-	3.55E+01	3.02E-14
Tb-153	M	1.28E-12	8.18E-13	4.13E+01	-	4.13E+01	1.14E-13
Tb-154	M	2.57E-12	1.14E-12	2.06E+01	-	2.06E+01	2.17E-14
Tb-155	M	1.08E-12	8.99E-13	4.90E+01	-	4.90E+01	3.10E-13
Tb-156	M	4.96E-12	4.22E-12	1.07E+01	-	1.07E+01	6.82E-14
Tb-156m	M	8.44E-13	8.47E-13	6.27E+01	-	6.27E+01	7.63E-14
Tb-156n	M	4.03E-13	3.77E-13	1.31E+02	-	1.31E+02	3.27E-14
Tb-157	M	1.86E-13	1.46E-12	2.84E+02	-	2.84E+02	1.88E-08
Tb-158	M	4.88E-12	8.29E-11	1.08E+01	-	1.08E+01	7.19E-10
Tb-160	M	8.70E-12	2.45E-11	6.08E+00	-	6.08E+00	5.40E-13
Tb-161	M	4.77E-12	5.03E-12	1.11E+01	-	1.11E+01	9.47E-14
Tc-101	M	3.06E-14	1.85E-14	1.73E+03	-	1.73E+03	1.32E-14
Tc-104	M	1.38E-13	5.33E-14	3.83E+02	-	3.83E+02	3.87E-15
Tc-93	M	1.59E-13	6.36E-14	3.33E+02	-	3.33E+02	2.72E-14
Tc-93m	M	6.81E-14	3.17E-14	7.77E+02	-	7.77E+02	1.67E-14
Tc-94	M	6.36E-13	2.80E-13	8.32E+01	-	8.32E+01	1.22E-14
Tc-94m	M	2.36E-13	1.03E-13	2.24E+02	-	2.24E+02	5.84E-15
Tc-95	M	5.77E-13	2.63E-13	9.17E+01	-	9.17E+01	5.57E-14
Tc-95m	M	1.80E-12	3.40E-12	2.94E+01	-	2.94E+01	1.31E-12
Tc-96	M	3.42E-12	2.00E-12	1.55E+01	-	1.55E+01	4.88E-14
Tc-96m	M	3.59E-14	2.05E-14	1.47E+03	-	1.47E+03	3.88E-14
Tc-97	M	2.70E-13	8.51E-13	1.96E+02	-	1.96E+02	1.38E-04
Tc-97m	M	2.38E-12	1.12E-11	2.22E+01	-	2.22E+01	1.44E-12
Tc-98	M	7.10E-12	3.01E-11	7.45E+00	-	7.45E+00	8.59E-06
Tc-99	M	2.75E-12	1.41E-11	1.92E+01	-	1.92E+01	1.14E-06
Tc-99m	M	7.96E-14	5.70E-14	6.65E+02	-	6.65E+02	1.27E-13
Te-116	M	6.73E-13	3.20E-13	7.86E+01	-	7.86E+01	7.26E-15
Te-121	M	1.46E-12	1.30E-12	3.62E+01	-	3.62E+01	5.72E-13
Te-121m	M	6.40E-12	1.44E-11	8.27E+00	-	8.27E+00	1.18E-12
Te-123	M	4.11E-12	2.50E-12	1.29E+01	-	1.29E+01	4.43E+01
Te-123m	M	4.14E-12	1.36E-11	1.28E+01	-	1.28E+01	1.44E-12

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Te-125m	M	3.33E-12	1.17E-11	1.59E+01	-	1.59E+01	8.84E-13
Te-127	M	1.00E-12	6.11E-13	5.29E+01	-	5.29E+01	2.01E-14
Te-127m	M	8.62E-12	2.58E-11	6.14E+00	-	6.14E+00	6.52E-13
Te-129	M	1.71E-13	9.95E-14	3.09E+02	-	3.09E+02	1.48E-14
Te-129m	M	1.53E-11	2.49E-11	3.46E+00	-	3.46E+00	1.15E-13
Te-131	M	2.17E-13	6.40E-14	2.44E+02	-	2.44E+02	4.25E-15
Te-131m	M	8.25E-12	4.22E-12	6.41E+00	-	6.41E+00	8.06E-15
Te-132	M	1.70E-11	9.32E-12	3.11E+00	-	3.11E+00	1.03E-14
Te-133	M	1.92E-13	4.92E-14	2.76E+02	-	2.76E+02	2.43E-15
Te-133m	M	8.73E-13	2.64E-13	6.06E+01	-	6.06E+01	2.38E-15
Te-134	M	3.01E-13	1.60E-13	1.76E+02	-	1.76E+02	5.25E-15
Th-226	S	6.66E-13	1.56E-10	7.94E+01	-	7.94E+01	2.96E-15
Th-227	S	4.74E-11	3.51E-08	1.12E+00	-	1.12E+00	3.64E-14
Th-228	S	1.07E-10	1.32E-07	4.94E-01	-	4.94E-01	6.04E-13
Th-229	S	2.24E-10	1.75E-07	2.36E-01	-	2.36E-01	1.11E-09
Th-229+D	S	5.28E-10	2.25E-07	1.00E-01	-	1.00E-01	4.72E-10
Th-230	S	9.10E-11	2.85E-08	5.81E-01	-	5.81E-01	2.88E-08
Th-231	S	2.21E-12	1.52E-12	2.39E+01	-	2.39E+01	4.51E-14
Th-232	S	1.01E-10	4.33E-08	5.24E-01	-	5.24E-01	4.78E-03
Th-234	S	2.31E-11	3.07E-11	2.29E+00	-	2.29E+00	9.91E-14
Th-234+D	S	-	-	-	-	-	-
Ti-44	S	2.56E-11	3.41E-10	2.07E+00	-	2.07E+00	1.20E-11
Ti-44+D	S	-	-	-	-	-	-
Ti-45	S	6.44E-13	3.09E-13	8.22E+01	-	8.22E+01	3.64E-15
Tl-194	F	1.81E-14	5.11E-15	2.92E+03	-	2.92E+03	9.97E-14
Tl-194m	F	7.81E-14	2.50E-14	6.77E+02	-	6.77E+02	2.30E-14
Tl-195	F	6.40E-14	2.08E-14	8.27E+02	-	8.27E+02	5.98E-14
Tl-197	F	6.25E-14	2.39E-14	8.47E+02	-	8.47E+02	1.51E-13
Tl-198	F	2.06E-13	7.92E-14	2.57E+02	-	2.57E+02	8.62E-14
Tl-198m	F	1.30E-13	4.92E-14	4.07E+02	-	4.07E+02	4.82E-14
Tl-199	F	7.36E-14	2.89E-14	7.19E+02	-	7.19E+02	3.39E-13
Tl-200	F	6.14E-13	2.52E-13	8.62E+01	-	8.62E+01	1.44E-13
Tl-201	F	3.61E-13	1.49E-13	1.47E+02	-	1.47E+02	6.88E-13
Tl-202	F	1.49E-12	6.14E-13	3.55E+01	-	3.55E+01	6.73E-13
Tl-204	F	5.85E-12	2.45E-12	9.04E+00	-	9.04E+00	1.95E-11
Tl-206	-	-	-	-	-	-	-
Tl-207	-	-	-	-	-	-	-
Tl-208	-	-	-	-	-	-	-
Tl-209	-	-	-	-	-	-	-
Tm-162	M	5.66E-14	2.72E-14	9.35E+02	-	9.35E+02	1.75E-14
Tm-166	M	1.12E-12	5.14E-13	4.72E+01	-	4.72E+01	1.93E-14
Tm-167	M	3.46E-12	4.37E-12	1.53E+01	-	1.53E+01	1.81E-13
Tm-170	M	8.92E-12	2.43E-11	5.93E+00	-	5.93E+00	9.95E-13
Tm-171	M	6.99E-13	3.33E-12	7.57E+01	-	7.57E+01	6.96E-11
Tm-172	M	1.08E-11	5.62E-12	4.90E+00	-	4.90E+00	1.71E-14
Tm-173	M	1.72E-12	7.73E-13	3.08E+01	-	3.08E+01	1.40E-14
Tm-175	M	5.22E-14	3.26E-14	1.01E+03	-	1.01E+03	1.44E-14
U-230	M	2.09E-10	4.55E-08	2.53E-01	-	2.53E-01	9.29E-15
U-231	M	1.75E-12	1.80E-12	3.02E+01	-	3.02E+01	2.25E-13
U-232	M	2.92E-10	1.95E-08	1.81E-01	-	1.81E-01	8.47E-12

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
U-233	M	7.18E-11	1.16E-08	7.37E-01	-	7.37E-01	7.62E-08
U-234	M	7.07E-11	1.14E-08	7.48E-01	-	7.48E-01	1.20E-07
U-235	M	6.96E-11	1.01E-08	7.60E-01	-	7.60E-01	3.52E-04
U-235+D	M	7.18E-11	1.01E-08	7.37E-01	-	7.37E-01	3.41E-04
U-236	M	6.70E-11	1.05E-08	7.90E-01	-	7.90E-01	1.22E-05
U-237	M	4.88E-12	6.44E-12	1.08E+01	-	1.08E+01	1.33E-13
U-238	M	6.40E-11	9.32E-09	8.27E-01	-	8.27E-01	2.46E-03
U-238+D	M	8.71E-11	9.35E-09	6.07E-01	-	6.07E-01	1.81E-03
U-239	M	7.40E-14	5.70E-14	7.15E+02	-	7.15E+02	2.14E-14
U-240	M	7.03E-12	2.96E-12	7.53E+00	-	7.53E+00	8.14E-15
V-47	M	1.25E-13	5.96E-14	4.23E+02	-	4.23E+02	3.45E-15
V-48	M	8.21E-12	9.29E-12	6.44E+00	-	6.44E+00	3.85E-14
V-49	M	1.22E-13	1.47E-13	4.34E+02	-	4.34E+02	5.38E-11
W-176	F	4.11E-13	1.24E-13	1.29E+02	-	1.29E+02	1.67E-14
W-177	F	2.01E-13	5.99E-14	2.63E+02	-	2.63E+02	3.35E-14
W-178	F	1.21E-12	3.85E-13	4.37E+01	-	4.37E+01	1.30E-12
W-178+D	F	-	-	-	-	-	-
W-179	F	7.22E-15	1.83E-15	7.33E+03	-	7.33E+03	2.62E-13
W-181	F	3.96E-13	1.35E-13	1.34E+02	-	1.34E+02	2.25E-11
W-185	F	2.93E-12	9.36E-13	1.81E+01	-	1.81E+01	1.92E-12
W-187	F	3.67E-12	1.11E-12	1.44E+01	-	1.44E+01	2.06E-14
W-188	F	1.40E-11	4.63E-12	3.78E+00	-	3.78E+00	3.78E-13
Xe-120	-	-	-	-	-	-	-
Xe-121	-	-	-	-	-	-	-
Xe-122	-	-	-	-	-	-	-
Xe-123	-	-	-	-	-	-	-
Xe-125	-	-	-	-	-	-	-
Xe-127	-	-	-	-	-	-	-
Xe-129m	-	-	-	-	-	-	-
Xe-131m	-	-	-	-	-	-	-
Xe-133	-	-	-	-	-	-	-
Xe-133m	-	-	-	-	-	-	-
Xe-135	-	-	-	-	-	-	-
Xe-135m	-	-	-	-	-	-	-
Xe-138	-	-	-	-	-	-	-
Y-86	S	4.07E-12	1.58E-12	1.30E+01	-	1.30E+01	5.27E-15
Y-86m	S	2.35E-13	9.29E-14	2.25E+02	-	2.25E+02	4.95E-15
Y-87	S	2.58E-12	1.49E-12	2.05E+01	-	2.05E+01	4.58E-14
Y-88	S	4.18E-12	1.70E-11	1.27E+01	-	1.27E+01	9.11E-13
Y-90	S	1.81E-11	8.40E-12	2.92E+00	-	2.92E+00	5.38E-15
Y-90m	S	1.04E-12	4.81E-13	5.09E+01	-	5.09E+01	4.67E-15
Y-91	S	1.60E-11	3.36E-11	3.31E+00	-	3.31E+00	1.35E-13
Y-91m	S	3.52E-14	3.01E-14	1.50E+03	-	1.50E+03	3.62E-14
Y-92	S	2.48E-12	9.32E-13	2.13E+01	-	2.13E+01	2.22E-15
Y-93	S	7.18E-12	2.64E-12	7.37E+00	-	7.37E+00	2.21E-15
Y-94	S	1.37E-13	5.51E-14	3.86E+02	-	3.86E+02	3.69E-15
Y-95	S	7.25E-14	2.92E-14	7.30E+02	-	7.30E+02	3.95E-15
Yb-162	S	5.22E-14	3.00E-14	1.01E+03	-	1.01E+03	1.65E-14
Yb-166	S	4.37E-12	2.89E-12	1.21E+01	-	1.21E+01	3.64E-14
Yb-167	S	1.56E-14	1.71E-14	3.39E+03	-	3.39E+03	5.28E-14

Isotope	ICRP Lung Absorption Type	Water Slope Factor (risk/pCi)	Inhalation Slope Factor (risk/pCi)	Ingestion PRG (pCi/L)	Inhalation PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Yb-169	S	4.00E-12	1.08E-11	1.32E+01	-	1.32E+01	5.49E-13
Yb-175	S	2.87E-12	2.95E-12	1.84E+01	-	1.84E+01	1.04E-13
Yb-177	S	3.46E-13	2.29E-13	1.53E+02	-	1.53E+02	1.64E-14
Yb-178	S	3.89E-13	2.38E-13	1.36E+02	-	1.36E+02	9.54E-15
Zn-62	M	4.96E-12	2.65E-12	1.07E+01	-	1.07E+01	1.96E-15
Zn-63	M	1.61E-13	7.55E-14	3.29E+02	-	3.29E+02	4.20E-15
Zn-65	M	1.17E-11	5.81E-12	4.52E+00	-	4.52E+00	5.50E-13
Zn-69	M	7.22E-14	6.11E-14	7.33E+02	-	7.33E+02	1.54E-14
Zn-69m	M	1.86E-12	1.28E-12	2.84E+01	-	2.84E+01	8.63E-15
Zn-71m	M	9.66E-13	5.33E-13	5.48E+01	-	5.48E+01	4.87E-15
Zn-72	M	6.59E-12	5.48E-12	8.03E+00	-	8.03E+00	8.59E-15
Zr-86	M	3.85E-12	1.56E-12	1.37E+01	-	1.37E+01	6.23E-15
Zr-88	M	1.58E-12	8.95E-12	3.35E+01	-	3.35E+01	1.89E-12
Zr-89	M	3.60E-12	1.92E-12	1.47E+01	-	1.47E+01	3.28E-14
Zr-93	M	1.11E-12	7.29E-12	4.77E+01	-	4.77E+01	1.90E-05
Zr-95	M	4.59E-12	1.65E-11	1.15E+01	-	1.15E+01	5.37E-13
Zr-97	M	1.25E-11	4.81E-12	4.23E+00	-	4.23E+00	2.22E-15