Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Actinium (89)	Ac-223+D	0.00E+00	0.00E+00	0.00E+00	4.86E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.7E-14
Actinium (89)	Ac-224	1.44E-10	1.0E-08 (S)	2.07E-10	5.08E-11	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	2.2E-01	.	1.8E+04	3.4E-01	1.7E-01	2.1E+03	4.5E+03	.	.	.	7.4E-02	5.5E-19
Actinium (89)	Ac-225	5.11E-09	7.7E-07 (S)	7.34E-09	3.08E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	6.2E-03	.	3.0E+05	9.7E-03	4.7E-03	5.8E+01	1.3E+02	.	.	.	2.1E-03	1.3E-18
Actinium (89)	Ac-225+D	5.11E-09	7.7E-07 (S)	7.34E-09	1.00E-11	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	6.2E-03	.	9.1E+04	9.7E-03	4.7E-03	5.8E+01	1.3E+02	.	.	.	2.1E-03	1.3E-18
Actinium (89)	Ac-226	1.88E-09	1.2E-07 (S)	2.77E-09	3.03E-11	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	1.7E-02	.	3.0E+04	2.6E-02	1.2E-02	1.5E+02	3.3E+02	.	.	.	5.6E-03	4.4E-19
Actinium (89)	Ac-227	5.43E-09	4.0E-06 (S)	6.63E-09	1.92E-14	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	5.9E-03	.	4.8E+07	4.0E-03	5.2E-03	6.4E+01	1.4E+02	.	.	.	1.6E-03	8.4E-16
Actinium (89)	Ac-228	5.09E-11	1.3E-09 (S)	7.39E-11	2.20E-10	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	6.3E-01	.	4.1E+03	9.6E-01	4.7E-01	5.7E+03	1.3E+04	.	.	.	2.1E-01	3.5E-18
Actinium (89)	Ac-230	0.00E+00	0.00E+00	0.00E+00	1.44E-10	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.3E+03	.	.	.	.	.	.	.	6.3E+03	5.8E-16
Actinium (89)	Ac-231	0.00E+00	0.00E+00	0.00E+00	9.88E-11	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	9.3E+03	.	.	.	.	.	.	.	9.3E+03	3.2E-15
Actinium (89)	Ac-232	0.00E+00	0.00E+00	0.00E+00	3.10E-10	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.9E+03	.	.	.	.	.	.	.	2.9E+03	2.7E-16
Actinium (89)	Ac-233	0.00E+00	0.00E+00	0.00E+00	1.23E-10	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	7.4E+03	.	.	.	.	.	.	.	7.4E+03	8.3E-16
Silver (47)	Ag-100m	0.00E+00	0.00E+00	0.00E+00	7.26E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	5.6E-17
Silver (47)	Ag-101	1.61E-12	6.4E-13 (S)	2.23E-12	3.94E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	2.0E+01	.	2.3E+03	3.2E+01	2.1E+00	1.3E+03	1.4E+02	1.6E+03	4.3E+02	.	1.8E+00	3.9E-19
Silver (47)	Ag-102	2.01E-12	7.4E-13 (S)	2.75E-12	8.80E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.6E+01	.	1.0E+03	2.6E+01	1.7E+00	1.0E+03	1.1E+02	1.3E+03	3.5E+02	.	1.4E+00	3.7E-19
Silver (47)	Ag-102m	0.00E+00	0.00E+00	0.00E+00	5.36E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	2.6E-16
Silver (47)	Ag-103	2.83E-12	1.6E-12 (S)	3.98E-12	2.08E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.1E+01	.	4.4E+03	1.8E+01	1.2E+00	7.1E+02	7.8E+01	9.2E+02	2.4E+02	.	9.9E-01	1.3E-18
Silver (47)	Ag-104	4.50E-12	1.8E-12 (S)	6.23E-12	6.88E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	7.1E+00	.	1.3E+03	1.1E+01	7.6E-01	4.5E+02	5.0E+01	5.9E+02	1.5E+02	.	6.3E-01	9.0E-19
Silver (47)	Ag-104m	3.70E-12	1.6E-12 (S)	5.15E-12	4.64E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	8.6E+00	.	2.0E+03	1.4E+01	9.1E-01	5.5E+02	6.0E+01	7.1E+02	1.8E+02	.	7.6E-01	5.3E-19
Silver (47)	Ag-105	4.73E-11	8.5E-11 (S)	6.65E-11	1.21E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	6.7E-01	.	7.5E+03	1.1E+00	7.1E-02	4.3E+01	4.6E+00	5.5E+01	1.4E+01	.	5.9E-02	7.3E-17
Silver (47)	Ag-105m	0.00E+00	0.00E+00	0.00E+00	2.42E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	3.8E+06	.	.	.	.	.	.	.	3.8E+06	5.6E-13
Silver (47)	Ag-106	1.57E-12	7.6E-13 (S)	2.18E-12	1.70E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	2.0E+01	.	5.4E+03	3.3E+01	2.2E+00	1.3E+03	1.4E+02	1.7E+03	4.4E+02	.	1.8E+00	9.0E-19
Silver (47)	Ag-106m	1.29E-10	9.5E-11 (S)	1.80E-10	7.10E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	2.5E-01	.	1.3E+03	3.9E-01	2.6E-02	1.6E+01	1.7E+00	2.0E+01	5.3E+00	.	2.2E-02	5.5E-18
Silver (47)	Ag-108	0.00E+00	0.00E+00	0.00E+00	4.95E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	9.3E-15
Silver (47)	Ag-108m	2.19E-10	2.8E-09 (S)	3.01E-10	3.98E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.5E-01	.	2.3E+03	6.7E-02	1.6E-02	9.4E+00	1.0E+00	1.2E+01	3.2E+00	.	1.1E-02	5.4E-14
Silver (47)	Ag-108m+D	2.19E-10	2.8E-09 (S)	3.01E-10	3.98E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.5E-01	.	2.3E+03	6.7E-02	1.6E-02	9.4E+00	1.0E+00	1.2E+01	3.2E+00	.	1.1E-02	5.4E-14
Silver (47)	Ag-109m	0.00E+00	0.00E+00	0.00E+00	8.17E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.1E+06	.	.	.	.	.	.	.	1.1E+06	1.6E-14
Silver (47)	Ag-110	0.00E+00	0.00E+00	0.00E+00	9.18E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	8.9E-16
Silver (47)	Ag-110m	2.71E-10	1.2E-09 (S)	3.76E-10	7.04E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.2E-01	.	1.3E+03	1.7E-01	1.3E-02	7.5E+00	8.2E-01	9.7E+00	2.5E+00	.	1.0E-02	8.1E-17
Silver (47)	Ag-110m+D	2.71E-10	1.2E-09 (S)	3.76E-10	7.04E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.2E-01	.	1.3E+03	1.7E-01	1.3E-02	7.5E+00	8.2E-01	9.7E+00	2.5E+00	.	1.0E-02	8.1E-17
Silver (47)	Ag-111	2.22E-10	2.0E-10 (S)	3.25E-10	6.56E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.4E-01	.	1.4E+05	2.2E-01	1.4E-02	8.7E+00	9.5E-01	1.1E+01	2.9E+00	.	1.2E-02	2.9E-18
Silver (47)	Ag-111m	0.00E+00	0.00E+00	0.00E+00	9.03E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.0E+06	.	.	.	.	.	.	.	1.0E+06	2.4E-14
Silver (47)	Ag-112	5.31E-11	2.1E-11 (S)	7.72E-11	1.82E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	6.0E-01	.	5.0E+03	9.2E-01	6.1E-02	3.7E+01	4.0E+00	4.7E+01	1.2E+01	.	5.1E-02	2.1E-19
Silver (47)	Ag-113	5.95E-11	2.4E-11 (S)	8.71E-11	1.84E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	5.4E-01	.	5.0E+04	8.2E-01	5.4E-02	3.2E+01	3.5E+00	4.2E+01	1.1E+01	.	4.5E-02	3.3E-19
Silver (47)	Ag-113m	0.00E+00	0.00E+00	0.00E+00	5.18E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.8E+04	.	.	.	.	.	.	.	1.8E+04	4.5E-16
Silver (47)	Ag-114	0.00E+00	0.00E+00	0.00E+00	7.23E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.3E+04	.	.	.	.	.	.	.	1.3E+04	2.2E-17
Silver (47)	Ag-115	3.85E-12	2.0E-12 (S)	5.45E-12	1.29E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	8.3E+00	.	7.1E+03	1.3E+01	8.6E-01	5.2E+02	5.7E+01	6.7E+02	1.7E+02	.	7.2E-01	3.3E-19
Silver (47)	Ag-116	0.00E+00	0.00E+00	0.00E+00	5.84E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	9.6E-17
Silver (47)	Ag-117	0.00E+00	0.00E+00	0.00E+00	3.57E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	2.6E+03	.	.	.	.	.	.	.	2.6E+03	7.3E-17
Silver (47)	Ag-99	0.00E+00	0.00E+00	0.00E+00	5.90E-10	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	6.3E-17
Aluminum (13)	Al-26	4.67E-10	7.9E-09 (S)	6.71E-10	7.10E-10	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	6.8E-02	.	1.3E+03	3.0E-02	1.5E-02	2.5E+01	1.4E+01	.	.	.	8.7E-03	1.7E-11
Aluminum (13)	Al-28	0.00E+00	0.00E+00	0.00E+00	4.89E-10	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	2.3E-17
Aluminum (13)	Al-29	0.00E+00	0.00E+00	0.00E+00	3.69E-10	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	9.3E-17
Americium (95)	Am-237	1.42E-12	1.7E-12 (S)	2.00E-12	8.52E-11	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.2E+01	.	1.1E+04	3.6E+01	1.1E+00	8.5E+03	2.2E+06	2.1E+05	1.6E+05	6.3E+05	1.0E+00	3.4E-18
Americium (95)	Am-238	2.58E-12	3.1E-12 (S)	3.61E-12	2.25E-10	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.2E+01	.	4.1E+03	2.0E+01	6.0E-01	4.7E+03	1.2E+06	1.2E+05	8.8E+04	3.5E+05	5.5E-01	2.5E-18
Americium (95)	Am-239	3.84E-11	2.5E-11 (S)	5.61E-11	5.08E-11	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	8.3E-01	.	1.8E+04	1.3E+00	3.8E-02	3.0E+02	7.9E+04	7.6E+03	5.6E+03	2.3E+04	3.6E-02	1.2E-18
Americium (95)	Am-240	7.14E-11	4.2E-11 (S)	1.02E-10	2.58E-10	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	4.5E-01	.	3.5E+03	7.0E-01	2.1E-02	1.7E+02	4.3E+04	4.2E+03	3.1E+03	1.2E+04	2.0E-02	2.8E-18
Americium (95)	Am-241	2.80E-09	1.0E-06 (F)	3.61E-09	3.57E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.1E-02	.	2.6E+05	5.7E-03	6.0E-04	4.7E+00	1.2E+03	1.2E+02	8.8E+01	3.5E+02	5.2E-04	5.6E-15
Americium (95)	Am-242	4.88E-11	1.8E-09 (S)	7.14E-11	2.93E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	6.5E-01	.	3.1E+05	1.0E+00	3.0E-02	2.4E+02	6.2E+04	6.0E+03	4.4E+03	1.8E+04	2.8E-02	1.3E-18
Americium (95)	Am-242m	1.91E-09	9.3E-07 (F)	2.36E-09	9.94E-14	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.7E-02	.	9.2E+06	8.9E-03	9.1E-04	7.2E+00	1.9E+03	1.8E+02	1.3E+02	5.4E+02	7.9E-04	2.8E-15
Americium (95)	Am-242m+D	1.96E-09	9.3E-07 (F)	2.43E-09	3.69E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.6E-02	.	2.5E+05	8.7E-03	8.9E-04	7.0E+00	1.8E+03	1.8E+02	1.3E+02	5.2E+02	7.7E-04	2.7E-15
Americium (95)	Am-243	2.80E-09	1.0E-06 (F)	3.62E-09	1.04E-11	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.1E-02	.	8.8E+04	5.5E-03	6.0E-04	4.7E+00	1.2E+03	1.2E+02	8.7E+01	3.5E+02	5.1E-04	9.5E-14
Americium (95)	Am-243+D	2.94E-09	1.0E-06 (F)	3.83E-09	5.02E-11	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.1E-02	.	1.8E+04	5.2E-03	5.6E-04	4.4E+00	1.2E+03	1.1E+02	8.3E+01	3.3E+02	4.9E-04	9.0E-14
Americium (95)	Am-244	6.67E-11	1.0E-10 (S)	9.70E-11	1.97E-10	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	4.8E-01	.	4.6E+03	7.3E-01	2.2E-02	1.8E+02	4.6E+04	4.4E+03	3.3E+03	1.3E+04	2.1E-02	6.0E-19
Americium (95)	Am-244m	1.41E-12	3.6E-12 (S)	1.97E-12	4.04E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.3E+01	.	2.3E+05	3.6E+01	1.1E+00	8.6E+03	2.2E+06	2.2E+05	1.6E+05	6.4E+05	1.0E+00	1.3E-18
Americium (95)	Am-245	6.01E-12	4.5E-12 (S)	8.71E-12	7.20E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	5.3E+00	.	1.3E+05	8.2E+00	2.5E-01	1.9E+03	5.1E+05	4.9E+04	3.6E+04	1.5E+05	2.3E-01	1.4E-18
Americium (95)	Am-246	3.67E-12	4.2E-12 (S)	5.15E-12	1.78E-10	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	8.7E+00	.	5.1E+03	1.4E+01	4.2E-01	3.3E+03	8.6E+05	8.3E+04	6.1E+04	2.5E+05	3.9E-01	7.3E-19
Americium (95)	Am-246m	1.78E-12	1.1E-12 (S)	2.46E-12	2.51E-10	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.8E+01	.	3.6E+03	2.9E+01	8.8E-01	6.9E+03	1.8E+06	1.7E+05	1.3E+05	5.2E+05	8.1E-01	9.9E-19
Americium (95)	Am-247	1.43E-12	1.3E-12 (S)	1.98E-12	3.04E-11	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.2E+01	.	3.0E+04	3.6E+01	1.1E+00	8.6E+03	2.2E+06	2.2E+05	1.6E+05	6.4E+05	1.0E+00	1.1E-18
Argon (18)	Ar-37	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Argon (18)	Ar-39	0.00E+00	0.00E+00	0.00E+00	7.13E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.3E+07	.	.	.	.	.	.	.	1.3E+07	1.4E-05
Argon (18)	Ar-41	0.00E+00	0.00E+00	0.00E+00	3.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.7E+03	.	.	.	.	.	.	.	2.7E+03	2.4E-15
Argon (18)	Ar-42	0.00E+00	0.00E+00	0.00E+00	8.02E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.1E+07	.	.	.	.	.	.	.	1.1E+07	1.6E-06
Argon (18)	Ar-42+D	3.41E-11	3.4E-11 (G)	4.70E-11	7.73E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	9.3E-01	.	1.2E+04	.	.	.	.	.	.	.	9.3E-01	1.3E-13
Argon (18)	Ar-43	0.00E+00	0.00E+00	0.00E+00	4.13E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.2E+03	.	.	.	.	.	.	.	2.2E+03	1.0E-16
Argon (18)	Ar-44	0.00E+00	0.00E+00	0.00E+00	5.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	1.8E-16
Arsenic (33)	As-68	0.00E+00	0.00E+00	0.00E+00	9.66E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	.	.	9.5E+02	.	.	.	.	.	.	.	9.5E+02	3.2E-17
Arsenic (33)	As-69	2.68E-12	1.1E-12 (S)	3.72E-12	2.84E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.2E+01	.	3.2E+03	1.9E+01	4.2E-01	1.1E+02	5.0E+03	.	.	.	4.0E-01	8.2E-20
Arsenic (33)	As-70	8.89E-12	4.0E-12 (S)	1.24E-11	1.10E-09	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	3.6E+00	.	8.3E+02	5.7E+00	1.3E-01	3.4E+01	1.5E+03	.	.	.	1.2E-01	8.7E-20
Arsenic (33)	As-71	6.08E-11	4.3E-11 (S)	8.78E-11	1.40E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	5.2E-01	.	6.5E+03	8.1E-01	1.8E-02	4.8E+00	2.1E+02	.	.	.	1.7E-02	9.2E-19
Arsenic (33)	As-72	2.78E-10	1.2E-10 (S)	4.06E-10	4.48E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.1E-01	.	2.0E+03	1.8E-01	3.9E-03	1.0E+00	4.6E+01	.	.	.	3.6E-03	8.1E-20
Arsenic (33)	As-73	4.24E-11	1.4E-10 (S)	6.18E-11	8.20E-13	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	7.5E-01	.	1.1E+06	1.1E+00	2.5E-02	6.9E+00	3.0E+02	.	.	.	2.4E-02	4.0E-17
Arsenic (33)	As-74	1.80E-10	2.6E-10 (S)	2.60E-10	1.87E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.8E-01	.	4.9E+03	2.7E-01	6.0E-03	1.6E+00	7.1E+01	.	.	.	5.7E-03	2.1E-18
Arsenic (33)	As-76	2.59E-10	1.2E-10 (S)	3.79E-10	1.06E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.2E-01	.	8.6E+03	1.9E-01	4.1E-03	1.1E+00	4.9E+01	.	.	.	3.9E-03	9.1E-20
Arsenic (33)	As-77	6.68E-11	5.1E-11 (S)	9.81E-11	2.08E-12	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	4.8E-01	.	4.4E+05	7.3E-01	1.6E-02	4.3E+00	1.9E+02	.	.	.	1.5E-02	5.3E-19
Arsenic (33)	As-78	1.59E-11	7.2E-12 (S)	2.28E-11	3.41E-10	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	2.0E+00	.	2.7E+03	3.1E+00	6.9E-02	1.9E+01	8.1E+02	.	.	.	6.5E-02	9.1E-20
Arsenic (33)	As-79	0.00E+00	0.00E+00	0.00E+00	9.25E-12	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	.	.	9.9E+04	.	.	.	.	.	.	.	9.9E+04	1.4E-14
Astatine (85)	At-204	0.00E+00	0.00E+00	0.00E+00	5.71E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	5.9E-16
Astatine (85)	At-205	3.88E-12	6.5E-11 (S)	5.29E-12	2.87E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	8.2E+00	.	3.2E+03	1.3E+01	.	1.6E+02	3.5E+01	.	.	.	4.3E+00	4.6E-18
Astatine (85)	At-206	4.46E-12	2.2E-11 (S)	6.09E-12	6.19E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	7.1E+00	.	1.5E+03	1.2E+01	.	1.4E+02	3.0E+01	.	.	.	3.8E+00	4.7E-18
Astatine (85)	At-207	1.76E-11	2.0E-10 (S)	2.41E-11	5.14E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	1.8E+00	.	1.8E+03	3.0E+00	.	3.5E+01	7.7E+00	.	.	.	9.5E-01	4.2E-18
Astatine (85)	At-208	6.44E-12	5.3E-11 (S)	8.74E-12	7.70E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	4.9E+00	.	1.2E+03	8.2E+00	.	9.7E+01	2.1E+01	.	.	.	2.6E+00	1.0E-17
Astatine (85)	At-209	3.05E-11	2.5E-10 (S)	4.17E-11	5.68E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	1.0E+00	.	1.6E+03	1.7E+00	.	2.0E+01	4.4E+00	.	.	.	5.5E-01	7.4E-18
Astatine (85)	At-210	7.30E-11	9.8E-10 (S)	9.98E-11	7.73E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	4.4E-01	.	1.2E+03	7.1E-01	.	8.5E+00	1.9E+00	.	.	.	2.3E-01	4.6E-18
Astatine (85)	At-211	9.10E-10	1.1E-08 (S)	1.25E-09	6.91E-12	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	3.5E-02	.	1.3E+05	5.7E-02	.	6.8E-01	1.5E-01	.	.	.	1.8E-02	3.3E-19

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Astatine (85)	At-211+D	9.10E-10	1.1E-08 (S)	1.25E-09	8.11E-12	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	3.5E-02	.	1.1E+05	5.7E-02	.	6.8E-01	1.5E-01	.	.	.	1.8E-02	3.3E-19
Astatine (85)	At-215	0.00E+00	0.00E+00	0.00E+00	4.13E-14	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	2.2E+07	.	.	.	.	.	.	.	2.2E+07	1.6E-18
Astatine (85)	At-216	0.00E+00	0.00E+00	0.00E+00	5.18E-13	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	1.8E+06	.	.	.	.	.	.	.	1.8E+06	3.8E-19
Astatine (85)	At-217	0.00E+00	0.00E+00	0.00E+00	5.78E-14	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	1.6E+07	.	.	.	.	.	.	.	1.6E+07	3.6E-16
Astatine (85)	At-218	0.00E+00	0.00E+00	0.00E+00	1.39E-15	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	6.6E+08	.	.	.	.	.	.	.	6.6E+08	7.1E-13
Astatine (85)	At-219	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Astatine (85)	At-220	0.00E+00	0.00E+00	0.00E+00	1.10E-10	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	8.3E+03	.	.	.	.	.	.	.	8.3E+03	1.3E-15
Gold (79)	Au-186	2.56E-12	1.1E-12 (S)	3.57E-12	3.76E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.2E+01	.	2.4E+03	2.0E+01	6.0E-01	4.8E+02	5.2E+04	.	.	.	5.6E-01	2.2E-19
Gold (79)	Au-187	0.00E+00	0.00E+00	0.00E+00	2.73E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	3.3E+03	.	.	.	.	.	.	.	3.3E+03	1.0E-15
Gold (79)	Au-190	2.75E-12	1.2E-12 (S)	3.81E-12	6.41E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.2E+01	.	1.4E+03	1.9E+01	5.7E-01	4.5E+02	4.9E+04	.	.	.	5.2E-01	8.4E-19
Gold (79)	Au-191	8.12E-12	5.4E-12 (S)	1.16E-11	1.40E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	3.9E+00	.	6.5E+03	6.1E+00	1.9E-01	1.5E+02	1.6E+04	.	.	.	1.7E-01	1.2E-18
Gold (79)	Au-192	1.70E-11	6.7E-12 (S)	2.41E-11	5.14E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.9E+00	.	1.8E+03	3.0E+00	8.9E-02	7.0E+01	7.7E+03	.	.	.	8.3E-02	9.3E-19
Gold (79)	Au-193	1.85E-11	1.1E-11 (S)	2.69E-11	3.47E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.7E+00	.	2.6E+04	2.6E+00	8.0E-02	6.3E+01	6.9E+03	.	.	.	7.4E-02	3.0E-18
Gold (79)	Au-193m	0.00E+00	0.00E+00	0.00E+00	4.58E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	2.0E+04	.	.	.	.	.	.	.	2.0E+04	4.9E-17
Gold (79)	Au-194	4.35E-11	2.1E-11 (S)	6.17E-11	2.66E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	7.3E-01	.	3.4E+03	1.2E+00	3.5E-02	2.8E+01	3.0E+03	.	.	.	3.2E-02	2.8E-18
Gold (79)	Au-195	4.19E-11	1.8E-10 (S)	6.11E-11	1.45E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	7.6E-01	.	6.3E+04	1.1E+00	3.5E-02	2.8E+01	3.0E+03	.	.	.	3.3E-02	3.4E-16
Gold (79)	Au-195m	0.00E+00	0.00E+00	0.00E+00	4.64E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	2.0E+04	.	.	.	.	.	.	.	2.0E+04	3.9E-16
Gold (79)	Au-196	4.15E-11	3.5E-11 (S)	5.94E-11	1.11E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	7.7E-01	.	8.3E+03	1.2E+00	3.6E-02	2.9E+01	3.1E+03	.	.	.	3.4E-02	1.2E-17
Gold (79)	Au-196m	6.07E-11	4.8E-11 (S)	8.87E-11	5.24E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	5.2E-01	.	1.7E+04	8.0E-01	2.4E-02	1.9E+01	2.1E+03	.	.	.	2.3E-02	5.0E-19
Gold (79)	Au-198	1.70E-10	1.1E-10 (S)	2.48E-10	9.78E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.9E-01	.	9.3E+03	2.9E-01	8.7E-03	6.8E+00	7.5E+02	.	.	.	8.1E-03	1.2E-18
Gold (79)	Au-198m	1.92E-10	2.0E-10 (S)	2.81E-10	1.20E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.7E-01	.	7.6E+03	2.5E-01	7.7E-03	6.0E+00	6.6E+02	.	.	.	7.1E-03	9.1E-19
Gold (79)	Au-199	7.63E-11	8.7E-11 (S)	1.12E-10	2.15E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	4.2E-01	.	4.3E+04	6.4E-01	1.9E-02	1.5E+01	1.7E+03	.	.	.	1.8E-02	3.2E-18
Gold (79)	Au-200	4.15E-12	2.3E-12 (S)	5.87E-12	7.10E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	7.7E+00	.	1.3E+04	1.2E+01	3.7E-01	2.9E+02	3.2E+04	.	.	.	3.4E-01	6.5E-19
Gold (79)	Au-200m	1.37E-10	7.0E-11 (S)	1.97E-10	4.86E-10	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.3E-01	.	1.9E+03	3.6E-01	1.1E-02	8.6E+00	9.4E+02	.	.	.	1.0E-02	4.5E-19
Gold (79)	Au-201	1.15E-12	8.7E-13 (S)	1.61E-12	8.52E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.8E+01	.	1.1E+05	4.4E+01	1.3E+00	1.1E+03	1.2E+05	.	.	.	1.2E+00	1.3E-18
Gold (79)	Au-202	0.00E+00	0.00E+00	0.00E+00	4.51E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	2.0E+04	.	.	.	.	.	.	.	2.0E+04	3.9E-16
Barium (56)	Ba-124	3.02E-12	1.1E-12 (S)	4.15E-12	1.38E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.1E+01	.	6.6E+03	1.7E+01	1.0E+02	1.5E+04	2.8E+03	.	2.4E+04	1.1E+03	6.1E+00	1.6E-18
Barium (56)	Ba-126	2.30E-11	9.7E-12 (S)	3.30E-11	1.41E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.4E+00	.	6.5E+03	2.2E+00	1.3E+01	1.8E+03	3.5E+02	.	3.0E+03	1.3E+02	7.9E-01	2.0E-18
Barium (56)	Ba-127	1.24E-12	5.5E-13 (S)	1.71E-12	1.78E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	2.6E+01	.	5.1E+03	4.2E+01	2.5E+02	3.5E+04	6.8E+03	.	5.8E+04	2.6E+03	1.5E+01	4.7E-18
Barium (56)	Ba-128	4.24E-10	2.1E-10 (S)	6.21E-10	1.14E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	7.5E-02	.	8.0E+04	1.1E-01	6.9E-01	9.8E+01	1.9E+01	.	1.6E+02	7.0E+00	4.2E-02	3.7E-18
Barium (56)	Ba-129	4.83E-12	2.4E-12 (S)	6.92E-12	7.89E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	6.6E+00	.	1.2E+04	1.0E+01	6.2E+01	8.8E+03	1.7E+03	.	1.4E+04	6.3E+02	3.7E+00	1.3E-17
Barium (56)	Ba-129m	6.02E-12	2.8E-12 (S)	8.43E-12	3.98E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	5.3E+00	.	2.3E+03	8.5E+00	5.1E+01	7.2E+03	1.4E+03	.	1.2E+04	5.2E+02	3.0E+00	1.0E-17
Barium (56)	Ba-131	5.48E-11	8.8E-11 (S)	7.85E-11	1.10E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	5.8E-01	.	8.3E+03	9.0E-01	5.5E+00	7.7E+02	1.5E+02	.	1.3E+03	5.6E+01	3.3E-01	1.4E-16
Barium (56)	Ba-131m	2.54E-13	4.9E-13 (S)	3.53E-13	1.44E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.3E+02	.	6.4E+04	2.0E+02	1.2E+03	1.7E+05	3.3E+04	.	2.8E+05	1.2E+04	7.2E+01	2.7E-17
Barium (56)	Ba-133	1.86E-10	8.9E-10 (S)	2.56E-10	8.87E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.7E-01	.	1.0E+04	1.3E-01	1.7E+00	2.4E+02	4.5E+01	.	3.9E+02	1.7E+01	7.0E-02	1.0E-14
Barium (56)	Ba-133m	8.82E-11	6.1E-11 (S)	1.29E-10	1.30E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	3.6E-01	.	7.0E+04	5.5E-01	3.3E+00	4.7E+02	9.0E+01	.	7.7E+02	3.4E+01	2.0E-01	1.2E-17
Barium (56)	Ba-135m	6.91E-11	4.7E-11 (S)	1.01E-10	1.12E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	4.6E-01	.	8.2E+04	7.1E-01	4.3E+00	6.0E+02	1.1E+02	.	9.9E+02	4.3E+01	2.6E-01	1.2E-17
Barium (56)	Ba-137m	0.00E+00	0.00E+00	0.00E+00	1.48E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	.	.	6.2E+03	.	.	.	.	.	.	.	6.2E+03	4.3E-16
Barium (56)	Ba-139	1.01E-11	5.1E-12 (S)	1.45E-11	1.15E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	3.2E+00	.	8.0E+04	4.9E+00	3.0E+01	4.2E+03	8.0E+02	.	6.9E+03	3.0E+02	1.8E+00	4.1E-18
Barium (56)	Ba-140	4.06E-10	6.2E-10 (S)	5.92E-10	4.35E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	7.8E-02	.	2.1E+04	1.2E-01	7.3E-01	1.0E+02	2.0E+01	.	1.7E+02	7.4E+00	4.4E-02	2.2E-17
Barium (56)	Ba-141	6.07E-12	2.9E-12 (S)	8.71E-12	2.35E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	5.2E+00	.	3.9E+03	8.2E+00	5.0E+01	7.0E+03	1.3E+03	.	1.1E+04	5.0E+02	3.0E+00	1.5E-18
Barium (56)	Ba-142	2.44E-12	1.2E-12 (S)	3.45E-12	2.65E-10	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.3E+01	.	3.4E+03	2.1E+01	1.2E+02	1.8E+04	3.4E+03	.	2.9E+04	1.3E+03	7.4E+00	2.2E-18
Beryllium (4)	Be-10	1.90E-10	2.5E-09 (S)	2.78E-10	8.77E-14	4.00E-03	1.00E+02	5.00E-03	8.30E-07	.	.	.	1.7E-01	.	1.0E+07	7.1E-02	1.9E-02	6.1E+00	8.0E+03	.	.	.	1.4E-02	2.1E-11
Beryllium (4)	Be-7	2.36E-12	5.8E-12 (S)	3.28E-12	1.22E-11	4.00E-03	1.00E+02	5.00E-03	8.30E-07	.	.	.	1.3E+01	.	7.5E+04	2.1E+01	1.6E+00	5.2E+02	6.8E+05	.	.	.	1.3E+00	1.4E-16
Bismuth (83)	Bi-197	0.00E+00	0.00E+00	0.00E+00	4.32E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	7.6E-16
Bismuth (83)	Bi-200	4.36E-12	2.2E-12 (S)	6.13E-12	6.03E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	7.3E+00	.	1.5E+03	1.2E+01	5.6E+00	6.9E+02	3.0E+02	.	.	.	2.5E+00	3.5E-18
Bismuth (83)	Bi-201	1.13E-11	5.4E-12 (S)	1.60E-11	4.48E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.8E+00	.	2.0E+03	4.5E+00	2.2E+00	2.7E+02	1.2E+02	.	.	.	9.5E-01	4.1E-18
Bismuth (83)	Bi-202	8.16E-12	3.5E-12 (S)	1.14E-11	6.94E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	3.9E+00	.	1.3E+03	6.3E+00	3.0E+00	3.7E+02	1.6E+02	.	.	.	1.3E+00	5.4E-18
Bismuth (83)	Bi-203	5.23E-11	2.3E-11 (S)	7.42E-11	6.25E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	6.1E-01	.	1.5E+03	9.6E-01	4.6E-01	5.7E+01	2.5E+01	.	.	.	2.0E-01	5.8E-18
Bismuth (83)	Bi-204	5.72E-11	2.4E-11 (S)	8.08E-11	7.42E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	5.6E-01	.	1.2E+03	8.8E-01	4.3E-01	5.3E+01	2.3E+01	.	.	.	1.9E-01	5.1E-18
Bismuth (83)	Bi-205	9.08E-11	1.0E-10 (S)	1.28E-10	4.42E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	3.5E-01	.	2.1E+03	5.5E-01	2.7E-01	3.3E+01	1.4E+01	.	.	.	1.2E-01	1.1E-16
Bismuth (83)	Bi-206	2.11E-10	1.7E-10 (S)	3.00E-10	8.33E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.5E-01	.	1.1E+03	2.4E-01	1.1E-01	1.4E+01	6.2E+00	.	.	.	5.1E-02	1.8E-17
Bismuth (83)	Bi-207	1.55E-10	3.0E-09 (S)	2.23E-10	3.88E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.1E-01	.	2.4E+03	8.7E-02	1.5E-01	1.9E+01	8.3E+00	.	.	.	4.4E-02	3.1E-14
Bismuth (83)	Bi-208	1.05E-10	2.7E-09 (S)	1.46E-10	7.54E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	3.0E-01	.	1.2E+03	1.1E-01	2.4E-01	2.9E+01	1.3E+01	.	.	.	5.9E-02	4.7E-10
Bismuth (83)	Bi-210	2.41E-10	1.2E-08 (S)	3.52E-10	2.11E-13	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.3E-01	.	4.3E+06	2.0E-01	9.8E-02	1.2E+01	5.3E+00	.	.	.	4.3E-02	1.3E-17
Bismuth (83)	Bi-210m	1.50E-09	7.9E-07 (S)	2.10E-09	6.25E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.1E-02	.	1.5E+04	7.5E-03	1.6E-02	2.0E+00	8.8E-01	.	.	.	4.1E-03	2.7E-10
Bismuth (83)	Bi-210m+D	1.50E-09	7.9E-07 (S)	2.10E-09	6.28E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.1E-02	.	1.5E+04	7.5E-03	1.6E-02	2.0E+00	8.8E-01	.	.	.	4.1E-03	2.7E-10
Bismuth (83)	Bi-211	0.00E+00	0.00E+00	0.00E+00	1.13E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	8.1E+04	.	.	.	.	.	.	.	8.1E+04	7.2E-15
Bismuth (83)	Bi-212	1.94E-11	2.3E-09 (S)	2.73E-11	2.68E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.6E+00	.	3.4E+04	2.6E+00	1.3E+00	1.6E+02	6.8E+01	.	.	.	5.5E-01	1.4E-18
Bismuth (83)	Bi-212+D	1.94E-11	2.3E-09 (S)	2.73E-11	2.68E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.6E+00	.	3.4E+04	2.6E+00	1.3E+00	1.6E+02	6.8E+01	.	.	.	5.5E-01	1.4E-18
Bismuth (83)	Bi-212n	0.00E+00	0.00E+00	0.00E+00	3.72E-13	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	2.5E+06	.	.	.	.	.	.	.	2.5E+06	7.2E-13
Bismuth (83)	Bi-213	1.37E-11	2.0E-09 (S)	1.94E-11	3.12E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.3E+00	.	2.9E+04	3.7E+00	1.8E+00	2.2E+02	9.6E+01	.	.	.	7.8E-01	1.5E-18
Bismuth (83)	Bi-213+D	1.37E-11	2.0E-09 (S)	1.94E-11	3.12E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.3E+00	.	2.9E+04	3.7E+00	1.8E+00	2.2E+02	9.6E+01	.	.	.	7.8E-01	1.5E-18
Bismuth (83)	Bi-214	5.19E-12	8.4E-10 (S)	7.17E-12	3.91E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	6.1E+00	.	2.3E+03	9.9E+00	4.8E+00	5.9E+02	2.6E+02	.	.	.	2.1E+00	1.8E-18
Bismuth (83)	Bi-214+D	5.19E-12	8.4E-10 (S)	7.17E-12	3.91E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	6.1E+00	.	2.3E+03	9.9E+00	4.8E+00	5.9E+02	2.6E+02	.	.	.	2.1E+00	1.8E-18
Bismuth (83)	Bi-215	0.00E+00	0.00E+00	0.00E+00	6.25E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	4.7E-15
Bismuth (83)	Bi-215+D	0.00E+00	0.00E+00	0.00E+00	6.25E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	4.7E-15
Bismuth (83)	Bi-216	0.00E+00	0.00E+00	0.00E+00	1.83E-10	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	5.0E+03	.	.	.	.	.	.	.	5.0E+03	4.6E-16
Berkelium (97)	Bk-245	9.37E-11	2.2E-10 (S)	1.37E-10	5.05E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	3.4E-01	.	1.8E+04	5.2E-01	.	3.1E+03	6.8E+03	.	.	.	2.1E-01	7.1E-17
Berkelium (97)	Bk-246	5.30E-11	2.6E-11 (S)	7.59E-11	2.10E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	6.0E-01	.	4.3E+03	9.4E-01	.	5.6E+03	1.2E+04	.	.	.	3.7E-01	4.6E-17
Berkelium (97)	Bk-247	3.37E-09	1.3E-06 (F)	4.34E-09	3.25E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	9.5E-03	.	2.8E+04	4.6E-03	.	9.8E+01	2.1E+02	.	.	.	3.1E-03	1.1E-13
Berkelium (97)	Bk-248m	6.68E-11	1.4E-09 (S)	9.78E-11	1.20E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	4.8E-01	.	7.6E+04	7.3E-01	.	4.3E+03	9.5E+03	.	.	.	2.9E-01	2.0E-17
Berkelium (97)	Bk-249	2.98E-11	3.2E-09 (F)	4.22E-11	5.14E-16	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.1E+00	.	1.8E+09	1.5E+00	.	1.0E+04	2.2E+04	.	.	.	6.2E-01	1.5E-14
Berkelium (97)	Bk-250	1.54E-11	3.7E-11 (S)	2.22E-11	2.30E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.1E+00	.	4.0E+03	3.2E+00	.	1.9E+04	4.2E+04	.	.	.	1.3E+00	1.2E-17
Berkelium (97)	Bk-251	2.52E-12	2.5E-12 (S)	3.59E-12	1.85E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.3E+01	.	4.9E+04	2.0E+01	.	1.2E+05	2.6E+05	.	.	.	7.7E+00	2.1E-17
Bromine (35)	Br-72	0.00E+00	0.00E+00	0.00E+00	7.67E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	1.2E+03	.	.	.	.	.	.	.	1.2E+03	2.2E-17
Bromine (35)	Br-73	0.00E+00	0.00E+00	0.00E+00	3.53E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	2.6E+03	.	.	.	.	.	.	.	2.6E+03	1.3E-16
Bromine (35)	Br-74	3.96E-12	1.8E-12 (S)	5.41E-12	1.27E-09	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	8.0E+00	.	7.2E+02	1.3E+01	1.1E+00	3.1E+00	1.7E+00	.	.	.	4.9E-01	1.8E-19
Bromine (35)	Br-74m	6.69E-12	3.4E-12 (S)	9.13E-12	1.10E-09	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	4.8E+00	.	8.3E+02	7.8E+00	6.2E-01	1.9E+00	1.0E+00	.	.	.	2.9E-01	1.9E-19
Bromine (35)	Br-75	4.19E-12	3.2E-12 (S)	5.72E-12	2.93E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	7.6E+00	.	3.1E+03	1.2E+01	9.9E-01	3.0E+00	1.6E+00	.	.	.	4.6E-01	6.6E-19
Bromine (35)	Br-76	3.88E-11	3.1E-11 (S)	5.28E-11	7.42E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	8.2E-01	.	1.2E+03	1.3E+00	1.1E-01	3.2E-01	1.8E-01	.	.	.	5.0E-02	7.3E-19
Bromine (35)	Br-76m	0.00E+00	0.00E+00	0.00E+00	5.14E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	5.8E-17
Bromine (35)	Br-77	8.29E-12	6.0E-12 (S)	1.11E-11	7.70E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	3.8E+00	.	1.2E+04	6.4E+00	5.1E-01	1.5E+00	8.4E-01	.	.	.	2.4E-01	1.2E-17
Bromine (35)	Br-77m	0.00E+00	0.00E+00	0.00E+00	3.22E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	2.8E+05	.	.	.	.	.	.	.	2.8E+05	1.8E-14

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Bromine (35)	Br-78	0.00E+00	0.00E+00	0.00E+00	2.54E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	3.6E-16
Bromine (35)	Br-80	1.29E-12	7.0E-13 (S)	1.77E-12	1.94E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	2.5E+01	.	4.7E+04	4.0E+01	3.2E+00	9.6E+00	5.2E+00	.	.	.	1.5E+00	4.2E-19
Bromine (35)	Br-80m	7.64E-12	9.4E-12 (S)	1.05E-11	1.20E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	4.2E+00	.	7.6E+05	6.8E+00	5.4E-01	1.6E+00	8.8E-01	.	.	.	2.5E-01	1.1E-18
Bromine (35)	Br-82	4.66E-11	4.8E-11 (S)	6.26E-11	6.72E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	6.8E-01	.	1.4E+03	1.1E+00	9.1E-02	2.7E-01	1.5E-01	.	.	.	4.2E-02	1.4E-18
Bromine (35)	Br-82m	0.00E+00	0.00E+00	0.00E+00	7.57E-13	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	1.2E+06	.	.	.	.	.	.	.	1.2E+06	1.2E-13
Bromine (35)	Br-83	2.31E-12	3.6E-12 (S)	3.18E-12	1.84E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	1.4E+01	.	5.0E+05	2.2E+01	1.8E+00	5.3E+00	2.9E+00	.	.	.	8.3E-01	2.0E-18
Bromine (35)	Br-84	4.00E-12	2.0E-12 (S)	5.48E-12	4.89E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	8.0E+00	.	1.9E+03	1.3E+01	1.0E+00	3.1E+00	1.7E+00	.	.	.	4.8E-01	2.5E-19
Bromine (35)	Br-84m	0.00E+00	0.00E+00	0.00E+00	7.20E-10	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	1.3E-16
Bromine (35)	Br-85	0.00E+00	0.00E+00	0.00E+00	1.82E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	5.0E+04	.	.	.	.	.	.	.	5.0E+04	2.4E-15
Carbon (6)	C-10	0.00E+00	0.00E+00	0.00E+00	4.32E-10	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	1.3E-18
Carbon (6)	C-11	1.10E-12	7.9E-13 (S)	1.51E-12	2.50E-10	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	2.9E+01	.	3.7E+03	4.7E+01	8.6E-04	1.8E+02	1.0E+02	.	.	.	8.6E-04	3.8E-23
Carbon (6)	C-14	4.20E-11	4.6E-10 (S)	5.40E-11	1.57E-15	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	7.6E-01	1.7E-02	5.8E+08	2.3E-02	2.4E-05	5.1E+00	2.9E+00	.	.	.	2.4E-05	2.0E-16
Calcium (20)	Ca-41	1.12E-11	1.6E-11 (S)	1.38E-11	0.00E+00	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	2.8E+00	.	.	6.1E-01	3.1E+00	4.7E+01	1.3E+01	2.6E+03	3.1E+03	6.3E+02	4.2E-01	1.8E-10
Calcium (20)	Ca-45	6.67E-11	3.5E-10 (S)	9.09E-11	7.95E-15	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	4.8E-01	.	1.1E+08	6.6E-01	4.7E-01	7.2E+00	2.0E+00	4.0E+02	4.7E+02	9.5E+01	1.6E-01	3.3E-16
Calcium (20)	Ca-47	2.06E-10	2.4E-10 (S)	2.96E-10	2.77E-10	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	1.5E-01	.	3.3E+03	2.4E-01	1.5E-01	2.2E+00	6.3E-01	1.2E+02	1.5E+02	2.9E+01	5.1E-02	3.1E-18
Calcium (20)	Ca-49	0.00E+00	0.00E+00	0.00E+00	9.31E-10	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	.	.	9.8E+02	.	.	.	.	.	.	.	9.8E+02	8.3E-17
Cadmium (48)	Cd-101	0.00E+00	0.00E+00	0.00E+00	6.44E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	1.4E+03	.	.	.	.	.	.	.	1.4E+03	3.8E-17
Cadmium (48)	Cd-102	0.00E+00	0.00E+00	0.00E+00	2.05E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	4.5E+03	.	.	.	.	.	.	.	4.5E+03	4.9E-16
Cadmium (48)	Cd-103	0.00E+00	0.00E+00	0.00E+00	5.52E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	2.5E-16
Cadmium (48)	Cd-104	8.30E-12	3.8E-12 (S)	1.19E-11	5.55E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	3.8E+00	.	1.6E+04	6.0E+00	2.2E-01	1.2E+02	8.2E+02	4.1E+02	9.4E+01	3.2E+03	2.0E-01	2.3E-19
Cadmium (48)	Cd-105	2.93E-12	1.4E-12 (S)	4.10E-12	3.38E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.1E+01	.	2.7E+03	1.7E+01	6.3E-01	3.6E+02	2.4E+03	1.2E+03	2.7E+02	9.3E+03	5.7E-01	6.6E-19
Cadmium (48)	Cd-107	9.53E-12	8.5E-12 (S)	1.39E-11	2.57E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	3.3E+00	.	3.6E+05	5.1E+00	1.9E-01	1.1E+02	7.0E+02	3.5E+02	8.0E+01	2.7E+03	1.7E-01	1.4E-18
Cadmium (48)	Cd-109	1.35E-10	5.9E-10 (S)	1.81E-10	1.14E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	2.4E-01	.	8.0E+05	2.3E-01	1.4E-02	8.1E+00	5.4E+01	2.7E+01	6.2E+00	2.1E+02	1.3E-02	1.8E-16
Cadmium (48)	Cd-111m	8.83E-13	1.2E-12 (S)	1.24E-12	6.56E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	3.6E+01	.	1.4E+04	5.7E+01	2.1E+00	1.2E+03	7.9E+03	3.9E+03	9.0E+02	3.1E+04	1.9E+00	2.0E-18
Cadmium (48)	Cd-113	6.13E-10	3.0E-09 (F)	7.79E-10	1.31E-14	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	5.2E-02	.	7.0E+07	8.3E-03	3.3E-03	1.9E+00	1.3E+01	6.2E+00	1.4E+00	4.9E+01	2.3E-03	2.0E-01
Cadmium (48)	Cd-113m	7.84E-10	3.6E-09 (F)	9.92E-10	6.97E-14	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	4.1E-02	.	1.3E+07	1.1E-02	2.6E-03	1.5E+00	9.8E+00	4.9E+00	1.1E+00	3.8E+01	2.0E-03	3.3E-16
Cadmium (48)	Cd-115	2.40E-10	1.4E-10 (S)	3.52E-10	4.70E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.3E-01	.	1.9E+04	2.0E-01	7.4E-03	4.2E+00	2.8E+01	1.4E+01	3.2E+00	1.1E+02	6.7E-03	4.9E-19
Cadmium (48)	Cd-115m	4.59E-10	7.9E-10 (S)	6.63E-10	8.93E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	6.9E-02	.	1.0E+05	1.0E-01	3.9E-03	2.2E+00	1.5E+01	7.3E+00	1.7E+00	5.7E+01	3.5E-03	5.2E-18
Cadmium (48)	Cd-117	3.69E-11	1.8E-11 (S)	5.35E-11	2.81E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	8.6E-01	.	3.3E+03	1.3E+00	4.8E-02	2.7E+01	1.8E+02	9.1E+01	2.1E+01	7.1E+02	4.4E-02	1.5E-19
Cadmium (48)	Cd-117m	3.30E-11	1.8E-11 (S)	4.75E-11	5.46E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	9.7E-01	.	1.7E+03	1.5E+00	5.4E-02	3.1E+01	2.1E+02	1.0E+02	2.4E+01	8.0E+02	5.0E-02	2.3E-19
Cadmium (48)	Cd-118	1.16E-11	5.8E-12 (S)	1.64E-11	4.26E-14	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	2.7E+00	.	2.1E+07	4.3E+00	1.6E-01	8.9E+01	6.0E+02	3.0E+02	6.8E+01	2.3E+03	1.4E-01	1.7E-19
Cadmium (48)	Cd-119	0.00E+00	0.00E+00	0.00E+00	4.39E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	1.3E-16
Cadmium (48)	Cd-119m	0.00E+00	0.00E+00	0.00E+00	6.15E-10	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	7.7E-17
Cerium (58)	Ce-130	3.89E-12	1.9E-12 (S)	5.40E-12	1.17E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	8.2E+00	.	7.8E+03	1.3E+01	3.8E+00	7.9E+04	1.7E+04	1.4E+05	.	2.3E+05	2.2E+00	1.3E-18
Cerium (58)	Ce-131	1.45E-12	6.8E-13 (S)	2.01E-12	4.07E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	2.2E+01	.	2.2E+03	3.5E+01	1.0E+01	2.1E+05	4.6E+04	3.6E+05	.	6.1E+05	5.8E+00	1.5E-18
Cerium (58)	Ce-132	4.87E-11	1.8E-11 (S)	7.08E-11	5.96E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	6.5E-01	.	1.5E+04	1.0E+00	2.9E-01	6.0E+03	1.3E+03	1.0E+04	.	1.7E+04	1.7E-01	9.2E-19
Cerium (58)	Ce-133	8.59E-12	4.4E-12 (S)	1.23E-11	1.24E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.7E+00	.	7.4E+03	5.8E+00	1.7E+00	3.5E+04	7.5E+03	5.9E+04	.	1.0E+05	9.6E-01	2.5E-18
Cerium (58)	Ce-133m	2.26E-11	9.3E-12 (S)	3.22E-11	4.39E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.4E+00	.	2.1E+03	2.2E+00	6.4E-01	1.3E+04	2.9E+03	2.3E+04	.	3.8E+04	3.7E-01	2.8E-18
Cerium (58)	Ce-134	4.53E-10	2.1E-10 (S)	6.63E-10	2.11E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	7.0E-02	.	4.3E+05	1.1E-01	3.1E-02	6.4E+02	1.4E+02	1.1E+03	.	1.9E+03	1.8E-02	2.2E-18
Cerium (58)	Ce-135	2.77E-11	1.2E-11 (S)	3.94E-11	1.98E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.2E+00	.	4.6E+03	1.8E+00	5.3E-01	1.1E+04	2.4E+03	1.9E+04	.	3.1E+04	3.0E-01	8.5E-18
Cerium (58)	Ce-137	3.64E-12	1.2E-12 (S)	5.29E-12	4.45E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	8.8E+00	.	2.1E+05	1.3E+01	3.9E+00	8.0E+04	1.8E+04	1.4E+05	.	2.3E+05	2.3E+00	3.3E-17
Cerium (58)	Ce-137m	9.55E-11	5.8E-11 (S)	1.40E-10	1.00E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.3E-01	.	9.1E+04	5.1E-01	1.5E-01	3.0E+03	6.6E+02	5.2E+03	.	8.8E+03	8.5E-02	4.8E-18
Cerium (58)	Ce-139	3.67E-11	1.9E-10 (S)	5.32E-11	3.25E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	8.7E-01	.	2.8E+04	1.3E+00	3.9E-01	8.0E+03	1.7E+03	1.4E+04	.	2.3E+04	2.2E-01	1.2E-15
Cerium (58)	Ce-141	1.26E-10	3.7E-10 (S)	1.84E-10	1.68E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	2.5E-01	.	5.5E+04	3.8E-01	1.1E-01	2.3E+03	5.0E+02	4.0E+03	.	6.7E+03	6.5E-02	8.4E-17
Cerium (58)	Ce-143	1.94E-10	1.1E-10 (S)	2.83E-10	6.41E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.6E-01	.	1.4E+04	2.5E-01	7.3E-02	1.5E+03	3.3E+02	2.6E+03	.	4.3E+03	4.2E-02	2.4E-18
Cerium (58)	Ce-144	9.52E-10	4.9E-09 (S)	1.40E-09	3.88E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.3E-02	.	2.4E+05	4.6E-02	1.5E-02	3.0E+02	6.6E+01	5.2E+02	.	8.8E+02	8.4E-03	9.8E-17
Cerium (58)	Ce-144+D	9.54E-10	4.9E-09 (S)	1.40E-09	1.33E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.3E-02	.	6.9E+04	4.6E-02	1.5E-02	3.0E+02	6.6E+01	5.2E+02	.	8.8E+02	8.4E-03	9.8E-17
Cerium (58)	Ce-145	0.00E+00	0.00E+00	0.00E+00	1.98E-10	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	.	.	4.6E+03	.	.	.	.	.	.	.	4.6E+03	4.0E-16
Californium (98)	Cf-244	3.37E-12	8.7E-10 (S)	4.71E-12	2.00E-14	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	9.5E+00	.	4.6E+07	1.5E+01	4.4E+00	3.0E+04	2.0E+05	.	.	.	2.5E+00	2.3E-18
Californium (98)	Cf-246	5.69E-10	4.5E-08 (S)	8.34E-10	2.43E-14	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	5.6E-02	.	3.8E+07	8.5E-02	2.5E-02	1.7E+02	1.1E+03	.	.	.	1.4E-02	1.5E-18
Californium (98)	Cf-247	2.52E-12	2.8E-12 (S)	3.65E-12	1.95E-11	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	1.3E+01	.	4.7E+04	2.0E+01	5.7E+00	3.9E+04	2.5E+05	.	.	.	3.3E+00	3.0E-17
Californium (98)	Cf-248	1.20E-09	6.9E-07 (S)	1.69E-09	1.07E-13	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.7E-02	.	8.5E+06	3.7E-02	1.2E-02	8.4E+01	5.5E+02	.	.	.	6.8E-03	1.6E-16
Californium (98)	Cf-249	3.43E-09	1.3E-06 (F)	4.41E-09	7.83E-11	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	9.3E-03	.	1.2E+04	4.6E-03	4.7E-03	3.2E+01	2.1E+02	.	.	.	1.9E-03	1.7E-14
Californium (98)	Cf-250	2.41E-09	1.0E-06 (S)	3.12E-09	2.66E-12	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	1.3E-02	.	3.4E+05	9.8E-03	6.6E-03	4.5E+01	3.0E+02	.	.	.	3.0E-03	1.0E-15
Californium (98)	Cf-251	3.54E-09	1.3E-06 (F)	4.56E-09	2.62E-11	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	9.0E-03	.	3.5E+04	4.4E-03	4.5E-03	3.1E+01	2.0E+02	.	.	.	1.8E-03	4.2E-14
Californium (98)	Cf-252	3.60E-09	1.2E-06 (S)	4.93E-09	1.23E-10	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	8.8E-03	.	7.4E+03	1.1E-02	4.2E-03	2.9E+01	1.9E+02	.	.	.	2.2E-03	1.6E-16
Californium (98)	Cf-253	1.24E-10	1.5E-07 (S)	1.78E-10	9.25E-14	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.6E-01	.	9.9E+06	4.0E-01	1.2E-01	7.9E+02	5.2E+03	.	.	.	6.7E-02	8.5E-17
Californium (98)	Cf-254	5.76E-08	4.1E-06 (S)	8.27E-08	4.54E-09	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	5.5E-04	.	2.0E+02	8.4E-04	2.5E-04	1.7E+00	1.1E+01	.	.	.	1.4E-04	6.2E-19
Californium (98)	Cf-255	3.65E-12	6.1E-10 (S)	5.27E-12	7.61E-14	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	8.7E+00	.	1.2E+07	1.4E+01	3.9E+00	2.7E+04	1.8E+05	.	.	.	2.3E+00	9.7E-18
Chlorine (17)	Cl-34	0.00E+00	0.00E+00	0.00E+00	2.55E-10	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	6.1E-19
Chlorine (17)	Cl-34m	4.79E-12	2.4E-12 (S)	6.55E-12	5.71E-10	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	6.7E+00	.	1.6E+03	1.1E+01	1.7E+00	7.6E+01	1.4E+01	.	.	.	1.1E+00	2.3E-19
Chlorine (17)	Cl-36	8.91E-11	2.7E-09 (S)	1.20E-10	1.44E-13	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	3.6E-01	.	6.4E+06	1.9E-03	9.2E-02	4.2E+00	7.7E-01	.	.	.	1.9E-03	2.1E-12
Chlorine (17)	Cl-38	5.25E-12	2.7E-12 (S)	7.20E-12	4.04E-10	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	6.1E+00	.	2.3E+03	9.9E+00	1.5E+00	6.9E+01	1.3E+01	.	.	.	9.9E-01	2.8E-19
Chlorine (17)	Cl-39	4.12E-12	2.7E-12 (S)	5.63E-12	3.82E-10	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	7.7E+00	.	2.4E+03	1.3E+01	2.0E+00	8.9E+01	1.6E+01	.	.	.	1.3E+00	5.4E-19
Chlorine (17)	Cl-40	0.00E+00	0.00E+00	0.00E+00	1.16E-09	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	.	.	7.9E+02	.	.	.	.	.	.	.	7.9E+02	8.4E-18
Curium (96)	Cm-238	6.79E-12	1.7E-10 (S)	9.71E-12	1.66E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	4.7E+00	.	5.5E+04	7.3E+00	1.8E+00	4.4E+04	9.6E+04	.	.	.	1.1E+00	7.4E-18
Curium (96)	Cm-239	1.23E-11	7.2E-12 (S)	1.79E-11	5.71E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	2.6E+00	.	1.6E+04	4.0E+00	9.6E-01	2.4E+04	5.2E+04	.	.	.	6.0E-01	4.9E-18
Curium (96)	Cm-240	9.44E-10	3.1E-07 (S)	1.37E-09	2.16E-14	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.4E-02	.	4.2E+07	5.1E-02	1.3E-02	3.1E+02	6.8E+02	.	.	.	7.8E-03	1.4E-17
Curium (96)	Cm-241	1.34E-10	3.3E-09 (S)	1.94E-10	1.16E-10	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	2.4E-01	.	7.9E+03	3.6E-01	8.9E-02	2.2E+03	4.8E+03	.	.	.	5.5E-02	1.2E-16
Curium (96)	Cm-242	1.04E-09	5.4E-07 (S)	1.48E-09	1.85E-14	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.1E-02	.	4.9E+07	4.5E-02	1.2E-02	2.9E+02	6.3E+02	.	.	.	7.1E-03	8.0E-17
Curium (96)	Cm-243	2.57E-09	9.9E-07 (S)	3.34E-09	2.90E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.2E-02	.	3.2E+04	7.5E-03	5.2E-03	1.3E+02	2.8E+02	.	.	.	2.5E-03	1.8E-15
Curium (96)	Cm-244	2.26E-09	9.6E-07 (S)	2.93E-09	1.95E-14	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.4E-02	.	4.7E+07	9.5E-03	5.9E-03	1.4E+02	3.2E+02	.	.	.	2.9E-03	1.3E-15
Curium (96)	Cm-245	2.83E-09	1.0E-06 (F)	3.66E-09	2.17E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.1E-02	.	4.2E+04	5.5E-03	4.7E-03	1.2E+02	2.5E+02	.	.	.	2.1E-03	4.5E-13
Curium (96)	Cm-246	2.79E-09	1.0E-06 (F)	3.59E-09	9.85E-13	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.1E-02	.	9.3E+05	5.6E-03	4.8E-03	1.2E+02	2.6E+02	.	.	.	2.1E-03	2.6E-13
Curium (96)	Cm-247	2.69E-09	9.4E-07 (F)	3.49E-09	7.61E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.2E-02	.	1.2E+04	5.8E-03	4.9E-03	1.2E+02	2.7E+02	.	.	.	2.2E-03	8.7E-10
Curium (96)	Cm-247+D	2.70E-09	9.4E-07 (F)	3.51E-09	8.08E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.2E-02	.	1.1E+04	5.7E-03	4.9E-03	1.2E+02	2.6E+02	.	.	.	2.2E-03	8.6E-10
Curium (96)	Cm-248	1.23E-08	3.9E-06 (F)	1.61E-08	3.53E-10	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	2.6E-03	.	2.6E+03	1.2E-03	1.1E-03	2.6E+01	5.8E+01	.	.	.	4.7E-04	4.2E-12
Curium (96)	Cm-249	2.28E-12	2.1E-12 (S)	3.25E-12	4.83E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.4E+01	.	1.9E+05	2.2E+01	5.3E+00	1.3E+05	2.9E+05	.	.	.	3.3E+00	1.0E-17
Curium (96)	Cm-250	8.90E-08	2.7E-05 (F)	1.17E-07	3.60E-09	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.6E-04	.	2.5E+02	1.7E-04	1.5E-04	3.6E+00	7.9E+00	.	.	.	6.5E-05	1.4E-14
Curium (96)	Cm-250+D	8.91E-08	2.7E-05 (F)	1.17E-07	3.66E-09	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.6E-04	.	2.5E+02	1.7E-04	1.5E-04	3.6E+00	7.9E+00	.	.	.	6.5E-05	1.4E-14
Curium (96)	Cm-251	1.65E-12	1.4E-12 (S)	2.32E-12	2.72E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.9E+01	.	3.4E+04	3.1E+01	7.4E+00	1.8E+05	4.0E+05	.	.	.	4.6E+00	3.8E-18
Cobalt (27)	Co-54m	0.00E+00	0.00E+00	0.00E+00	1.01E-09	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	.

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Cobalt (27)	Co-57	2.81E-11	1.0E-10 (S)	4.03E-11	2.72E-11	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	1.1E+00	.	3.4E+04	1.6E+00	1.7E-01	4.9E+02	4.2E+02	9.0E+02	4.9E+01	2.9E+03	1.3E-01	5.9E-16
Cobalt (27)	Co-58	7.95E-11	2.1E-10 (S)	1.12E-10	2.44E-10	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	4.0E-01	.	3.7E+03	6.2E-01	6.1E-02	1.8E+02	1.5E+02	3.3E+02	1.7E+01	1.0E+03	4.8E-02	5.7E-17
Cobalt (27)	Co-58m	3.37E-12	2.2E-12 (S)	4.90E-12	2.82E-16	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	9.5E+00	.	3.2E+09	1.5E+01	1.4E+00	4.0E+03	3.4E+03	7.4E+03	4.0E+02	2.4E+04	1.1E+00	6.9E-18
Cobalt (27)	Co-60	4.26E-10	2.7E-09 (S)	6.03E-10	6.60E-10	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	7.5E-02	.	1.4E+03	6.9E-02	1.1E-02	3.3E+01	2.8E+01	6.0E+01	3.2E+00	1.9E+02	8.6E-03	2.8E-16
Cobalt (27)	Co-60m	7.02E-14	1.2E-13 (S)	9.68E-14	1.06E-12	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	4.5E+02	.	8.6E+05	7.4E+02	7.0E+01	2.0E+05	1.7E+05	3.8E+05	2.0E+04	1.2E+06	5.6E+01	6.9E-18
Cobalt (27)	Co-61	6.62E-12	4.2E-12 (S)	9.51E-12	2.06E-11	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	4.8E+00	.	4.4E+04	7.5E+00	7.2E-01	2.1E+03	1.8E+03	3.8E+03	2.1E+02	1.2E+04	5.7E-01	6.8E-19
Cobalt (27)	Co-62	0.00E+00	0.00E+00	0.00E+00	4.32E-10	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	3.9E-17
Cobalt (27)	Co-62m	2.30E-12	9.1E-13 (S)	3.16E-12	7.16E-10	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	1.4E+01	.	1.3E+03	2.3E+01	2.2E+00	6.2E+03	5.3E+03	1.2E+04	6.2E+02	3.6E+04	1.7E+00	2.9E-19
Chromium (24)	Cr-48	1.96E-11	1.9E-11 (S)	2.76E-11	1.03E-10	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	1.6E+00	.	8.9E+03	2.6E+00	4.7E-01	1.0E+01	1.6E+02	.	.	.	3.1E-01	3.8E-18
Chromium (24)	Cr-49	3.67E-12	2.0E-12 (S)	5.14E-12	2.55E-10	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	8.7E+00	.	3.6E+03	1.4E+01	2.5E+00	5.5E+01	8.4E+02	.	.	.	1.7E+00	6.8E-19
Chromium (24)	Cr-51	5.00E-12	4.5E-12 (S)	7.18E-12	7.67E-12	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	6.4E+00	.	1.2E+05	9.8E+00	1.8E+00	3.9E+01	6.0E+02	.	.	.	1.2E+00	4.8E-16
Chromium (24)	Cr-55	0.00E+00	0.00E+00	0.00E+00	1.51E-12	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	.	.	6.0E+05	.	.	.	.	.	.	.	6.0E+05	2.3E-14
Chromium (24)	Cr-56	0.00E+00	0.00E+00	0.00E+00	1.68E-11	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	.	.	5.4E+04	.	.	.	.	.	.	.	5.4E+04	3.6E-15
Cesium (55)	Cs-121	0.00E+00	0.00E+00	0.00E+00	2.91E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	1.9E-16
Cesium (55)	Cs-121m	0.00E+00	0.00E+00	0.00E+00	2.91E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	1.5E-16
Cesium (55)	Cs-123	0.00E+00	0.00E+00	0.00E+00	2.65E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	3.4E+03	.	.	.	.	.	.	.	3.4E+03	4.9E-16
Cesium (55)	Cs-124	0.00E+00	0.00E+00	0.00E+00	2.91E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	3.9E-17
Cesium (55)	Cs-125	1.68E-12	1.2E-12 (S)	2.29E-12	1.85E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.9E+01	.	5.0E+03	3.1E+01	9.0E-02	1.7E+02	1.8E+02	1.6E+02	3.1E+02	4.2E+03	9.0E-02	9.9E-20
Cesium (55)	Cs-126	0.00E+00	0.00E+00	0.00E+00	2.86E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	3.2E+03	.	.	.	.	.	.	.	3.2E+03	1.3E-16
Cesium (55)	Cs-127	1.80E-12	3.0E-12 (S)	2.42E-12	1.01E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.8E+01	.	9.1E+03	2.9E+01	8.6E-02	1.6E+02	1.7E+02	1.5E+02	2.9E+02	3.9E+03	8.5E-02	8.0E-19
Cesium (55)	Cs-128	0.00E+00	0.00E+00	0.00E+00	2.19E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	4.2E+03	.	.	.	.	.	.	.	4.2E+03	3.8E-16
Cesium (55)	Cs-129	4.98E-12	7.0E-12 (S)	6.66E-12	6.15E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	6.4E+00	.	1.5E+04	1.1E+01	3.1E-02	5.8E+01	6.1E+01	5.5E+01	1.1E+02	1.4E+03	3.1E-02	1.5E-18
Cesium (55)	Cs-130	1.22E-12	7.2E-13 (S)	1.66E-12	1.21E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	2.6E+01	.	7.5E+03	4.3E+01	1.2E-01	2.3E+02	2.4E+02	2.2E+02	4.2E+02	5.7E+03	1.2E-01	9.3E-20
Cesium (55)	Cs-130m	0.00E+00	0.00E+00	0.00E+00	1.07E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	8.5E+04	.	.	.	.	.	.	.	8.5E+04	7.6E-15
Cesium (55)	Cs-131	5.03E-12	5.0E-12 (S)	6.74E-12	1.16E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	6.3E+00	.	7.9E+05	1.1E+01	3.1E-02	5.7E+01	6.0E+01	5.4E+01	1.0E+02	1.4E+03	3.0E-02	1.1E-17
Cesium (55)	Cs-132	4.01E-11	2.8E-11 (S)	5.25E-11	1.74E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.9E-01	.	5.3E+03	1.4E+00	3.9E-03	7.3E+00	7.7E+00	6.9E+00	1.3E+01	1.8E+02	3.9E-03	9.5E-19
Cesium (55)	Cs-134	1.14E-09	1.9E-09 (S)	1.40E-09	3.88E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	2.8E-02	.	2.4E+03	3.9E-02	1.5E-04	2.8E-01	2.9E-01	2.6E-01	5.0E-01	6.8E+00	1.5E-04	4.2E-18
Cesium (55)	Cs-134m	1.12E-12	4.8E-12 (S)	1.51E-12	4.20E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	2.8E+01	.	2.2E+05	4.7E+01	1.4E-01	2.6E+02	2.7E+02	2.4E+02	4.7E+02	6.3E+03	1.4E-01	6.3E-19
Cesium (55)	Cs-135	1.70E-10	9.1E-10 (S)	2.11E-10	1.13E-14	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.9E-01	.	8.1E+07	8.9E-02	9.8E-04	1.8E+00	1.9E+00	1.7E+00	3.3E+00	4.5E+01	9.6E-04	3.1E-11
Cesium (55)	Cs-135m	1.22E-12	6.9E-13 (S)	1.65E-12	4.04E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	2.6E+01	.	2.3E+03	4.3E+01	1.3E-01	2.3E+02	2.4E+02	2.2E+02	4.3E+02	5.8E+03	1.2E-01	1.8E-19
Cesium (55)	Cs-136	2.33E-10	2.8E-10 (S)	3.03E-10	5.40E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.4E-01	.	1.7E+03	2.3E-01	6.8E-04	1.3E+00	1.3E+00	1.2E+00	2.3E+00	3.1E+01	6.8E-04	3.4E-19
Cesium (55)	Cs-137	8.24E-10	3.0E-09 (S)	1.01E-09	6.06E-14	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	3.9E-02	.	1.5E+07	2.3E-02	2.0E-04	3.8E-01	4.0E-01	3.6E-01	7.0E-01	9.4E+00	2.0E-04	8.6E-17
Cesium (55)	Cs-137+D	8.24E-10	3.0E-09 (S)	1.01E-09	1.39E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	3.9E-02	.	6.6E+03	2.3E-02	2.0E-04	3.8E-01	4.0E-01	3.6E-01	7.0E-01	9.4E+00	2.0E-04	8.6E-17
Cesium (55)	Cs-138	4.48E-12	2.5E-12 (S)	6.13E-12	6.31E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.1E+00	.	1.4E+03	1.2E+01	3.4E-02	6.3E+01	6.6E+01	5.9E+01	1.1E+02	1.6E+03	3.3E-02	3.0E-20
Cesium (55)	Cs-138m	0.00E+00	0.00E+00	0.00E+00	1.05E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	8.7E+03	.	.	.	.	.	.	.	8.7E+03	6.9E-16
Cesium (55)	Cs-139	0.00E+00	0.00E+00	0.00E+00	8.55E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	2.7E-15
Cesium (55)	Cs-140	0.00E+00	0.00E+00	0.00E+00	4.86E-10	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	5.5E-17
Copper (29)	Cu-57	0.00E+00	0.00E+00	0.00E+00	2.96E-10	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	1.1E-19
Copper (29)	Cu-59	0.00E+00	0.00E+00	0.00E+00	3.63E-10	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	4.0E-17
Copper (29)	Cu-60	3.79E-12	1.6E-12 (S)	5.22E-12	1.04E-09	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	8.4E+00	.	8.8E+02	1.4E+01	4.3E-01	1.6E+02	1.8E+02	6.4E+02	7.3E+02	1.5E+03	4.0E-01	1.1E-19
Copper (29)	Cu-61	1.21E-11	6.3E-12 (S)	1.75E-11	2.03E-10	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	2.6E+00	.	4.5E+03	4.1E+00	1.3E-01	4.9E+01	5.3E+01	1.9E+02	2.2E+02	4.3E+02	1.2E-01	2.8E-19
Copper (29)	Cu-62	0.00E+00	0.00E+00	0.00E+00	2.48E-10	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	3.7E+03	.	.	.	.	.	.	.	3.7E+03	4.4E-16
Copper (29)	Cu-64	1.75E-11	1.2E-11 (S)	2.55E-11	4.54E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	1.8E+00	.	2.0E+04	2.8E+00	8.8E-02	3.3E+01	3.6E+01	1.3E+02	1.5E+02	3.0E+02	8.1E-02	7.8E-19
Copper (29)	Cu-66	0.00E+00	0.00E+00	0.00E+00	2.64E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	2.3E-15
Copper (29)	Cu-67	5.09E-11	6.2E-11 (S)	7.42E-11	2.65E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	6.3E-01	.	3.4E+04	9.6E-01	3.0E-02	1.1E+01	1.2E+01	4.5E+01	5.1E+01	1.0E+02	2.8E-02	1.4E-18
Copper (29)	Cu-69	0.00E+00	0.00E+00	0.00E+00	1.36E-10	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	6.7E+03	.	.	.	.	.	.	.	6.7E+03	2.6E-16
Dysprosium (66)	Dy-148	0.00E+00	0.00E+00	0.00E+00	1.73E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	5.3E+03	.	.	.	.	.	.	.	5.3E+03	5.1E-16
Dysprosium (66)	Dy-149	0.00E+00	0.00E+00	0.00E+00	4.17E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.2E+03	.	.	.	.	.	.	.	2.2E+03	2.7E-16
Dysprosium (66)	Dy-150	0.00E+00	0.00E+00	0.00E+00	6.44E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.4E+04	.	.	.	.	.	.	.	1.4E+04	3.0E-15
Dysprosium (66)	Dy-151	1.46E-12	1.3E-11 (S)	2.04E-12	3.47E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.2E+01	.	2.6E+03	3.5E+01	3.9E-01	2.1E+03	1.5E+04	.	.	.	3.8E-01	2.0E-19
Dysprosium (66)	Dy-152	1.45E-11	6.7E-12 (S)	2.09E-11	6.44E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.2E+00	.	1.4E+04	3.4E+00	3.8E-02	2.0E+02	1.5E+03	.	.	.	3.7E-02	1.6E-19
Dysprosium (66)	Dy-153	2.08E-11	1.2E-11 (S)	2.98E-11	2.10E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	1.5E+00	.	4.3E+03	2.4E+00	2.7E-02	1.4E+02	1.0E+03	.	.	.	2.6E-02	3.0E-19
Dysprosium (66)	Dy-154	8.64E-10	3.5E-07 (S)	1.14E-09	0.00E+00	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	3.7E-02	.	.	1.8E-02	7.0E-04	3.7E+00	2.7E+01	.	.	.	6.6E-04	3.2E-11
Dysprosium (66)	Dy-155	1.55E-11	7.8E-12 (S)	2.20E-11	1.63E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.1E+00	.	5.6E+03	3.2E+00	3.6E-02	1.9E+02	1.4E+03	.	.	.	3.5E-02	6.4E-19
Dysprosium (66)	Dy-157	6.12E-12	2.4E-12 (S)	8.67E-12	7.89E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	5.2E+00	.	1.2E+04	8.2E+00	9.2E-02	4.9E+02	3.6E+03	.	.	.	8.9E-02	1.4E-18
Dysprosium (66)	Dy-159	1.47E-11	4.7E-11 (S)	2.14E-11	5.24E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.2E+00	.	1.7E+05	3.2E+00	3.7E-02	2.0E+02	1.4E+03	.	.	.	3.6E-02	2.4E-16
Dysprosium (66)	Dy-165	1.12E-11	6.1E-12 (S)	1.62E-11	6.19E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.8E+00	.	1.5E+05	4.4E+00	4.9E-02	2.6E+02	1.9E+03	.	.	.	4.8E-02	2.2E-19
Dysprosium (66)	Dy-165m	0.00E+00	0.00E+00	0.00E+00	3.79E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	9.9E-15
Dysprosium (66)	Dy-166	3.05E-10	2.5E-10 (S)	4.48E-10	6.78E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	1.0E-01	.	1.3E+05	1.6E-01	1.8E-03	9.5E+00	6.9E+01	.	.	.	1.7E-03	2.8E-19
Dysprosium (66)	Dy-167	0.00E+00	0.00E+00	0.00E+00	1.29E-10	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	7.1E+03	.	.	.	.	.	.	.	7.1E+03	1.4E-15
Dysprosium (66)	Dy-168	0.00E+00	0.00E+00	0.00E+00	9.37E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	9.8E+03	.	.	.	.	.	.	.	9.8E+03	2.8E-15
Erbium (68)	Er-154	0.00E+00	0.00E+00	0.00E+00	1.20E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	7.6E+04	.	.	.	.	.	.	.	7.6E+04	8.6E-15
Erbium (68)	Er-156	2.64E-12	1.5E-12 (S)	3.74E-12	9.12E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.2E+01	.	1.0E+05	1.9E+01	.	1.1E+03	8.3E+03	.	.	.	7.3E+00	4.4E-18
Erbium (68)	Er-159	1.57E-12	9.3E-13 (S)	2.17E-12	2.40E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.0E+01	.	3.8E+03	3.3E+01	.	2.0E+03	1.4E+04	.	.	.	1.2E+01	1.4E-17
Erbium (68)	Er-161	8.80E-12	4.0E-12 (S)	1.25E-11	2.46E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.6E+00	.	3.7E+03	5.7E+00	.	3.4E+02	2.5E+03	.	.	.	2.2E+00	1.3E-17
Erbium (68)	Er-163	2.00E-13	8.1E-14 (S)	2.82E-13	5.18E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.6E+02	.	1.8E+05	2.5E+02	.	1.5E+04	1.1E+05	.	.	.	9.7E+01	2.3E-16
Erbium (68)	Er-165	2.45E-12	9.0E-13 (S)	3.53E-12	4.73E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.3E+01	.	1.9E+05	2.0E+01	.	1.2E+03	8.8E+03	.	.	.	7.9E+00	1.6E-16
Erbium (68)	Er-167m	0.00E+00	0.00E+00	0.00E+00	2.18E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.2E+04	.	.	.	.	.	.	.	4.2E+04	5.2E-17
Erbium (68)	Er-169	6.83E-11	1.2E-10 (S)	1.00E-10	1.63E-14	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.7E-01	.	5.6E+07	7.1E-01	.	4.2E+01	3.1E+02	.	.	.	2.8E-01	1.3E-16
Erbium (68)	Er-171	5.44E-11	2.7E-11 (S)	7.95E-11	8.71E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.9E-01	.	1.0E+04	9.0E-01	.	5.3E+01	3.9E+02	.	.	.	3.5E-01	5.3E-18
Erbium (68)	Er-172	1.67E-10	1.4E-10 (S)	2.44E-10	1.23E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.9E-01	.	7.4E+03	2.9E-01	.	1.7E+01	1.3E+02	.	.	.	1.1E-01	1.1E-17
Erbium (68)	Er-173	0.00E+00	0.00E+00	0.00E+00	2.03E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.5E+03	.	.	.	.	.	.	.	4.5E+03	2.2E-16
Einsteinium (99)	Es-249	1.79E-12	1.9E-11 (S)	2.53E-12	9.69E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.8E+01	.	9.4E+03	2.8E+01	.	1.7E+05	3.7E+05	.	.	.	1.1E+01	5.5E-17
Einsteinium (99)	Es-250	6.22E-11	1.1E-10 (S)	9.01E-11	2.88E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	5.1E-01	.	3.2E+03	7.9E-01	.	4.7E+03	1.0E+04	.	.	.	3.1E-01	7.9E-18
Einsteinium (99)	Es-250m	2.47E-12	2.1E-11 (S)	3.47E-12	1.37E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.3E+01	.	6.7E+03	2.1E+01	.	1.2E+05	2.7E+05	.	.	.	7.9E+00	5.2E-17
Einsteinium (99)	Es-251	2.86E-11	1.9E-10 (S)	4.18E-11	1.95E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.1E+00	.	4.7E+04	1.7E+00	.	1.0E+04	2.2E+04	.	.	.	6.7E-01	6.6E-17
Einsteinium (99)	Es-253	9.40E-10	2.9E-07 (S)	1.38E-09	8.08E-14	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	3.4E-02	.	1.1E+07	5.1E-02	.	3.1E+02	6.7E+02	.	.	.	2.0E-02	3.0E-17
Einsteinium (99)	Es-254	1.50E-09	7.0E-07 (S)	2.12E-09	7.70E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.1E-02	.	1.2E+06	3.0E-02	.	2.0E+02	4.4E+02	.	.	.	1.3E-02	2.5E-16
Einsteinium (99)	Es-254+D	1.52E-09	7.0E-07 (S)	2.14E-09	2.30E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.1E-02	.	4.0E+03	3.0E-02	.	2.0E+02	4.3E+02	.	.	.	1.2E-02	2.5E-16
Einsteinium (99)	Es-254m	7.63E-10	4.7E-08 (S)	1.12E-09	1.17E-10	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	4.2E-02	.	7.8E+03	6.4E-02	.	3.8E+02	8.3E+02	.	.	.	2.5E-02	3.0E-18
Einsteinium (99)	Es-255	7.69E-10	4.1E-07 (S)	1.12E-09	1.92E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	4.1E-02	.	4.8E+06	6.3E-02	.	3.8E+02	8.3E+02	.	.	.	2.5E-02	7.2E-17
Einsteinium (99)	Es-256	4.39E-10	3.9E-09 (S)	6.28E-10	4.70E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	7.3E-02	.	1.9E+06	1.1E-01	.	6.8E+02	1.5E+03	.	.	.	4.4E-02	5.7E-20
Europium (63)	Eu-142	0.00E+00	0.00E+00	0.00E+00	3.07E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.0E+03	.	.	.	.	.	.	.	3.0E+03	3.3E-18
Europium (63)	Eu-142m	0.00E+00	0.00E+00	0.00E+00	8.65E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	3.6E-17

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Europium (63)	Eu-143	0.00E+00	0.00E+00	0.00E+00	2.85E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.2E+03	.	.	.	.	.	.	.	3.2E+03	2.3E-16
Europium (63)	Eu-144	0.00E+00	0.00E+00	0.00E+00	2.77E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.3E+03	.	.	.	.	.	.	.	3.3E+03	1.6E-17
Europium (63)	Eu-145	6.52E-11	4.7E-11 (S)	9.21E-11	3.28E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	4.9E-01	.	2.8E+03	7.7E-01	4.3E-02	4.6E+01	3.4E+02	.	.	.	3.8E-02	9.2E-18
Europium (63)	Eu-146	1.17E-10	6.9E-11 (S)	1.65E-10	6.09E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.7E-01	.	1.5E+03	4.3E-01	2.4E-02	2.6E+01	1.9E+02	.	.	.	2.1E-02	4.0E-18
Europium (63)	Eu-147	5.43E-11	1.2E-10 (S)	7.80E-11	1.11E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	5.9E-01	.	8.2E+03	9.1E-01	5.1E-02	5.4E+01	4.0E+02	.	.	.	4.5E-02	4.5E-17
Europium (63)	Eu-148	1.19E-10	3.5E-10 (F)	1.66E-10	5.55E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.7E-01	.	1.6E+03	4.2E-01	2.4E-02	2.6E+01	1.9E+02	.	.	.	2.1E-02	4.8E-17
Europium (63)	Eu-149	2.38E-11	4.7E-11 (S)	3.46E-11	1.10E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.3E+00	.	8.3E+04	2.0E+00	1.2E-01	1.2E+02	8.9E+02	.	.	.	1.0E-01	4.0E-16
Europium (63)	Eu-150	1.09E-10	7.3E-09 (F)	1.52E-10	3.82E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.9E-01	.	2.4E+03	1.6E-01	2.6E-02	2.8E+01	2.0E+02	.	.	.	2.1E-02	1.2E-14
Europium (63)	Eu-150m	6.53E-11	3.0E-11 (S)	9.57E-11	1.19E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	4.9E-01	.	7.7E+04	7.4E-01	4.2E-02	4.4E+01	3.2E+02	.	.	.	3.6E-02	8.3E-19
Europium (63)	Eu-152	1.58E-10	5.2E-09 (F)	2.25E-10	2.97E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.0E-01	.	3.1E+03	1.3E-01	1.8E-02	1.9E+01	1.4E+02	.	.	.	1.4E-02	3.1E-15
Europium (63)	Eu-152m	8.02E-11	3.2E-11 (S)	1.17E-10	7.38E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	4.0E-01	.	1.2E+04	6.1E-01	3.4E-02	3.6E+01	2.6E+02	.	.	.	3.0E-02	5.0E-19
Europium (63)	Eu-152n	1.16E-12	8.0E-13 (S)	1.67E-12	1.42E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.7E+01	.	6.4E+04	4.3E+01	2.4E+00	2.5E+03	1.9E+04	.	.	.	2.1E+00	6.0E-18
Europium (63)	Eu-154	2.66E-10	5.6E-09 (F)	3.83E-10	3.19E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.2E-01	.	2.9E+03	9.2E-02	1.0E-02	1.1E+01	8.1E+01	.	.	.	8.7E-03	1.2E-15
Europium (63)	Eu-154m	4.91E-13	3.0E-13 (S)	6.92E-13	1.16E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	6.5E+01	.	7.9E+04	1.0E+02	5.8E+00	6.1E+03	4.5E+04	.	.	.	5.0E+00	7.0E-18
Europium (63)	Eu-155	5.24E-11	5.2E-10 (S)	7.64E-11	1.17E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	6.1E-01	.	7.8E+04	5.7E-01	5.2E-02	5.6E+01	4.0E+02	.	.	.	4.4E-02	3.4E-15
Europium (63)	Eu-156	3.62E-10	4.3E-10 (S)	5.28E-10	3.28E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	8.8E-02	.	2.8E+03	1.3E-01	7.5E-03	8.0E+00	5.9E+01	.	.	.	6.6E-03	4.4E-18
Europium (63)	Eu-157	1.01E-10	4.6E-11 (S)	1.48E-10	6.63E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	3.2E-01	.	1.4E+04	4.8E-01	2.7E-02	2.9E+01	2.1E+02	.	.	.	2.4E-02	6.6E-19
Europium (63)	Eu-158	5.62E-12	3.1E-12 (S)	7.90E-12	3.38E-10	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	5.7E+00	.	2.7E+03	9.0E+00	5.0E-01	5.4E+02	3.9E+03	.	.	.	4.4E-01	6.3E-19
Europium (63)	Eu-159	3.25E-12	1.7E-12 (S)	4.62E-12	6.94E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	9.8E+00	.	1.3E+04	1.5E+01	8.6E-01	9.2E+02	6.7E+03	.	.	.	7.5E-01	4.3E-19
Fluorine (9)	F-17	0.00E+00	0.00E+00	0.00E+00	2.50E-10	2.00E-02	1.00E+01	2.00E-02	7.00E-03	.	.	.	.	.	3.7E+03	.	.	.	.	.	.	.	3.7E+03	1.3E-17
Fluorine (9)	F-18	2.54E-12	3.2E-12 (S)	3.38E-12	2.42E-10	2.00E-02	1.00E+01	2.00E-02	7.00E-03	.	.	.	1.3E+01	.	3.8E+03	2.1E+01	1.5E+01	1.3E+02	7.8E+01	.	.	.	4.7E+00	1.8E-18
Iron (26)	Fe-52	1.91E-10	8.1E-11 (S)	2.78E-10	1.80E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	1.7E-01	.	5.1E+03	2.6E-01	1.1E-02	2.2E+00	1.9E+02	8.7E+01	6.8E+00	7.6E+00	9.8E-03	5.0E-20
Iron (26)	Fe-53	0.00E+00	0.00E+00	0.00E+00	2.90E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	2.8E-16
Iron (26)	Fe-53m	0.00E+00	0.00E+00	0.00E+00	7.95E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	3.0E-17
Iron (26)	Fe-55	2.32E-11	4.0E-11 (F)	3.13E-11	3.66E-20	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	1.4E+00	.	2.5E+13	1.7E+00	9.7E-02	1.9E+01	1.7E+03	7.8E+02	6.1E+01	6.8E+01	8.5E-02	1.3E-15
Iron (26)	Fe-59	2.13E-10	4.0E-10 (S)	3.01E-10	3.11E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	1.5E-01	.	2.9E+03	2.3E-01	1.0E-02	2.0E+00	1.8E+02	8.1E+01	6.3E+00	7.0E+00	9.0E-03	6.7E-18
Iron (26)	Fe-60	5.06E-09	1.0E-08 (F)	6.74E-09	3.76E-15	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	6.3E-03	.	2.4E+08	3.0E-03	4.5E-04	9.0E-02	7.9E+00	3.6E+00	2.8E-01	3.1E-01	3.7E-04	3.4E-12
Iron (26)	Fe-60+D	5.49E-09	1.3E-08 (F)	7.34E-09	6.60E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	5.8E-03	.	1.4E+03	2.7E-03	4.1E-04	8.3E-02	7.2E+00	3.3E+00	2.6E-01	2.9E-01	3.4E-04	3.1E-12
Iron (26)	Fe-61	0.00E+00	0.00E+00	0.00E+00	3.66E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	1.8E-16
Iron (26)	Fe-62	0.00E+00	0.00E+00	0.00E+00	1.25E-10	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	7.3E+03	.	.	.	.	.	.	.	7.3E+03	1.0E-16
Fermium (100)	Fm-251	1.05E-11	1.8E-10 (S)	1.53E-11	3.47E-11	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	3.0E+00	.	2.6E+04	4.7E+00	.	2.8E+03	1.5E+04	.	.	.	1.8E+00	2.9E-17
Fermium (100)	Fm-252	4.92E-10	3.5E-08 (S)	7.22E-10	9.06E-14	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	6.5E-02	.	1.0E+07	9.9E-02	.	5.9E+01	3.2E+02	.	.	.	3.9E-02	3.0E-18
Fermium (100)	Fm-253	1.87E-10	4.1E-08 (S)	2.73E-10	1.26E-11	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	1.7E-01	.	7.3E+04	2.6E-01	.	1.6E+02	8.5E+02	.	.	.	1.0E-01	2.2E-17
Fermium (100)	Fm-254	6.02E-11	5.9E-09 (S)	8.77E-11	1.91E-12	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	5.3E-01	.	4.8E+05	8.1E-01	.	4.8E+02	2.6E+03	.	.	.	3.2E-01	3.1E-18
Fermium (100)	Fm-255	4.46E-10	2.7E-08 (S)	6.55E-10	4.86E-13	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	7.1E-02	.	1.9E+06	1.1E-01	.	6.5E+01	3.5E+02	.	.	.	4.3E-02	2.6E-18
Fermium (100)	Fm-256	2.58E-09	2.4E-08 (S)	3.68E-09	3.35E-09	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	1.2E-02	.	2.7E+02	1.9E-02	.	1.2E+01	6.3E+01	.	.	.	7.5E-03	6.0E-20
Fermium (100)	Fm-257	1.31E-09	7.6E-07 (S)	1.88E-09	3.28E-11	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	2.4E-02	.	2.8E+04	3.6E-02	.	2.3E+01	1.2E+02	.	.	.	1.5E-02	1.1E-16
Francium (87)	Fr-212	4.80E-11	5.7E-10 (S)	6.53E-11	2.90E-10	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	6.6E-01	.	3.2E+03	1.1E+00	.	4.3E+00	3.6E+00	.	.	.	3.4E-01	2.8E-19
Francium (87)	Fr-219	0.00E+00	0.00E+00	0.00E+00	8.58E-13	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.1E+06	.	.	.	.	.	.	.	1.1E+06	1.5E-17
Francium (87)	Fr-220	0.00E+00	0.00E+00	0.00E+00	1.91E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	4.8E+05	.	.	.	.	.	.	.	4.8E+05	9.5E-15
Francium (87)	Fr-220+D	0.00E+00	0.00E+00	0.00E+00	2.42E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	3.8E+05	.	.	.	.	.	.	.	3.8E+05	7.5E-15
Francium (87)	Fr-221	0.00E+00	0.00E+00	0.00E+00	6.85E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	2.9E-14
Francium (87)	Fr-221+D	0.00E+00	0.00E+00	0.00E+00	6.91E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	2.8E-14
Francium (87)	Fr-222	3.93E-11	1.6E-09 (S)	5.37E-11	4.26E-11	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	8.1E-01	.	2.1E+04	1.3E+00	.	5.3E+00	4.3E+00	.	.	.	4.2E-01	2.6E-19
Francium (87)	Fr-223	1.99E-10	1.1E-09 (S)	2.73E-10	1.06E-11	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	1.6E-01	.	8.6E+04	2.6E-01	.	1.0E+00	8.5E-01	.	.	.	8.2E-02	7.9E-20
Francium (87)	Fr-224	0.00E+00	0.00E+00	0.00E+00	1.42E-10	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	6.5E+03	.	.	.	.	.	.	.	6.5E+03	9.5E-16
Francium (87)	Fr-227	0.00E+00	0.00E+00	0.00E+00	1.07E-10	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	8.5E+03	.	.	.	.	.	.	.	8.5E+03	9.4E-16
Gallium (31)	Ga-64	0.00E+00	0.00E+00	0.00E+00	9.06E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	.	.	1.0E+03	.	.	.	.	.	.	.	1.0E+03	3.3E-17
Gallium (31)	Ga-65	1.68E-12	8.0E-13 (S)	2.32E-12	2.85E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	1.9E+01	.	3.2E+03	3.1E+01	.	1.2E+04	8.0E+04	.	.	.	1.2E+01	2.3E-18
Gallium (31)	Ga-66	1.74E-10	6.2E-11 (S)	2.53E-10	6.88E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	1.8E-01	.	1.3E+03	2.8E-01	.	1.1E+02	7.3E+02	.	.	.	1.1E-01	8.2E-19
Gallium (31)	Ga-67	2.86E-11	2.9E-11 (S)	4.15E-11	3.60E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	1.1E+00	.	2.5E+04	1.7E+00	.	6.8E+02	4.5E+03	.	.	.	6.7E-01	4.2E-17
Gallium (31)	Ga-68	7.58E-12	3.6E-12 (S)	1.08E-11	2.34E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	4.2E+00	.	3.9E+03	6.6E+00	.	2.6E+03	1.7E+04	.	.	.	2.6E+00	2.3E-18
Gallium (31)	Ga-70	1.40E-12	8.3E-13 (S)	1.95E-12	2.36E-12	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	2.3E+01	.	3.9E+05	3.7E+01	.	1.5E+04	9.5E+04	.	.	.	1.4E+01	4.1E-18
Gallium (31)	Ga-72	1.53E-10	6.3E-11 (S)	2.21E-10	7.26E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	2.1E-01	.	1.3E+03	3.2E-01	.	1.3E+02	8.4E+02	.	.	.	1.3E-01	1.5E-18
Gallium (31)	Ga-73	3.77E-11	1.8E-11 (S)	5.50E-11	8.39E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	8.5E-01	.	1.1E+04	1.3E+00	.	5.1E+02	3.4E+03	.	.	.	5.1E-01	2.1E-18
Gallium (31)	Ga-74	0.00E+00	0.00E+00	0.00E+00	8.55E-10	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	1.3E-16
Gadolinium (64)	Gd-142	0.00E+00	0.00E+00	0.00E+00	2.61E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	1.1E-16
Gadolinium (64)	Gd-143m	0.00E+00	0.00E+00	0.00E+00	5.33E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	8.9E-17
Gadolinium (64)	Gd-144	0.00E+00	0.00E+00	0.00E+00	2.33E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	3.9E+03	.	.	.	.	.	.	.	3.9E+03	5.0E-16
Gadolinium (64)	Gd-145	1.96E-12	8.2E-13 (S)	2.70E-12	6.53E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	1.4E+03	2.6E+01	7.7E+00	1.6E+03	1.1E+04	.	.	.	4.3E+00	2.8E-18
Gadolinium (64)	Gd-145m	0.00E+00	0.00E+00	0.00E+00	1.69E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	5.4E+03	.	.	.	.	.	.	.	5.4E+03	2.2E-16
Gadolinium (64)	Gd-146	1.34E-10	6.9E-10 (S)	1.94E-10	4.73E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.4E-01	.	1.9E+04	3.6E-01	1.1E-01	2.2E+01	1.6E+02	.	.	.	6.1E-02	1.2E-16
Gadolinium (64)	Gd-147	6.91E-11	4.0E-11 (S)	9.83E-11	3.47E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.6E-01	.	2.6E+03	7.2E-01	2.1E-01	4.3E+01	3.1E+02	.	.	.	1.2E-01	8.0E-18
Gadolinium (64)	Gd-148	1.13E-09	4.1E-07 (S)	1.47E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.8E-02	.	.	1.5E-02	1.4E-02	2.9E+00	2.1E+01	.	.	.	5.7E-03	6.6E-15
Gadolinium (64)	Gd-149	7.11E-11	9.7E-11 (S)	1.03E-10	1.22E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.5E-01	.	7.5E+03	6.9E-01	2.0E-01	4.1E+01	3.0E+02	.	.	.	1.2E-01	4.5E-17
Gadolinium (64)	Gd-150	1.02E-09	3.3E-07 (S)	1.32E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.1E-02	.	.	1.5E-02	1.6E-02	3.2E+00	2.3E+01	.	.	.	6.2E-03	1.7E-10
Gadolinium (64)	Gd-151	3.55E-11	1.2E-10 (S)	5.17E-11	1.16E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	9.0E-01	.	7.9E+04	1.3E+00	4.0E-01	8.2E+01	6.0E+02	.	.	.	2.3E-01	1.2E-15
Gadolinium (64)	Gd-152	8.02E-10	2.5E-07 (F)	1.04E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.0E-02	.	.	1.9E-02	2.0E-02	4.1E+00	3.0E+01	.	.	.	7.8E-03	1.3E-02
Gadolinium (64)	Gd-153	4.14E-11	2.3E-10 (S)	6.01E-11	1.66E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.7E-01	.	5.5E+04	1.1E+00	3.4E-01	7.1E+01	5.1E+02	.	.	.	1.9E-01	2.0E-15
Gadolinium (64)	Gd-159	8.77E-11	4.3E-11 (S)	1.29E-10	1.19E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.6E-01	.	7.7E+04	5.5E-01	1.6E-01	3.3E+01	2.4E+02	.	.	.	9.2E-02	3.2E-18
Gadolinium (64)	Gd-162	0.00E+00	0.00E+00	0.00E+00	1.01E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	9.1E+03	.	.	.	.	.	.	.	9.1E+03	2.4E-15
Germanium (32)	Ge-66	9.86E-12	7.0E-12 (S)	1.31E-11	1.63E-10	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	3.2E+00	.	5.6E+03	5.4E+00	9.9E-03	3.2E+00	1.4E+01	.	.	.	9.8E-03	1.7E-20
Germanium (32)	Ge-67	2.65E-12	1.2E-12 (S)	3.63E-12	3.57E-10	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.2E+01	.	2.6E+03	2.0E+01	3.6E-02	1.2E+01	5.1E+01	.	.	.	3.5E-02	8.8E-21
Germanium (32)	Ge-68	1.88E-10	2.8E-09 (S)	2.66E-10	3.11E-16	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.7E-01	.	2.9E+09	2.1E-01	4.9E-04	1.6E-01	7.0E-01	.	.	.	4.8E-04	2.5E-18
Germanium (32)	Ge-68+D	1.96E-10	2.8E-09 (S)	2.77E-10	2.34E-10	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.6E-01	.	3.9E+03	2.0E-01	4.7E-04	1.5E-01	6.7E-01	.	.	.	4.6E-04	2.4E-18
Germanium (32)	Ge-69	2.16E-11	2.0E-11 (S)	2.95E-11	2.41E-10	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.5E+00	.	3.8E+03	2.4E+00	4.4E-03	1.4E+00	6.3E+00	.	.	.	4.3E-03	1.4E-19
Germanium (32)	Ge-71	1.76E-12	1.5E-12 (S)	2.50E-12	3.16E-16	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.8E+01	.	2.9E+09	2.8E+01	5.2E-02	1.7E+01	7.4E+01	.	.	.	5.1E-02	1.2E-17
Germanium (32)	Ge-75	2.35E-12	2.4E-12 (S)	3.15E-12	8.71E-12	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.4E+01	.	1.0E+05	2.3E+01	4.1E-02	1.3E+01	5.9E+01	.	.	.	4.1E-02	5.0E-20
Germanium (32)	Ge-77	3.30E-11	3.3E-11 (S)	4.45E-11	2.70E-10	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	9.7E-01	.	3.4E+03	1.6E+00	2.9E-03	9.5E-01	4.2E+00	.	.	.	2.9E-03	3.0E-20
Germanium (32)	Ge-78	7.93E-12	6.9E-12 (S)	1.03E-11	6.69E-11	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	4.0E+00	.	1.4E+04	6.9E+00	1.3E-02	4.1E+00	1.8E+01	.	.	.	1.2E-02	1.7E-20
Hydrogen (1)	H-3	1.37E-12	2.3E-11 (S)	1.76E-12	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hafnium (72)	Hf-167	0.00E+00	0.00E+00	0.00E+00	1.48E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	.	.	6.2E+03	.	.	.	.	.	.	.	6.2E+03	4.2E-16
Hafnium (72)	Hf-169	0.00E+00	0.00E+00	0.00E+00	1.52E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	.	.	6.0E+03	.	.	.	.	.	.	.	6.0E+03	6.5E-16
Hafnium (72)	Hf-170	4.79E-11	2.8E-11 (S)	6.85E-11	1.00E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	6.7E-01	.	9.1E+03	1.0E+00	6.9E-03	3.1E+02	1.4E+03	.	.	.	6.8E-03	2.2E-19

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Hafnium (72)	Hf-172	1.39E-10	2.3E-09 (S)	1.99E-10	1.66E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.3E-01	.	5.5E+04	2.8E-01	2.4E-03	1.1E+02	4.7E+02	.	.	.	2.3E-03	7.7E-17
Hafnium (72)	Hf-172+D	1.39E-10	2.3E-09 (S)	1.99E-10	1.66E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.3E-01	.	5.5E+04	2.8E-01	2.4E-03	1.1E+02	4.7E+02	.	.	.	2.3E-03	7.7E-17
Hafnium (72)	Hf-173	2.82E-11	1.7E-11 (S)	4.06E-11	8.84E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.1E+00	.	1.0E+04	1.8E+00	1.2E-02	5.2E+02	2.3E+03	.	.	.	1.1E-02	5.5E-19
Hafnium (72)	Hf-174	1.72E-09	2.7E-07 (S)	2.16E-09	0.00E+00	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.9E-02	.	.	9.2E-03	2.2E-04	9.8E+00	4.3E+01	.	.	.	2.1E-04	7.6E-03
Hafnium (72)	Hf-175	5.20E-11	1.4E-10 (S)	7.49E-11	8.02E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	6.1E-01	.	1.1E+04	9.3E-01	6.3E-03	2.8E+02	1.2E+03	.	.	.	6.2E-03	2.1E-17
Hafnium (72)	Hf-177m	5.52E-12	5.3E-12 (S)	7.72E-12	5.36E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	5.8E+00	.	1.7E+03	9.2E+00	6.1E-02	2.7E+03	1.2E+04	.	.	.	6.0E-02	1.1E-19
Hafnium (72)	Hf-178m	3.31E-10	8.8E-09 (F)	4.64E-10	5.36E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	9.6E-02	.	1.7E+03	5.3E-02	1.0E-03	4.6E+01	2.0E+02	.	.	.	9.8E-04	5.6E-16
Hafnium (72)	Hf-179m	1.80E-10	4.4E-10 (S)	2.61E-10	2.15E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.8E-01	.	4.3E+03	2.7E-01	1.8E-03	8.1E+01	3.6E+02	.	.	.	1.8E-03	2.3E-18
Hafnium (72)	Hf-180m	1.96E-11	1.2E-11 (S)	2.82E-11	2.34E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.6E+00	.	3.9E+03	2.5E+00	1.7E-02	7.5E+02	3.3E+03	.	.	.	1.6E-02	1.9E-19
Hafnium (72)	Hf-181	1.73E-10	5.8E-10 (S)	2.52E-10	1.27E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.8E-01	.	7.2E+03	2.8E-01	1.9E-03	8.4E+01	3.7E+02	.	.	.	1.8E-03	4.0E-18
Hafnium (72)	Hf-182	1.28E-10	8.9E-09 (F)	1.72E-10	5.68E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.5E-01	.	1.6E+04	1.2E-01	2.7E-03	1.2E+02	5.4E+02	.	.	.	2.6E-03	4.5E-10
Hafnium (72)	Hf-182+D	3.39E-10	9.9E-09 (F)	4.77E-10	3.85E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	9.4E-02	.	2.4E+03	4.2E-02	9.9E-04	4.4E+01	1.9E+02	.	.	.	9.5E-04	1.6E-10
Hafnium (72)	Hf-182m	3.29E-12	3.4E-12 (S)	4.64E-12	2.18E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	9.7E+00	.	4.2E+03	1.5E+01	1.0E-01	4.6E+03	2.0E+04	.	.	.	1.0E-01	2.2E-19
Hafnium (72)	Hf-183	6.53E-12	4.9E-12 (S)	9.35E-12	1.91E-10	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	4.9E+00	.	4.8E+03	7.6E+00	5.0E-02	2.3E+03	9.9E+03	.	.	.	4.9E-02	1.1E-19
Hafnium (72)	Hf-184	7.82E-11	4.0E-11 (S)	1.14E-10	5.30E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	4.1E-01	.	1.7E+04	6.3E-01	4.1E-03	1.9E+02	8.1E+02	.	.	.	4.1E-03	3.6E-20
Mercury (80)	Hg-190	1.52E-12	7.0E-12 (V)	2.12E-12	4.20E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.1E+01	.	2.2E+04	3.4E+01	4.0E-02	4.0E+02	1.7E+03	.	3.0E+04	.	4.0E-02	3.0E-20
Mercury (80)	Hg-191m	4.74E-12	2.9E-11 (V)	6.70E-12	3.72E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	6.7E+00	.	2.5E+03	1.1E+01	1.3E-02	1.3E+02	5.5E+02	.	9.4E+03	.	1.3E-02	2.4E-20
Mercury (80)	Hg-192	2.60E-11	9.1E-11 (V)	3.71E-11	6.03E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.2E+00	.	1.5E+04	1.9E+00	2.3E-03	2.3E+01	1.0E+02	.	1.7E+03	.	2.3E-03	2.5E-20
Mercury (80)	Hg-193	1.24E-11	7.9E-11 (V)	1.78E-11	2.10E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.6E+00	.	4.3E+03	4.0E+00	4.8E-03	4.8E+01	2.1E+02	.	3.6E+03	.	4.8E-03	4.1E-20
Mercury (80)	Hg-193+D	1.24E-11	7.9E-11 (V)	1.78E-11	2.12E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.6E+00	.	4.3E+03	4.0E+00	4.8E-03	4.8E+01	2.1E+02	.	3.6E+03	.	4.8E-03	4.1E-20
Mercury (80)	Hg-193m	5.48E-11	2.7E-10 (V)	7.89E-11	2.57E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	5.8E-01	.	3.6E+03	9.0E-01	1.1E-03	1.1E+01	4.7E+01	.	8.0E+02	.	1.1E-03	2.9E-20
Mercury (80)	Hg-194	7.87E-11	2.0E-09 (S)	1.08E-10	1.98E-15	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	4.0E-01	.	4.6E+08	1.0E-01	7.9E-04	7.9E+00	3.4E+01	.	5.9E+02	.	7.8E-04	6.9E-15
Mercury (80)	Hg-194+D	1.22E-10	2.0E-09 (S)	1.70E-10	2.66E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.6E-01	.	3.4E+03	6.6E-02	5.0E-04	5.0E+00	2.2E+01	.	3.7E+02	.	4.9E-04	4.4E-15
Mercury (80)	Hg-195	1.45E-11	1.4E-10 (V)	2.11E-11	4.51E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.2E+00	.	2.0E+04	3.4E+00	4.0E-03	4.0E+01	1.8E+02	.	3.0E+03	.	4.0E-03	9.7E-20
Mercury (80)	Hg-195m	8.97E-11	7.3E-10 (V)	1.31E-10	4.58E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	3.6E-01	.	2.0E+04	5.4E-01	6.5E-04	6.5E+00	2.8E+01	.	4.8E+02	.	6.5E-04	6.2E-20
Mercury (80)	Hg-197	4.13E-11	4.2E-10 (V)	6.03E-11	1.29E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	7.7E-01	.	7.1E+04	1.2E+00	1.4E-03	1.4E+01	6.2E+01	.	1.0E+03	.	1.4E-03	2.1E-19
Mercury (80)	Hg-197m	8.24E-11	5.3E-10 (V)	1.21E-10	2.01E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	3.9E-01	.	4.5E+04	5.9E-01	7.0E-04	7.0E+00	3.1E+01	.	5.2E+02	.	7.0E-04	3.9E-20
Mercury (80)	Hg-199m	1.79E-12	1.6E-11 (V)	2.53E-12	4.04E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.8E+01	.	2.3E+04	2.8E+01	3.4E-02	3.4E+02	1.5E+03	.	2.5E+04	.	3.3E-02	5.6E-20
Mercury (80)	Hg-203	8.34E-11	6.6E-10 (V)	1.21E-10	5.68E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	3.8E-01	.	1.6E+04	5.7E-01	7.0E-04	7.0E+00	3.1E+01	.	5.2E+02	.	7.0E-04	1.9E-18
Mercury (80)	Hg-205	0.00E+00	0.00E+00	0.00E+00	1.62E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	5.7E+05	.	.	.	.	.	.	.	5.7E+05	1.2E-13
Mercury (80)	Hg-206	0.00E+00	0.00E+00	0.00E+00	2.92E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	3.1E+04	.	.	.	.	.	.	.	3.1E+04	1.0E-14
Mercury (80)	Hg-207	0.00E+00	0.00E+00	0.00E+00	7.07E-10	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	1.5E-16
Holmium (67)	Ho-150	0.00E+00	0.00E+00	0.00E+00	4.73E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	7.3E-17
Holmium (67)	Ho-153	0.00E+00	0.00E+00	0.00E+00	2.52E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	2.2E-16
Holmium (67)	Ho-153m	0.00E+00	0.00E+00	0.00E+00	2.57E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	1.0E-15
Holmium (67)	Ho-154	1.84E-12	6.8E-13 (S)	2.53E-12	4.70E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.7E+01	.	1.9E+03	2.8E+01	8.2E+00	1.7E+03	1.2E+04	.	.	.	4.6E+00	1.6E-18
Holmium (67)	Ho-154m	0.00E+00	0.00E+00	0.00E+00	6.00E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	1.4E-16
Holmium (67)	Ho-155	3.06E-12	1.7E-12 (S)	4.32E-12	1.48E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.0E+01	.	6.2E+03	1.6E+01	4.8E+00	9.8E+02	7.2E+03	.	.	.	2.7E+00	4.0E-18
Holmium (67)	Ho-156	6.63E-12	3.4E-12 (S)	9.32E-12	5.36E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.8E+00	.	1.7E+03	7.6E+00	2.2E+00	4.6E+02	3.3E+03	.	.	.	1.3E+00	2.2E-18
Holmium (67)	Ho-157	4.54E-13	2.3E-13 (S)	6.30E-13	1.35E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.0E+01	.	6.8E+03	1.1E+02	3.3E+01	6.7E+03	4.9E+04	.	.	.	1.9E+01	7.2E-18
Holmium (67)	Ho-159	5.15E-13	3.6E-13 (S)	7.12E-13	8.33E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.2E+01	.	1.1E+04	1.0E+02	2.9E+01	6.0E+03	4.3E+04	.	.	.	1.6E+01	1.7E-17
Holmium (67)	Ho-160	1.06E-12	6.1E-13 (S)	1.45E-12	4.20E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.0E+01	.	2.2E+03	4.9E+01	1.4E+01	2.9E+03	2.1E+04	.	.	.	8.0E+00	6.5E-18
Holmium (67)	Ho-161	1.33E-12	6.4E-13 (S)	1.92E-12	7.04E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.4E+01	.	1.3E+05	3.7E+01	1.1E+01	2.2E+03	1.6E+04	.	.	.	6.2E+00	2.9E-17
Holmium (67)	Ho-162	1.57E-13	1.6E-13 (S)	2.16E-13	3.57E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.0E+02	.	2.6E+04	3.3E+02	9.6E+01	2.0E+04	1.4E+05	.	.	.	5.4E+01	2.6E-17
Holmium (67)	Ho-162m	1.93E-12	1.4E-12 (S)	2.71E-12	1.36E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.7E+01	.	6.7E+03	2.6E+01	7.6E+00	1.6E+03	1.1E+04	.	.	.	4.3E+00	9.3E-18
Holmium (67)	Ho-163	4.89E-13	3.2E-11 (F)	7.11E-13	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.5E+01	.	.	2.8E+01	2.9E+01	6.0E+03	4.3E+04	.	.	.	1.2E+01	9.0E-10
Holmium (67)	Ho-164	4.72E-13	4.7E-13 (S)	6.58E-13	3.88E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.7E+01	.	2.4E+05	1.1E+02	3.1E+01	6.5E+03	4.7E+04	.	.	.	1.8E+01	1.7E-17
Holmium (67)	Ho-164m	1.13E-12	1.0E-12 (S)	1.61E-12	5.55E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.8E+01	.	1.6E+05	4.4E+01	1.3E+01	2.6E+03	1.9E+04	.	.	.	7.3E+00	9.0E-18
Holmium (67)	Ho-166	2.49E-10	1.1E-10 (S)	3.66E-10	7.35E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.3E-01	.	1.2E+05	1.9E-01	5.7E-02	1.2E+01	8.4E+01	.	.	.	3.3E-02	1.7E-18
Holmium (67)	Ho-166m	2.24E-10	2.1E-08 (F)	3.19E-10	4.01E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.4E-01	.	2.3E+03	6.3E-02	6.5E-02	1.3E+01	9.7E+01	.	.	.	2.6E-02	5.4E-13
Holmium (67)	Ho-167	1.04E-11	6.8E-12 (S)	1.50E-11	8.71E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.1E+00	.	1.0E+04	4.8E+00	1.4E+00	2.8E+02	2.1E+03	.	.	.	7.9E-01	4.8E-18
Holmium (67)	Ho-168	0.00E+00	0.00E+00	0.00E+00	2.21E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	4.1E+03	.	.	.	.	.	.	.	4.1E+03	4.1E-16
Holmium (67)	Ho-168m	0.00E+00	0.00E+00	0.00E+00	7.89E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.2E+06	.	.	.	.	.	.	.	1.2E+06	8.4E-14
Holmium (67)	Ho-170	0.00E+00	0.00E+00	0.00E+00	4.29E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	2.0E-16
Iodine (53)	I-118	1.36E-11	1.6E-11 (V)	1.92E-11	5.08E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.3E+00	.	1.8E+03	3.7E+00	9.0E-01	6.6E+01	1.8E+01	9.3E+01	1.1E+04	8.3E+01	5.3E-01	1.7E-19
Iodine (53)	I-118m	0.00E+00	0.00E+00	0.00E+00	9.40E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	9.7E+02	.	.	.	.	.	.	.	9.7E+02	1.9E-16
Iodine (53)	I-119	2.48E-12	4.4E-12 (V)	3.44E-12	2.21E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.3E+01	.	4.1E+03	2.1E+01	5.0E+00	3.7E+02	1.0E+02	5.2E+02	6.3E+04	4.6E+02	2.9E+00	1.3E-18
Iodine (53)	I-120	2.07E-11	2.6E-11 (V)	2.87E-11	7.04E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.5E+00	.	1.3E+03	2.5E+00	6.0E-01	4.4E+01	1.2E+01	6.2E+01	7.6E+03	5.5E+01	3.5E-01	6.8E-19
Iodine (53)	I-120m	9.75E-12	1.3E-11 (V)	1.34E-11	8.96E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	3.3E+00	.	1.0E+03	5.3E+00	1.3E+00	9.5E+01	2.6E+01	1.3E+02	1.6E+04	1.2E+02	7.5E-01	9.4E-19
Iodine (53)	I-121	5.53E-12	7.3E-12 (V)	7.59E-12	9.28E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	5.8E+00	.	9.9E+03	9.4E+00	2.3E+00	1.7E+02	4.5E+01	2.3E+02	2.9E+04	2.1E+02	1.3E+00	4.0E-18
Iodine (53)	I-122	0.00E+00	0.00E+00	0.00E+00	2.38E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	3.8E+03	.	.	.	.	.	.	.	3.8E+03	3.4E-16
Iodine (53)	I-123	1.91E-11	2.3E-11 (V)	2.71E-11	3.57E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.7E+00	.	2.6E+04	2.6E+00	6.4E-01	4.7E+01	1.3E+01	6.6E+01	8.1E+03	5.8E+01	3.7E-01	7.2E-18
Iodine (53)	I-124	1.12E-09	1.2E-09 (V)	1.59E-09	2.81E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.8E-02	.	3.2E+03	4.5E-02	1.1E-02	8.0E-01	2.2E-01	1.1E+00	1.4E+02	1.0E+00	6.4E-03	9.3E-19
Iodine (53)	I-125	6.91E-10	7.5E-10 (V)	9.34E-10	1.80E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	4.6E-02	.	5.1E+05	7.5E-02	1.8E-02	1.4E+00	3.7E-01	1.9E+00	2.3E+02	1.7E+00	1.1E-02	2.2E-17
Iodine (53)	I-126	2.38E-09	2.6E-09 (V)	3.35E-09	1.05E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.3E-02	.	8.7E+03	2.1E-02	5.1E-03	3.8E-01	1.0E-01	5.3E-01	6.5E+01	4.7E-01	3.0E-03	1.4E-18
Iodine (53)	I-128	2.19E-12	5.6E-12 (V)	3.01E-12	1.69E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.5E+01	.	5.4E+04	2.4E+01	5.7E+00	4.2E+02	1.1E+02	5.9E+02	7.2E+04	5.3E+02	3.3E+00	2.1E-18
Iodine (53)	I-129	4.08E-09	4.4E-09 (V)	5.32E-09	1.39E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	7.8E-03	.	6.6E+05	3.8E-03	3.2E-03	2.4E-01	6.5E-02	3.3E-01	4.1E+01	3.0E-01	1.4E-03	2.9E-10
Iodine (53)	I-130	1.63E-10	1.9E-10 (V)	2.31E-10	5.33E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.0E-01	.	1.7E+03	3.1E-01	7.5E-02	5.5E+00	1.5E+00	7.7E+00	9.4E+02	6.9E+00	4.4E-02	8.3E-19
Iodine (53)	I-130m	0.00E+00	0.00E+00	0.00E+00	2.63E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	7.9E-15
Iodine (53)	I-131	1.23E-09	1.4E-09 (V)	1.75E-09	9.28E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.6E-02	.	9.9E+03	4.1E-02	9.9E-03	7.2E-01	2.0E-01	1.0E+00	1.2E+02	9.1E-01	5.8E-03	1.7E-18
Iodine (53)	I-132	2.26E-11	3.1E-11 (V)	3.14E-11	5.74E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.4E+00	.	1.6E+03	2.3E+00	5.5E-01	4.0E+01	1.1E+01	5.7E+01	6.9E+03	5.0E+01	3.2E-01	1.1E-18
Iodine (53)	I-132m	5.16E-12	1.1E-11 (V)	7.06E-12	8.24E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	6.2E+00	.	1.1E+04	1.0E+01	2.4E+00	1.8E+02	4.9E+01	2.5E+02	3.1E+04	2.2E+02	1.4E+00	3.1E-18
Iodine (53)	I-133	3.93E-10	4.4E-10 (V)	5.62E-10	1.52E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	8.1E-02	.	6.0E+03	1.3E-01	3.1E-02	2.3E+00	6.1E-01	3.2E+00	3.9E+02	2.8E+00	1.8E-02	5.9E-19
Iodine (53)	I-134	6.38E-12	1.2E-11 (V)	8.76E-12	6.63E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	5.0E+00	.	1.4E+03	8.1E+00	2.0E+00	1.4E+02	3.9E+01	2.0E+02	2.5E+04	1.8E+02	1.1E+00	1.6E-18
Iodine (53)	I-134m	0.00E+00	0.00E+00	0.00E+00	6.47E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	1.4E+04	.	.	.	.	.	.	.	1.4E+04	1.3E-15
Iodine (53)	I-135	7.77E-11	9.3E-11 (V)	1.10E-10	4.17E-10	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	4.1E-01	.	2.2E+03	6.5E-01	1.6E-01	1.2E+01	3.1E+00	1.6E+01	2.0E+03	1.4E+01	9.2E-02	9.6E-19
Indium (49)	In-103	0.00E+00	0.00E+00	0.00E+00	7.16E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	2.6E-17
Indium (49)	In-105	0.00E+00	0.00E+00	0.00E+00	4.92E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	2.0E-16
Indium (49)	In-106	0.00E+00	0.00E+00	0.00E+00	8.93E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.0E+03	.	.	.	.	.	.	.	1.0E+03	1.3E-16
Indium (49)	In-106m	0.00E+00	0.00E+00	0.00E+00	7.42E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.2E+03	.	.	.	.	.	.	.	1.2E+03	1.3E-16
Indium (49)	In-107	2.88E-12	1.6E-12 (S)	4.05E-12	3.98E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.1E+01	.	2.3E+03	1.8E+01	1.3E-02	5.2E+02	2.3E+03	.	.	.	1.3E-02	8.7E-21
Indium (49)	In-108	5.51E-12	2.2E-12 (S)	7.63E-12	1.00E-09	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	5.8E+00	.	9.1E+02	9.3E+00	6.8E-03	2.8E+02	1.2E+03	.	.	.	6.8E-03	8.4E-21
Indium (49)	In-108m	4.86E-12	2.0E-12 (S)	6.78E-12	7.48E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	6.6E+00	.	1.2E+03	1.1E+01	7.6E-03	3.1E+02	1.4E+03	.	.	.	7.6E-03	6.4E-21
Indium (49)	In-109	5.72E-12	2.7E-12 (S)	8.11E-12	1.58E-10	3.00E-03

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Indium (49)	In-109m	0.00E+00	0.00E+00	0.00E+00	1.51E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	6.1E+03	.	.	.	.	.	.	.	6.1E+03	1.7E-16
Indium (49)	In-110	2.08E-11	7.5E-12 (S)	2.89E-11	7.79E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.5E+00	.	1.2E+03	2.5E+00	1.8E-03	7.3E+01	3.2E+02	.	.	.	1.8E-03	1.1E-20
Indium (49)	In-110m	7.64E-12	3.4E-12 (S)	1.08E-11	3.98E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.2E+00	.	2.3E+03	6.6E+00	4.8E-03	2.0E+02	8.6E+02	.	.	.	4.8E-03	7.2E-21
Indium (49)	In-111	3.51E-11	2.3E-11 (S)	5.03E-11	9.21E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	9.1E-01	.	9.9E+03	1.4E+00	1.0E-03	4.2E+01	1.8E+02	.	.	.	1.0E-03	9.1E-20
Indium (49)	In-111m	0.00E+00	0.00E+00	0.00E+00	1.15E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	7.9E+03	.	.	.	.	.	.	.	7.9E+03	1.3E-15
Indium (49)	In-112	4.75E-13	3.3E-13 (S)	6.54E-13	6.44E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	6.7E+01	.	1.4E+04	1.1E+02	7.9E-02	3.2E+03	1.4E+04	.	.	.	7.9E-02	2.6E-20
Indium (49)	In-112m	8.84E-13	1.0E-12 (S)	1.23E-12	5.14E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	3.6E+01	.	1.8E+05	5.8E+01	4.2E-02	1.7E+03	7.5E+03	.	.	.	4.2E-02	1.9E-20
Indium (49)	In-113m	2.59E-12	1.5E-12 (S)	3.71E-12	6.19E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.2E+01	.	1.5E+04	1.9E+01	1.4E-02	5.7E+02	2.5E+03	.	.	.	1.4E-02	3.1E-20
Indium (49)	In-114	0.00E+00	0.00E+00	0.00E+00	1.29E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	7.1E+05	.	.	.	.	.	.	.	7.1E+05	1.9E-14
Indium (49)	In-114m	6.78E-10	1.4E-09 (S)	9.85E-10	1.76E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.7E-02	.	5.2E+04	7.1E-02	5.3E-05	2.2E+00	9.4E+00	.	.	.	5.2E-05	8.4E-20
Indium (49)	In-114m+D	6.78E-10	1.4E-09 (S)	9.85E-10	1.88E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.7E-02	.	4.9E+04	7.1E-02	5.3E-05	2.2E+00	9.4E+00	.	.	.	5.2E-05	8.4E-20
Indium (49)	In-115	9.17E-10	1.1E-08 (F)	1.17E-09	3.82E-14	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	3.5E-02	.	2.4E+07	1.7E-02	4.4E-05	1.8E+00	7.9E+00	.	.	.	4.4E-05	2.3E-04
Indium (49)	In-115m	1.21E-11	6.3E-12 (S)	1.76E-11	3.76E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	2.6E+00	.	2.4E+04	4.0E+00	2.9E-03	1.2E+02	5.3E+02	.	.	.	2.9E-03	1.8E-20
Indium (49)	In-116m	4.41E-12	2.5E-12 (S)	6.14E-12	6.50E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	7.2E+00	.	1.4E+03	1.2E+01	8.4E-03	3.5E+02	1.5E+03	.	.	.	8.4E-03	1.0E-20
Indium (49)	In-117	1.87E-12	1.6E-12 (S)	2.62E-12	1.68E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.7E+01	.	5.4E+03	2.7E+01	2.0E-02	8.1E+02	3.5E+03	.	.	.	2.0E-02	2.0E-20
Indium (49)	In-117m	1.20E-11	6.7E-12 (S)	1.73E-11	2.09E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	2.7E+00	.	4.4E+04	4.1E+00	3.0E-03	1.2E+02	5.4E+02	.	.	.	3.0E-03	8.0E-21
Indium (49)	In-118	0.00E+00	0.00E+00	0.00E+00	2.43E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	3.8E+04	.	.	.	.	.	.	.	3.8E+04	7.3E-17
Indium (49)	In-118m	0.00E+00	0.00E+00	0.00E+00	7.20E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	1.3E-16
Indium (49)	In-119	0.00E+00	0.00E+00	0.00E+00	1.93E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	4.7E+03	.	.	.	.	.	.	.	4.7E+03	2.7E-16
Indium (49)	In-119m	2.02E-12	9.5E-13 (S)	2.79E-12	1.78E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.6E+01	.	5.1E+04	2.6E+01	1.9E-02	7.6E+02	3.3E+03	.	.	.	1.9E-02	7.8E-21
Indium (49)	In-121	0.00E+00	0.00E+00	0.00E+00	2.37E-10	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	3.9E+03	.	.	.	.	.	.	.	3.9E+03	3.5E-17
Indium (49)	In-121m	0.00E+00	0.00E+00	0.00E+00	1.58E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	5.8E+04	.	.	.	.	.	.	.	5.8E+04	5.4E-15
Iridium (77)	Ir-180	0.00E+00	0.00E+00	0.00E+00	3.94E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	2.3E+03	.	.	.	.	.	.	.	2.3E+03	1.2E-16
Iridium (77)	Ir-182	2.92E-12	1.4E-12 (S)	4.07E-12	3.50E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.1E+01	.	2.6E+03	1.8E+01	1.3E+01	1.0E+03	2.3E+05	.	.	.	4.4E+00	2.4E-18
Iridium (77)	Ir-183	4.58E-12	2.7E-12 (S)	6.47E-12	3.03E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	7.0E+00	.	3.0E+03	1.1E+01	8.0E+00	6.6E+02	1.4E+05	.	.	.	2.8E+00	5.8E-18
Iridium (77)	Ir-184	1.97E-11	9.9E-12 (S)	2.82E-11	4.95E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.6E+00	.	1.8E+03	2.5E+00	1.8E+00	1.5E+02	3.3E+04	.	.	.	6.4E-01	4.3E-18
Iridium (77)	Ir-185	4.26E-11	2.3E-11 (S)	6.14E-11	2.18E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	7.5E-01	.	4.2E+03	1.2E+00	8.4E-01	6.9E+01	1.5E+04	.	.	.	2.9E-01	9.3E-18
Iridium (77)	Ir-186	6.72E-11	3.3E-11 (S)	9.64E-11	4.20E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.7E-01	.	2.2E+03	7.4E-01	5.4E-01	4.4E+01	9.6E+03	.	.	.	1.9E-01	6.9E-18
Iridium (77)	Ir-186m	6.92E-12	3.5E-12 (S)	9.81E-12	3.19E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.6E+00	.	2.9E+03	7.3E+00	5.3E+00	4.3E+02	9.5E+04	.	.	.	1.8E+00	7.7E-18
Iridium (77)	Ir-187	1.49E-11	7.6E-12 (S)	2.14E-11	7.70E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.1E+00	.	1.2E+04	3.3E+00	2.4E+00	2.0E+02	4.3E+04	.	.	.	8.4E-01	2.0E-17
Iridium (77)	Ir-188	7.72E-11	4.1E-11 (S)	1.09E-10	5.62E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.1E-01	.	1.6E+03	6.5E-01	4.7E-01	3.9E+01	8.5E+03	.	.	.	1.6E-01	1.5E-17
Iridium (77)	Ir-189	3.87E-11	5.9E-11 (S)	5.65E-11	1.44E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	8.2E-01	.	6.4E+04	1.3E+00	9.2E-01	7.5E+01	1.6E+04	.	.	.	3.2E-01	2.3E-16
Iridium (77)	Ir-190	1.17E-10	1.4E-10 (S)	1.67E-10	3.57E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.7E-01	.	2.6E+03	4.2E-01	3.1E-01	2.5E+01	5.6E+03	.	.	.	1.1E-01	6.8E-17
Iridium (77)	Ir-190m	6.73E-13	6.2E-13 (S)	9.60E-13	4.61E-16	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.7E+01	.	2.0E+09	7.4E+01	5.4E+01	4.4E+03	9.7E+05	.	.	.	1.9E+01	4.7E-17
Iridium (77)	Ir-190n	1.18E-11	6.2E-12 (S)	1.67E-11	9.78E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.7E+00	.	9.3E+04	4.3E+00	3.1E+00	2.5E+02	5.6E+04	.	.	.	1.1E+00	7.5E-18
Iridium (77)	Ir-191m	0.00E+00	0.00E+00	0.00E+00	1.44E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	6.4E+04	.	.	.	.	.	.	.	6.4E+04	2.0E-16
Iridium (77)	Ir-192	1.99E-10	6.5E-10 (S)	2.89E-10	1.98E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.6E-01	.	4.6E+03	2.4E-01	1.8E-01	1.5E+01	3.2E+03	.	.	.	6.2E-02	2.5E-16
Iridium (77)	Ir-192m	0.00E+00	0.00E+00	0.00E+00	1.38E-14	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	6.6E+07	.	.	.	.	.	.	.	6.6E+07	3.6E-12
Iridium (77)	Ir-192n	1.42E-10	4.3E-09 (S)	2.06E-10	1.31E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.2E-01	.	7.0E+06	9.3E-02	2.5E-01	2.1E+01	4.5E+03	.	.	.	5.2E-02	2.5E-13
Iridium (77)	Ir-193m	5.28E-11	1.2E-10 (S)	7.75E-11	5.40E-14	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	6.0E-01	.	1.7E+07	9.2E-01	6.7E-01	5.5E+01	1.2E+04	.	.	.	2.3E-01	1.4E-16
Iridium (77)	Ir-194	2.33E-10	9.2E-11 (S)	3.42E-10	2.34E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.4E-01	.	3.9E+04	2.1E-01	1.5E-01	1.2E+01	2.7E+03	.	.	.	5.3E-02	2.4E-18
Iridium (77)	Ir-194m	2.29E-10	1.2E-09 (S)	3.25E-10	5.71E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.4E-01	.	1.6E+03	2.0E-01	1.6E-01	1.3E+01	2.9E+03	.	.	.	5.4E-02	5.1E-16
Iridium (77)	Ir-195	1.07E-11	6.5E-12 (S)	1.56E-11	1.09E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	3.0E+00	.	8.4E+04	4.6E+00	3.3E+00	2.7E+02	5.9E+04	.	.	.	1.2E+00	6.7E-18
Iridium (77)	Ir-195m	1.83E-11	1.2E-11 (S)	2.65E-11	8.90E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.7E+00	.	1.0E+04	2.7E+00	2.0E+00	1.6E+02	3.5E+04	.	.	.	6.8E-01	6.0E-18
Iridium (77)	Ir-196	0.00E+00	0.00E+00	0.00E+00	5.93E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	5.2E-16
Iridium (77)	Ir-196m	8.81E-12	5.7E-12 (S)	1.24E-11	6.03E-10	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	3.6E+00	.	1.5E+03	5.7E+00	4.2E+00	3.4E+02	7.5E+04	.	.	.	1.4E+00	4.7E-18
Potassium (19)	K-38	0.00E+00	0.00E+00	0.00E+00	8.58E-10	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	6.1E-17
Potassium (19)	K-40	6.67E-10	6.0E-09 (S)	9.24E-10	4.23E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	4.8E-02	.	2.2E+04	7.8E-03	1.8E-04	4.6E-01	2.9E-01	.	.	4.1E+00	1.7E-04	8.8E-10
Potassium (19)	K-42	3.41E-11	3.4E-11 (S)	4.70E-11	7.73E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	9.3E-01	.	1.2E+04	1.5E+00	3.4E-03	9.0E+00	5.6E+00	.	.	8.1E+01	3.4E-03	2.1E-20
Potassium (19)	K-43	2.10E-11	2.9E-11 (S)	2.85E-11	2.37E-10	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	1.5E+00	.	3.9E+03	2.5E+00	5.7E-03	1.5E+01	9.3E+00	.	.	1.3E+02	5.6E-03	6.4E-20
Potassium (19)	K-44	3.73E-12	1.7E-12 (S)	5.11E-12	6.56E-10	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	8.5E+00	.	1.4E+03	1.4E+01	3.2E-02	8.3E+01	5.2E+01	.	.	7.4E+02	3.1E-02	6.0E-21
Potassium (19)	K-45	2.18E-12	1.0E-12 (S)	2.98E-12	4.99E-10	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	1.5E+01	.	1.8E+03	2.4E+01	5.4E-02	1.4E+02	8.9E+01	.	.	1.3E+03	5.4E-02	8.3E-21
Potassium (19)	K-46	0.00E+00	0.00E+00	0.00E+00	8.11E-10	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	1.8E-17
Krypton (36)	Kr-74	0.00E+00	0.00E+00	0.00E+00	2.56E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	6.0E-16
Krypton (36)	Kr-75	0.00E+00	0.00E+00	0.00E+00	3.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.9E+03	.	.	.	.	.	.	.	2.9E+03	1.8E-16
Krypton (36)	Kr-76	0.00E+00	0.00E+00	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	9.1E+03	.	.	.	.	.	.	.	9.1E+03	1.2E-13
Krypton (36)	Kr-76+D	0.00E+00	0.00E+00	0.00E+00	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	9.1E+03	.	.	.	.	.	.	.	9.1E+03	1.2E-13
Krypton (36)	Kr-77	0.00E+00	0.00E+00	0.00E+00	2.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	4.1E-15
Krypton (36)	Kr-79	0.00E+00	0.00E+00	0.00E+00	6.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	4.9E-13
Krypton (36)	Kr-81	0.00E+00	0.00E+00	0.00E+00	2.07E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.4E+06	.	.	.	.	.	.	.	4.4E+06	8.5E-03
Krypton (36)	Kr-81m	0.00E+00	0.00E+00	0.00E+00	3.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.0E+04	.	.	.	.	.	.	.	3.0E+04	1.1E-16
Krypton (36)	Kr-83m	0.00E+00	0.00E+00	0.00E+00	5.11E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.8E+08	.	.	.	.	.	.	.	1.8E+08	3.2E-10
Krypton (36)	Kr-85	0.00E+00	0.00E+00	0.00E+00	6.41E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.4E+06	.	.	.	.	.	.	.	1.4E+06	1.4E-07
Krypton (36)	Kr-85m	0.00E+00	0.00E+00	0.00E+00	3.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.5E+04	.	.	.	.	.	.	.	2.5E+04	1.1E-13
Krypton (36)	Kr-87	0.00E+00	0.00E+00	0.00E+00	2.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.2E+03	.	.	.	.	.	.	.	4.2E+03	5.6E-15
Krypton (36)	Kr-88	0.00E+00	0.00E+00	0.00E+00	5.40E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	5.0E-15
Krypton (36)	Kr-89	0.00E+00	0.00E+00	0.00E+00	5.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.7E+03	.	.	.	.	.	.	.	1.7E+03	9.7E-17
Lanthanum (57)	La-128	0.00E+00	0.00E+00	0.00E+00	7.13E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	1.7E-16
Lanthanum (57)	La-129	1.47E-12	6.4E-13 (S)	2.05E-12	2.23E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.2E+01	.	4.1E+03	3.5E+01	6.8E+00	3.2E+04	1.5E+04	.	9.3E+03	2.1E+05	4.5E+00	1.3E-18
Lanthanum (57)	La-130	0.00E+00	0.00E+00	0.00E+00	5.65E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	3.6E-16
Lanthanum (57)	La-131	2.43E-12	1.6E-12 (S)	3.43E-12	1.57E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	1.3E+01	.	5.8E+03	2.1E+01	4.1E+00	1.9E+04	9.0E+03	.	5.5E+03	1.2E+05	2.7E+00	4.1E-18
Lanthanum (57)	La-132	5.14E-11	1.9E-11 (S)	7.43E-11	5.14E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	6.2E-01	.	1.8E+03	9.6E-01	1.9E-01	8.8E+02	4.2E+02	.	2.6E+02	5.7E+03	1.3E-01	9.4E-19
Lanthanum (57)	La-132m	4.06E-12	1.7E-12 (S)	5.84E-12	1.62E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	7.8E+00	.	5.6E+03	1.2E+01	2.4E+00	1.1E+04	5.3E+03	.	3.3E+03	7.2E+04	1.6E+00	1.0E-18
Lanthanum (57)	La-133	3.77E-12	1.6E-12 (S)	5.45E-12	3.47E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	8.5E+00	.	2.6E+04	1.3E+01	2.6E+00	1.2E+04	5.7E+03	.	3.5E+03	7.8E+04	1.7E+00	1.1E-17
Lanthanum (57)	La-134	0.00E+00	0.00E+00	0.00E+00	1.76E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	5.2E+03	.	.	.	.	.	.	.	5.2E+03	8.8E-16
Lanthanum (57)	La-135	3.94E-12	1.4E-12 (S)	5.70E-12	4.07E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	8.1E+00	.	2.2E+05	1.3E+01	2.5E+00	1.1E+04	5.4E+03	.	3.3E+03	7.4E+04	1.6E+00	5.1E-17
Lanthanum (57)	La-136	0.00E+00	0.00E+00	0.00E+00	9.72E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	9.4E+03	.	.	.	.	.	.	.	9.4E+03	2.5E-15
Lanthanum (57)	La-137	9.52E-12	3.8E-10 (F)	1.37E-11	1.51E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	3.3E+00	.	6.1E+05	1.5E+00	1.0E+00	4.8E+03	2.3E+03	.	1.4E+03	3.1E+04	5.1E-01	4.3E-10
Lanthanum (57)	La-138	9.58E-11	8.2E-09 (F)	1.34E-10	3.22E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	3.3E-01	.	2.8E+03	1.5E-01	1.0E-01	4.9E+02	2.3E+02	.	1.4E+02	3.2E+03	5.2E-02	7.6E-05
Lanthanum (57)	La-140	2.95E-10	1.4E-10 (S)	4.29E-10	6.12E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	1.1E-01	.	1.5E+03	1.7E-01	3.3E-02	1.5E+02	7.2E+01	.	4.4E+01	9.9E+02	2.2E-02	1.5E-18
Lanthanum (57)	La-141	5.26E-11	2.2E-11 (S)	7.68E-11	8.27E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	6.1E-01	.	1.1E+05	9.3E-01	1.8E-01	8.5E+02	4.0E+02	.	2.5E+02	5.5E+03	1.2E-01	8.0E-19
Lanthanum (57)	La-142	1.50E-11	6.7E-12 (S)	2.14E-11	6.56E-10	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.1E+00	.	1.4E+03	3.3E+00	6.5E-01	3.1E+03	1.4E+03	.	8.9E+02	2.0E+04	4.3E-01	1.1E-18
Lanthanum (57)	La-143	3.42E-12	1.6E-12 (S)	4.84E-12	7.23E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	9.3E+00	.	1.3E+04	1.5E+01	2.9E+00	1.3E+04	6.4E+03	.	3.9E+03	8.7E+04	1.9E+00	7.7E-19
Lutetium (71)	Lu-165	1.20E-12	7.5E-13 (S)	1.67E-12	2.75E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.7E+01	.	3.3E+03	4.3E+01	.	2.5E+03	1.9E+04	.	.	.	1.6E+01	5.7E-18

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Lutetium (71)	Lu-167	3.63E-12	2.5E-12 (S)	5.09E-12	4.39E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	8.8E+00	.	2.1E+03	1.4E+01	.	8.3E+02	6.1E+03	.	.	.	5.3E+00	9.1E-18
Lutetium (71)	Lu-169	5.72E-11	4.0E-11 (S)	8.13E-11	3.35E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.6E-01	.	2.7E+03	8.8E-01	.	5.2E+01	3.8E+02	.	.	.	3.4E-01	2.3E-17
Lutetium (71)	Lu-169m	0.00E+00	0.00E+00	0.00E+00	9.09E-17	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.0E+10	.	.	.	.	.	.	.	1.0E+10	8.9E-10
Lutetium (71)	Lu-170	9.72E-11	5.5E-11 (S)	1.38E-10	6.94E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E-01	.	1.3E+03	5.2E-01	.	3.1E+01	2.2E+02	.	.	.	2.0E-01	1.9E-17
Lutetium (71)	Lu-171	9.25E-11	1.1E-10 (S)	1.34E-10	1.54E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.4E-01	.	5.9E+03	5.3E-01	.	3.2E+01	2.3E+02	.	.	.	2.1E-01	8.3E-17
Lutetium (71)	Lu-171m	0.00E+00	0.00E+00	0.00E+00	5.27E-14	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.7E+07	.	.	.	.	.	.	.	1.7E+07	7.7E-13
Lutetium (71)	Lu-172	1.52E-10	1.6E-10 (S)	2.17E-10	4.95E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.1E-01	.	1.8E+03	3.3E-01	.	2.0E+01	1.4E+02	.	.	.	1.3E-01	4.2E-17
Lutetium (71)	Lu-172m	0.00E+00	0.00E+00	0.00E+00	1.88E-16	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.9E+09	.	.	.	.	.	.	.	4.9E+09	6.1E-10
Lutetium (71)	Lu-173	5.22E-11	3.4E-10 (S)	7.57E-11	3.50E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	6.1E-01	.	2.6E+04	7.9E-01	.	5.6E+01	4.1E+02	.	.	.	3.4E-01	8.4E-15
Lutetium (71)	Lu-174	4.23E-11	4.1E-10 (S)	6.14E-11	2.44E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.5E-01	.	3.8E+04	8.0E-01	.	6.9E+01	5.0E+02	.	.	.	3.9E-01	2.3E-14
Lutetium (71)	Lu-174m	9.39E-11	4.2E-10 (S)	1.38E-10	9.53E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.4E-01	.	9.6E+04	4.9E-01	.	3.1E+01	2.2E+02	.	.	.	2.0E-01	1.4E-15
Lutetium (71)	Lu-176	2.55E-10	4.8E-09 (F)	3.70E-10	1.13E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.2E-01	.	8.1E+03	5.4E-02	.	1.1E+01	8.4E+01	.	.	.	3.8E-02	2.6E-05
Lutetium (71)	Lu-176m	2.27E-11	1.2E-11 (S)	3.32E-11	2.79E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.4E+00	.	3.3E+05	2.1E+00	.	1.3E+02	9.3E+02	.	.	.	8.4E-01	6.4E-18
Lutetium (71)	Lu-177	9.53E-11	1.3E-10 (S)	1.40E-10	7.92E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E-01	.	1.2E+05	5.1E-01	.	3.0E+01	2.2E+02	.	.	.	2.0E-01	6.7E-17
Lutetium (71)	Lu-177m	2.51E-10	1.5E-09 (S)	3.65E-10	2.31E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.3E-01	.	4.0E+03	1.8E-01	.	1.2E+01	8.5E+01	.	.	.	7.5E-02	6.0E-16
Lutetium (71)	Lu-178	2.27E-12	1.4E-12 (S)	3.17E-12	3.31E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.4E+01	.	2.8E+04	2.2E+01	.	1.3E+03	9.8E+03	.	.	.	8.6E+00	8.6E-18
Lutetium (71)	Lu-178m	1.69E-12	1.5E-12 (S)	2.34E-12	2.47E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.9E+01	.	3.7E+03	3.0E+01	.	1.8E+03	1.3E+04	.	.	.	1.2E+01	9.3E-18
Lutetium (71)	Lu-179	3.19E-11	1.4E-11 (S)	4.66E-11	7.35E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.0E+00	.	1.2E+05	1.5E+00	.	9.1E+01	6.6E+02	.	.	.	6.0E-01	5.8E-18
Lutetium (71)	Lu-180	0.00E+00	0.00E+00	0.00E+00	3.91E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	2.3E+03	.	.	.	.	.	.	.	2.3E+03	4.7E-16
Lutetium (71)	Lu-181	0.00E+00	0.00E+00	0.00E+00	1.39E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	6.6E+03	.	.	.	.	.	.	.	6.6E+03	8.2E-16
Magnesium (12)	Mg-27	0.00E+00	0.00E+00	0.00E+00	2.27E-10	3.00E-02	3.70E+01	3.00E-03	8.00E-03	.	.	.	.	.	4.0E+03	.	.	.	.	.	.	.	4.0E+03	2.0E-16
Magnesium (12)	Mg-28	3.06E-10	1.5E-10 (S)	4.45E-10	3.53E-10	3.00E-02	3.70E+01	3.00E-03	8.00E-03	.	.	.	1.0E-01	.	2.6E+03	1.6E-01	3.1E-02	6.4E+00	5.2E-01	.	.	.	2.0E-02	1.4E-19
Manganese (25)	Mn-50m	0.00E+00	0.00E+00	0.00E+00	1.20E-09	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	7.6E+02	.	.	.	.	.	.	.	7.6E+02	1.3E-17
Manganese (25)	Mn-51	5.66E-12	2.7E-12 (S)	7.96E-12	2.45E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	5.6E+00	.	3.7E+03	9.0E+00	2.7E-01	1.8E+03	5.7E+03	1.7E+03	1.3E+05	1.1E+04	2.5E-01	1.2E-19
Manganese (25)	Mn-52	1.75E-10	1.3E-10 (S)	2.45E-10	8.93E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	1.8E-01	.	1.0E+03	2.9E-01	8.8E-03	5.8E+01	1.8E+02	5.6E+01	4.1E+03	3.7E+02	8.2E-03	6.7E-19
Manganese (25)	Mn-52m	3.42E-12	1.4E-12 (S)	4.73E-12	6.22E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	9.3E+00	.	1.5E+03	1.5E+01	4.6E-01	3.0E+03	9.6E+03	2.9E+03	2.1E+05	1.9E+04	4.2E-01	9.1E-20
Manganese (25)	Mn-53	4.17E-12	2.6E-11 (S)	6.01E-12	0.00E+00	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	7.6E+00	.	.	2.0E+00	3.6E-01	2.4E+03	7.5E+03	2.3E+03	1.7E+05	1.5E+04	2.9E-01	5.9E-09
Manganese (25)	Mn-54	6.15E-11	3.3E-10 (S)	8.39E-11	2.11E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	5.2E-01	.	4.3E+03	6.9E-01	2.6E-02	1.7E+02	5.4E+02	1.6E+02	1.2E+04	1.1E+03	2.4E-02	1.1E-16
Manganese (25)	Mn-56	2.78E-11	1.2E-11 (S)	4.01E-11	4.51E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	1.1E+00	.	2.0E+03	1.8E+00	5.4E-02	3.5E+02	1.1E+03	3.4E+02	2.5E+04	2.3E+03	5.0E-02	8.5E-20
Manganese (25)	Mn-57	0.00E+00	0.00E+00	0.00E+00	2.52E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	3.6E+04	.	.	.	.	.	.	.	3.6E+04	5.8E-16
Manganese (25)	Mn-58m	0.00E+00	0.00E+00	0.00E+00	6.28E-10	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	1.8E-17
Molybdenum (42	Mo-101	1.82E-12	1.2E-12 (S)	2.50E-12	3.85E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	1.8E+01	.	2.4E+03	2.9E+01	1.1E+02	3.4E+03	6.7E+02	.	4.2E+03	2.4E+03	9.6E+00	2.8E-18
Molybdenum (42)	Mo-102	2.81E-12	1.2E-12 (S)	3.86E-12	4.51E-12	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	1.1E+01	.	2.0E+05	1.8E+01	7.1E+01	2.2E+03	4.4E+02	.	2.7E+03	1.5E+03	6.2E+00	1.4E-18
Molybdenum (42)	Mo-89	0.00E+00	0.00E+00	0.00E+00	3.06E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	.	.	3.0E+03	.	.	.	.	.	.	.	3.0E+03	1.1E-16
Molybdenum (42	Mo-90	1.75E-11	3.7E-11 (S)	2.33E-11	2.01E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	1.8E+00	.	4.5E+03	3.1E+00	1.2E+01	3.6E+02	7.2E+01	.	4.5E+02	2.6E+02	1.0E+00	6.0E-18
Molybdenum (42)	Mo-91	2.55E-12	1.1E-12 (S)	3.50E-12	2.42E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	1.2E+01	.	3.8E+03	2.0E+01	7.8E+01	2.4E+03	4.8E+02	.	3.0E+03	1.7E+03	6.9E+00	1.9E-18
Molybdenum (42)	Mo-91m	0.00E+00	0.00E+00	0.00E+00	3.53E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	.	.	2.6E+03	.	.	.	.	.	.	.	2.6E+03	5.0E-17
Molybdenum (42	Mo-93	8.44E-11	1.5E-10 (S)	1.05E-10	7.92E-14	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	3.8E-01	.	1.2E+07	6.6E-02	2.6E+00	8.1E+01	1.6E+01	.	1.0E+02	5.7E+01	5.4E-02	2.1E-12
Molybdenum (42)	Mo-93m	9.01E-12	1.3E-11 (S)	1.20E-11	6.03E-10	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	3.5E+00	.	1.5E+03	5.9E+00	2.3E+01	7.1E+02	1.4E+02	.	8.8E+02	5.0E+02	2.0E+00	1.5E-17
Molybdenum (42)	Mo-99	4.32E-11	1.3E-10 (S)	5.70E-11	3.69E-11	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	7.4E-01	.	2.5E+04	1.2E+00	4.8E+00	1.5E+02	3.0E+01	.	1.9E+02	1.0E+02	4.1E-01	3.2E-17
Nitrogen (7)	N-13	0.00E+00	0.00E+00	0.00E+00	2.50E-10	7.50E+00	1.50E+05	1.00E-02	1.00E-02	.	.	.	.	.	3.7E+03	.	.	.	.	.	.	.	3.7E+03	9.3E-17
Nitrogen (7)	N-16	0.00E+00	0.00E+00	0.00E+00	1.45E-09	7.50E+00	1.50E+05	1.00E-02	1.00E-02	.	.	.	.	.	6.3E+02	.	.	.	.	.	.	.	6.3E+02	2.4E-19
Sodium (11)	Na-22	2.60E-10	2.6E-09 (S)	3.41E-10	5.62E-10	8.70E-03	7.60E+01	1.50E-02	1.30E-02	.	7.00E+00	4.00E+00	1.2E-01	.	1.6E+03	1.5E-01	2.0E-02	1.7E+00	4.2E-01	.	8.0E-01	2.8E+00	1.4E-02	8.6E-17
Sodium (11)	Na-24	3.32E-11	3.3E-11 (S)	4.44E-11	1.16E-09	8.70E-03	7.60E+01	1.50E-02	1.30E-02	.	7.00E+00	4.00E+00	9.6E-01	.	7.9E+02	1.6E+00	1.5E-01	1.3E+01	3.2E+00	.	6.1E+00	2.1E+01	1.1E-01	4.8E-19
Niobium (41)	Nb-87	0.00E+00	0.00E+00	0.00E+00	2.98E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	2.0E-16
Niobium (41)	Nb-88	3.46E-12	1.4E-12 (S)	4.75E-12	1.07E-09	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	9.2E+00	.	8.6E+02	1.5E+01	3.6E-01	6.9E+06	9.5E+05	7.7E+04	1.3E+06	8.0E+05	3.4E-01	8.6E-20
Niobium (41)	Nb-88m	0.00E+00	0.00E+00	0.00E+00	1.05E-09	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	8.7E+02	.	.	.	.	.	.	.	8.7E+02	1.2E-16
Niobium (41)	Nb-89	2.75E-11	1.1E-11 (S)	3.97E-11	3.57E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.2E+00	.	2.6E+03	1.8E+00	4.3E-02	8.2E+05	1.1E+05	9.2E+03	1.6E+05	9.6E+04	4.1E-02	8.8E-20
Niobium (41)	Nb-89m	1.06E-11	4.9E-12 (S)	1.50E-11	3.22E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	3.0E+00	.	2.8E+03	4.8E+00	1.1E-01	2.2E+06	3.0E+05	2.4E+04	4.2E+05	2.5E+05	1.1E-01	1.3E-19
Niobium (41)	Nb-90	1.54E-10	6.5E-11 (S)	2.21E-10	1.14E-09	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	2.1E-01	.	8.0E+02	3.2E-01	7.8E-03	1.5E+05	2.0E+04	1.7E+03	2.9E+04	1.7E+04	7.3E-03	1.1E-19
Niobium (41)	Nb-91	7.23E-12	1.4E-10 (S)	1.06E-11	4.54E-13	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	4.4E+00	.	2.0E+06	1.9E+00	1.6E-01	3.1E+06	4.3E+05	3.4E+04	6.0E+05	3.6E+05	1.4E-01	9.3E-13
Niobium (41)	Nb-91m	7.26E-11	3.9E-10 (S)	1.06E-10	6.56E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	4.4E-01	.	1.4E+05	6.6E-01	1.6E-02	3.1E+05	4.3E+04	3.4E+03	6.0E+04	3.6E+04	1.5E-02	2.4E-17
Niobium (41)	Nb-92	8.97E-11	2.0E-09 (S)	1.24E-10	3.76E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	3.6E-01	.	2.4E+03	1.6E-01	1.4E-02	2.6E+05	3.6E+04	2.9E+03	5.1E+04	3.1E+04	1.2E-02	4.1E-09
Niobium (41)	Nb-92m	4.57E-11	3.9E-11 (S)	6.41E-11	2.45E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	7.0E-01	.	3.7E+03	1.1E+00	2.7E-02	5.1E+05	7.1E+04	5.7E+03	9.9E+04	5.9E+04	2.5E-02	6.7E-18
Niobium (41)	Nb-93m	2.25E-11	1.6E-10 (S)	3.29E-11	1.42E-14	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.4E+00	.	6.4E+07	8.5E-01	5.2E-02	9.9E+05	1.4E+05	1.1E+04	1.9E+05	1.2E+05	4.8E-02	7.4E-15
Niobium (41)	Nb-94	2.10E-10	3.6E-09 (S)	3.00E-10	3.91E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.5E-01	.	2.3E+03	6.5E-02	5.7E-03	1.1E+05	1.5E+04	1.2E+03	2.1E+04	1.3E+04	5.1E-03	1.0E-12
Niobium (41)	Nb-94m	0.00E+00	0.00E+00	0.00E+00	1.17E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	7.8E+05	.	.	.	.	.	.	.	7.8E+05	9.1E-14
Niobium (41)	Nb-95	6.63E-11	1.7E-10 (S)	9.46E-11	1.92E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	4.8E-01	.	4.8E+03	7.4E-01	1.8E-02	3.5E+05	4.8E+04	3.9E+03	6.7E+04	4.0E+04	1.7E-02	1.6E-17
Niobium (41)	Nb-95m	1.06E-10	1.0E-10 (S)	1.56E-10	1.51E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	3.0E-01	.	6.1E+04	4.6E-01	1.1E-02	2.1E+05	2.9E+04	2.3E+03	4.1E+04	2.4E+04	1.0E-02	1.0E-18
Niobium (41)	Nb-96	1.36E-10	6.6E-11 (S)	1.96E-10	6.25E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	2.3E-01	.	1.5E+03	3.6E-01	8.8E-03	1.7E+05	2.3E+04	1.9E+03	3.2E+04	1.9E+04	8.3E-03	2.2E-19
Niobium (41)	Nb-97	5.30E-12	3.1E-12 (S)	7.55E-12	1.66E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	6.0E+00	.	5.5E+03	9.4E+00	2.3E-01	4.3E+06	6.0E+05	4.8E+04	8.4E+05	5.0E+05	2.2E-01	3.0E-19
Niobium (41)	Nb-98m	7.17E-12	3.4E-12 (S)	1.01E-11	7.26E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	4.4E+00	.	1.3E+03	7.1E+00	1.7E-01	3.2E+06	4.5E+05	3.6E+04	6.3E+05	3.8E+05	1.6E-01	1.6E-19
Niobium (41)	Nb-99	0.00E+00	0.00E+00	0.00E+00	4.01E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	2.3E+04	.	.	.	.	.	.	.	2.3E+04	1.1E-16
Niobium (41)	Nb-99m	0.00E+00	0.00E+00	0.00E+00	2.09E-10	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	4.4E+03	.	.	.	.	.	.	.	4.4E+03	2.2E-16
Neodymium (60)	Nd-134	0.00E+00	0.00E+00	0.00E+00	1.27E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	.	.	7.2E+03	.	.	.	.	.	.	.	7.2E+03	1.6E-15
Neodymium (60)	Nd-135	3.00E-12	1.4E-12 (S)	4.16E-12	3.06E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.1E+01	.	3.0E+03	1.7E+01	1.2E+00	1.0E+03	7.4E+03	.	5.1E+03	3.0E+06	1.0E+00	3.4E-19
Neodymium (60)	Nd-136	7.32E-12	3.6E-12 (S)	1.03E-11	6.03E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	4.4E+00	.	1.5E+04	6.9E+00	5.0E-01	4.1E+02	3.0E+03	.	2.0E+03	1.2E+06	4.2E-01	5.7E-19
Neodymium (60)	Nd-137	4.05E-12	1.9E-12 (S)	5.73E-12	2.93E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	7.9E+00	.	3.1E+03	1.2E+01	9.0E-01	7.4E+02	5.4E+03	.	3.7E+03	2.2E+06	7.6E-01	7.9E-19
Neodymium (60)	Nd-138	9.26E-11	3.4E-11 (S)	1.35E-10	5.74E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	3.4E-01	.	1.6E+05	5.3E-01	3.8E-02	3.1E+01	2.3E+02	.	1.6E+02	9.4E+04	3.2E-02	2.7E-19
Neodymium (60)	Nd-139	1.40E-12	6.7E-13 (S)	1.98E-12	1.06E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	2.3E+01	.	8.6E+03	3.6E+01	2.6E+00	2.1E+03	1.6E+04	.	1.1E+04	6.4E+06	2.2E+00	1.8E-18
Neodymium (60)	Nd-139m	2.72E-11	1.3E-11 (S)	3.89E-11	3.94E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.2E+00	.	2.3E+03	1.8E+00	1.3E-01	1.1E+02	7.9E+02	.	5.4E+02	3.3E+05	1.1E-01	1.0E-18
Neodymium (60)	Nd-140	3.36E-10	1.6E-10 (S)	4.91E-10	2.23E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	9.5E-02	.	4.1E+05	1.4E-01	1.1E-02	8.6E+00	6.3E+01	.	4.3E+01	2.6E+04	8.9E-03	1.2E-18
Neodymium (60)	Nd-141	8.49E-13	3.7E-13 (S)	1.22E-12	1.43E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	3.8E+01	.	6.4E+04	5.8E+01	4.2E+00	3.5E+03	2.5E+04	.	1.7E+04	1.0E+07	3.6E+00	1.5E-17
Neodymium (60)	Nd-141m	0.00E+00	0.0E+00 (0)	0.00E+00	1.74E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	.	.	5.3E+03	.	.	.	.	.	.	.	5.3E+03	1.5E-16
Neodymium (60)	Nd-144	8.29E-10	2.8E-07 (F)	1.06E-09	0.00E+00	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	3.8E-02	.	.	1.9E-02	4.9E-03	4.0E+00	2.9E+01	.	2.0E+01	1.2E+04	3.5E-03	1.2E-01
Neodymium (60)	Nd-147	1.89E-10	2.5E-10 (S)	2.76E-10	3.07E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.7E-01	.	3.0E+04	2.6E-01	1.9E-02	1.5E+01	1.1E+02	.	7.6E+01	4.6E+04	1.6E-02	7.3E-18
Neodymium (60)	Nd-149	1.47E-11	8.6E-12 (S)	2.13E-11	8.77E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	2.2E+00	.	1.0E+04	3.3E+00	2.4E-01	2.0E+02	1.5E+03	.	9.9E+02	6.0E+05	2.0E-01	6.2E-19
Neodymium (60)	Nd-151	1.93E-12	1.0E-12 (S)	2.73E-12	2.14E-10	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.7E+01	.	4.3E+03	2.6E+01	1.9E+00	1.6E+03	1.1E+04	.	7.7E+03	4.6E+06	1.6E+00	5.9E-19
Neodymium (60)	Nd-152	2.07E-12	1.1E-12 (S)	2.85E-12	3.91E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.5E+01	.	2.3E+04	2.5E+01	1.8E+00	1.5E+03	1.1E+04	.	7.4E+03	4.4E+06	1.5E+00	5.2E-19
Neon (10)	Ne-19	0.00E+00	0.00E+00	0.00E+00	2.51E-10	0.00E+00	.	0.00E+00	0.00E+00	.	.	.	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	3.9E-18
Neon (10)	Ne-24	0.00E+00	0.00E+00	0.00E+00	1.33E-10	0.00E+00	.	0.00E+00	0.00E+00	.	.	.	.	.	6.8E+03	.	.	.	.	.	.	.	6.8E+03	1.1E-16
Nickel (28)	Ni-56	7.66E-11	1.1E-10 (V)	1.07E-10	4.32E-10	2.35E-02

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Nickel (28)	Ni-63	1.84E-11	1.6E-10 (V)	2.62E-11	0.00E+00	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	1.7E+00	.	.	7.7E-01	9.4E-01	6.5E+01	7.5E+01	.	.	.	3.4E-01	2.2E-13
Nickel (28)	Ni-65	1.87E-11	1.9E-11 (V)	2.71E-11	1.48E-10	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	1.7E+00	.	6.2E+03	2.6E+00	9.1E-01	6.3E+01	7.2E+01	.	.	.	4.8E-01	9.2E-19
Nickel (28)	Ni-66	5.44E-10	2.7E-10 (S)	7.98E-10	7.10E-15	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	5.9E-02	.	1.3E+08	8.9E-02	3.1E-02	2.1E+00	2.4E+00	.	.	.	1.6E-02	6.9E-19
Neptunium (93)	Np-232	5.36E-13	1.4E-12 (S)	7.33E-13	2.94E-10	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	5.9E+01	.	3.1E+03	9.7E+01	2.4E+01	1.2E+04	2.5E+05	.	.	.	1.4E+01	9.6E-18
Neptunium (93)	Np-233	1.40E-13	8.4E-14 (S)	1.95E-13	1.84E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	2.3E+02	.	5.0E+04	3.7E+02	8.8E+01	4.4E+04	9.5E+05	.	.	.	5.4E+01	9.0E-17
Neptunium (93)	Np-234	7.45E-11	4.4E-11 (S)	1.06E-10	2.89E-10	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	4.3E-01	.	3.2E+03	6.7E-01	1.6E-01	8.0E+01	1.7E+03	.	.	.	1.0E-01	2.9E-17
Neptunium (93)	Np-235	1.01E-11	5.5E-11 (S)	1.48E-11	1.49E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	3.2E+00	.	6.2E+06	4.2E+00	1.2E+00	5.7E+02	1.3E+04	.	.	.	7.1E-01	1.9E-14
Neptunium (93)	Np-235+D	1.01E-11	5.5E-11 (S)	1.48E-11	1.49E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	3.2E+00	.	6.2E+06	4.2E+00	1.2E+00	5.7E+02	1.3E+04	.	.	.	7.1E-01	1.9E-14
Neptunium (93)	Np-236	3.60E-10	9.1E-08 (F)	4.93E-10	3.02E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	8.8E-02	.	3.0E+04	4.0E-02	3.5E-02	1.7E+01	3.8E+02	.	.	.	1.5E-02	5.8E-11
Neptunium (93)	Np-236m	3.05E-11	3.5E-10 (S)	4.47E-11	1.02E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.0E+00	.	9.0E+04	1.6E+00	3.9E-01	1.9E+02	4.1E+03	.	.	.	2.4E-01	1.5E-17
Neptunium (93)	Np-237	1.68E-09	7.8E-07 (S)	2.24E-09	4.64E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.9E-02	.	2.0E+05	8.9E-03	7.7E-03	3.8E+00	8.3E+01	.	.	.	3.4E-03	1.8E-10
Neptunium (93)	Np-237+D	1.85E-09	7.8E-07 (S)	2.48E-09	5.52E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.7E-02	.	1.7E+04	8.0E-03	7.0E-03	3.4E+00	7.5E+01	.	.	.	3.1E-03	1.6E-10
Neptunium (93)	Np-238	1.41E-10	1.4E-10 (S)	2.06E-10	1.49E-10	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	2.3E-01	.	6.1E+03	3.5E-01	8.4E-02	4.1E+01	9.0E+02	.	.	.	5.2E-02	7.4E-18
Neptunium (93)	Np-239	1.41E-10	1.2E-10 (S)	2.06E-10	3.98E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	2.3E-01	.	2.3E+04	3.5E-01	8.4E-02	4.1E+01	9.0E+02	.	.	.	5.2E-02	8.3E-18
Neptunium (93)	Np-240	5.21E-12	4.6E-12 (S)	7.36E-12	2.60E-10	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	6.1E+00	.	3.5E+03	9.7E+00	2.3E+00	1.2E+03	2.5E+04	.	.	.	1.4E+00	4.2E-18
Neptunium (93)	Np-240m	0.00E+00	0.00E+00	0.00E+00	8.02E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	3.9E-15
Neptunium (93)	Np-241	6.63E-13	5.2E-13 (S)	9.15E-13	8.46E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	4.8E+01	.	1.1E+05	7.8E+01	1.9E+01	9.3E+03	2.0E+05	.	.	.	1.2E+01	7.6E-18
Neptunium (93)	Np-242	0.00E+00	0.00E+00	0.00E+00	7.07E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	1.3E+04	.	.	.	.	.	.	.	1.3E+04	1.4E-15
Neptunium (93)	Np-242m	0.00E+00	0.00E+00	0.00E+00	2.27E-10	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	4.0E+03	.	.	.	.	.	.	.	4.0E+03	1.1E-15
Oxygen (8)	O-14	0.00E+00	0.00E+00	0.00E+00	8.99E-10	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	1.0E+03	.	.	.	.	.	.	.	1.0E+03	3.3E-18
Oxygen (8)	O-15	0.00E+00	0.00E+00	0.00E+00	2.50E-10	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	3.7E+03	.	.	.	.	.	.	.	3.7E+03	2.2E-17
Oxygen (8)	O-19	0.00E+00	0.00E+00	0.00E+00	2.47E-10	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	3.7E+03	.	.	.	.	.	.	.	3.7E+03	6.1E-18
Osmium (76)	Os-180	1.03E-12	7.2E-13 (S)	1.42E-12	2.55E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.1E+01	.	3.6E+04	5.0E+01	.	3.0E+03	1.3E+04	.	.	.	1.9E+01	1.4E-17
Osmium (76)	Os-181	9.69E-12	5.1E-12 (S)	1.38E-11	3.47E-10	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.3E+00	.	2.6E+03	5.2E+00	.	3.1E+02	1.3E+03	.	.	.	2.0E+00	7.5E-18
Osmium (76)	Os-182	7.24E-11	4.1E-11 (S)	1.04E-10	9.97E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	4.4E-01	.	9.2E+03	6.9E-01	.	4.1E+01	1.8E+02	.	.	.	2.7E-01	1.3E-17
Osmium (76)	Os-183	2.81E-11	1.8E-11 (S)	4.04E-11	1.46E-10	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.1E+00	.	6.3E+03	1.8E+00	.	1.1E+02	4.6E+02	.	.	.	6.8E-01	1.9E-17
Osmium (76)	Os-183m	2.23E-11	1.2E-11 (S)	3.17E-11	2.55E-10	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.4E+00	.	3.6E+03	2.2E+00	.	1.3E+02	5.9E+02	.	.	.	8.7E-01	1.9E-17
Osmium (76)	Os-185	5.02E-11	1.6E-10 (S)	7.08E-11	1.68E-10	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	6.3E-01	.	5.4E+03	9.7E-01	.	6.0E+01	2.6E+02	.	.	.	3.8E-01	1.9E-15
Osmium (76)	Os-186	2.12E-09	3.2E-07 (S)	2.83E-09	0.00E+00	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.5E-02	.	.	6.5E-03	.	1.5E+00	6.6E+00	.	.	.	4.5E-03	1.8E-01
Osmium (76)	Os-189m	2.67E-12	8.9E-13 (S)	3.91E-12	3.98E-16	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.2E+01	.	2.3E+09	1.8E+01	.	1.1E+03	4.7E+03	.	.	.	7.2E+00	9.3E-17
Osmium (76)	Os-190m	0.00E+00	0.00E+00	0.00E+00	3.88E-10	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	8.7E-16
Osmium (76)	Os-191	1.00E-10	2.0E-10 (S)	1.47E-10	1.60E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.2E-01	.	5.7E+04	4.8E-01	.	2.9E+01	1.3E+02	.	.	.	1.9E-01	1.6E-16
Osmium (76)	Os-191m	1.70E-11	1.8E-11 (S)	2.49E-11	9.78E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.9E+00	.	9.3E+05	2.9E+00	.	1.7E+02	7.4E+02	.	.	.	1.1E+00	3.3E-17
Osmium (76)	Os-193	1.46E-10	7.5E-11 (S)	2.14E-10	1.55E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	2.2E-01	.	5.9E+04	3.3E-01	.	2.0E+01	8.7E+01	.	.	.	1.3E-01	9.0E-18
Osmium (76)	Os-194	4.22E-10	6.9E-09 (S)	6.15E-10	2.63E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	7.5E-02	.	3.5E+06	6.3E-02	.	6.9E+00	3.0E+01	.	.	.	3.4E-02	4.1E-15
Osmium (76)	Os-194+D	6.55E-10	7.0E-09 (S)	9.57E-10	2.36E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	4.9E-02	.	3.9E+04	4.0E-02	.	4.4E+00	1.9E+01	.	.	.	2.2E-02	2.6E-15
Osmium (76)	Os-196	5.86E-12	3.4E-12 (S)	8.22E-12	1.88E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	5.4E+00	.	4.9E+04	8.7E+00	.	5.2E+02	2.3E+03	.	.	.	3.3E+00	4.5E-18
Phosphorus (15)	P-30	0.00E+00	0.00E+00	0.00E+00	2.52E-10	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	.	.	3.6E+03	.	.	.	.	.	.	.	3.6E+03	5.4E-17
Phosphorus (15)	P-32	2.42E-10	3.8E-10 (S)	3.32E-10	5.65E-13	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	1.3E-01	.	1.6E+06	2.1E-01	1.1E-05	4.6E-01	2.8E-01	8.1E+00	.	1.8E+01	1.1E-05	1.4E-21
Phosphorus (15)	P-33	2.64E-11	1.7E-10 (S)	3.67E-11	7.54E-15	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	1.2E+00	.	1.2E+08	1.9E+00	1.0E-04	4.2E+00	2.5E+00	7.4E+01	.	1.6E+02	1.0E-04	2.4E-20
Protactinium (91)	Pa-227	2.62E-11	5.7E-09 (S)	3.69E-11	3.88E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	1.2E+00	.	2.4E+05	1.9E+00	1.4E+00	4.6E+04	1.0E+04	.	.	.	4.9E-01	8.4E-19
Protactinium (91)	Pa-228	9.58E-11	6.5E-09 (S)	1.38E-10	3.44E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	3.3E-01	.	2.7E+03	5.2E-01	3.7E-01	1.2E+04	2.7E+03	.	.	.	1.3E-01	7.8E-18
Protactinium (91)	Pa-229	1.24E-11	6.6E-10 (S)	1.80E-11	1.27E-11	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	2.6E+00	.	7.2E+04	4.0E+00	2.9E+00	9.4E+04	2.1E+04	.	.	.	1.0E+00	9.9E-17
Protactinium (91)	Pa-230	1.00E-10	6.2E-08 (S)	1.44E-10	1.65E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	3.2E-01	.	5.5E+03	4.9E-01	3.6E-01	1.2E+04	2.6E+03	.	.	.	1.3E-01	1.4E-16
Protactinium (91)	Pa-231	4.66E-09	2.1E-06 (F)	6.10E-09	7.92E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	6.8E-03	.	1.2E+05	3.2E-03	8.5E-03	2.8E+02	6.1E+01	.	.	.	1.7E-03	1.4E-12
Protactinium (91)	Pa-232	9.38E-11	1.9E-10 (S)	1.36E-10	2.34E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	3.4E-01	.	3.9E+03	5.2E-01	3.8E-01	1.2E+04	2.7E+03	.	.	.	1.3E-01	1.2E-17
Protactinium (91)	Pa-233	1.66E-10	4.1E-10 (S)	2.42E-10	5.05E-11	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	1.9E-01	.	1.8E+04	2.9E-01	2.1E-01	7.0E+03	1.5E+03	.	.	.	7.5E-02	1.3E-16
Protactinium (91)	Pa-234	5.60E-11	3.2E-11 (S)	8.11E-11	3.66E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	5.7E-01	.	2.5E+03	8.8E-01	6.4E-01	2.1E+04	4.6E+03	.	.	.	2.2E-01	4.2E-18
Protactinium (91)	Pa-234m	0.00E+00	0.00E+00	0.00E+00	4.92E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.0E-14
Protactinium (91)	Pa-235	1.24E-12	8.6E-13 (S)	1.73E-12	3.03E-13	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	2.6E+01	.	3.0E+06	4.1E+01	3.0E+01	9.8E+05	2.1E+05	.	.	.	1.0E+01	1.2E-17
Protactinium (91)	Pa-236	0.00E+00	0.00E+00	0.00E+00	2.39E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	3.8E+03	.	.	.	.	.	.	.	3.8E+03	1.6E-15
Protactinium (91)	Pa-237	0.00E+00	0.00E+00	0.00E+00	1.53E-10	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	6.0E+03	.	.	.	.	.	.	.	6.0E+03	2.4E-15
Lead (82)	Pb-194	1.07E-12	6.1E-13 (S)	1.47E-12	2.72E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.0E+01	.	3.4E+03	4.8E+01	1.4E+01	8.2E+03	6.6E+03	.	.	.	7.9E+00	3.7E-18
Lead (82)	Pb-195m	1.43E-12	1.1E-12 (S)	1.96E-12	4.07E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.2E+01	.	2.2E+03	3.6E+01	1.1E+01	6.2E+03	5.0E+03	.	.	.	6.0E+00	3.4E-18
Lead (82)	Pb-196	1.90E-12	1.3E-12 (S)	2.63E-12	1.15E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.7E+01	.	7.9E+03	2.7E+01	7.9E+00	4.6E+03	3.7E+03	.	.	.	4.5E+00	6.4E-18
Lead (82)	Pb-197	0.00E+00	0.00E+00	0.00E+00	3.94E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	.	.	2.3E+03	.	.	.	.	.	.	.	2.3E+03	7.2E-16
Lead (82)	Pb-197m	2.99E-12	2.7E-12 (S)	4.15E-12	2.87E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.1E+01	.	3.2E+03	1.7E+01	5.0E+00	2.9E+03	2.4E+03	.	.	.	2.8E+00	4.7E-18
Lead (82)	Pb-198	7.04E-12	4.2E-12 (S)	9.81E-12	1.02E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	4.5E+00	.	9.0E+03	7.3E+00	2.1E+00	1.2E+03	1.0E+03	.	.	.	1.2E+00	6.7E-18
Lead (82)	Pb-199	3.22E-12	1.9E-12 (S)	4.50E-12	2.64E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	9.9E+00	.	3.5E+03	1.6E+01	4.6E+00	2.7E+03	2.2E+03	.	.	.	2.6E+00	9.2E-18
Lead (82)	Pb-200	4.29E-11	3.5E-11 (S)	6.10E-11	4.45E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	7.4E-01	.	2.1E+04	1.2E+00	3.4E-01	2.0E+02	1.6E+02	.	.	.	1.9E-01	9.9E-18
Lead (82)	Pb-201	1.62E-11	1.1E-11 (S)	2.29E-11	1.84E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.0E+00	.	5.0E+03	3.1E+00	9.0E-01	5.3E+02	4.3E+02	.	.	.	5.2E-01	1.1E-17
Lead (82)	Pb-201m	0.00E+00	0.00E+00	0.00E+00	8.90E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	.	.	1.0E+04	.	.	.	.	.	.	.	1.0E+04	4.1E-16
Lead (82)	Pb-202	9.12E-10	3.7E-09 (S)	1.22E-09	1.91E-15	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.5E-02	.	4.8E+08	1.6E-02	1.7E-02	9.9E+00	8.0E+00	.	.	.	6.7E-03	7.3E-12
Lead (82)	Pb-202+D	9.52E-10	3.8E-09 (S)	1.27E-09	1.09E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.3E-02	.	8.4E+03	1.5E-02	1.6E-02	9.5E+00	7.7E+00	.	.	.	6.4E-03	7.0E-12
Lead (82)	Pb-202m	1.29E-11	7.2E-12 (S)	1.81E-11	4.99E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.5E+00	.	1.8E+03	3.9E+00	1.1E+00	6.7E+02	5.4E+02	.	.	.	6.5E-01	5.5E-18
Lead (82)	Pb-203	2.81E-11	2.3E-11 (S)	4.01E-11	7.13E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.1E+00	.	1.3E+04	1.8E+00	5.2E-01	3.0E+02	2.4E+02	.	.	.	3.0E-01	3.7E-17
Lead (82)	Pb-204m	3.44E-12	1.5E-12 (S)	4.76E-12	5.21E-10	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	9.3E+00	.	1.8E+03	1.5E+01	4.3E+00	2.5E+03	2.1E+03	.	.	.	2.5E+00	6.7E-18
Lead (82)	Pb-205	1.67E-11	6.2E-11 (S)	2.17E-11	1.93E-15	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.9E+00	.	4.7E+08	9.0E-01	9.5E-01	5.6E+02	4.5E+02	.	.	.	3.7E-01	1.2E-07
Lead (82)	Pb-209	6.51E-12	5.6E-12 (S)	9.42E-12	6.28E-14	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	4.9E+00	.	1.5E+07	7.6E+00	2.2E+00	1.3E+03	1.0E+03	.	.	.	1.3E+00	1.0E-17
Lead (82)	Pb-210	2.39E-08	4.3E-07 (S)	3.18E-08	2.46E-13	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.3E-03	.	3.7E+06	8.1E-04	6.5E-04	3.8E-01	3.1E-01	.	.	.	2.8E-04	1.4E-16
Lead (82)	Pb-211	1.11E-11	1.1E-09 (S)	1.57E-11	1.63E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.9E+00	.	5.6E+04	4.5E+00	1.3E+00	7.7E+02	6.2E+02	.	.	.	7.5E-01	1.1E-18
Lead (82)	Pb-212	6.80E-10	1.7E-08 (S)	9.64E-10	3.31E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	4.7E-02	.	2.8E+04	7.4E-02	2.1E-02	1.3E+01	1.0E+01	.	.	.	1.2E-02	3.3E-19
Lead (82)	Pb-214	9.31E-12	1.1E-09 (S)	1.31E-11	6.03E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.4E+00	.	1.5E+04	5.4E+00	1.6E+00	9.3E+02	7.5E+02	.	.	.	9.0E-01	1.0E-18
Palladium (46)	Pd-100	1.03E-10	7.8E-11 (S)	1.47E-10	1.96E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	3.1E-01	.	4.7E+04	4.8E-01	3.5E-01	2.9E+02	1.3E+02	.	.	.	1.2E-01	1.3E-17
Palladium (46)	Pd-101	1.11E-11	5.1E-12 (S)	1.59E-11	8.14E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	2.9E+00	.	1.1E+04	4.5E+00	3.3E+00	2.7E+03	1.2E+03	.	.	.	1.1E+00	1.2E-17
Palladium (46)	Pd-103	3.37E-11	4.8E-11 (S)	4.94E-11	2.48E-13	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	9.5E-01	.	3.7E+06	1.4E+00	1.0E+00	8.6E+02	3.8E+02	.	.	.	3.7E-01	1.8E-16
Palladium (46)	Pd-107	7.00E-12	4.7E-11 (S)	1.03E-11	0.00E+00	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	4.6E+00	.	.	1.5E+00	5.0E+00	4.1E+03	1.8E+03	.	.	.	9.3E-01	6.7E-08
Palladium (46)	Pd-109	9.64E-11	5.1E-11 (S)	1.41E-10	1.16E-12	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	3.3E-01	.	7.9E+05	5.1E-01	3.7E-01	3.0E+02	1.3E+02	.	.	.	1.3E-01	2.3E-18
Palladium (46)	Pd-109m	0.00E+00	0.00E+00	0.00E+00	2.50E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	3.7E+04	.	.	.	.	.	.	.	3.7E+04	3.7E-15
Palladium (46)	Pd-111	2.68E-12	1.8E-12 (S)	3.76E-12	1.30E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	1.2E+01	.	7.0E+04	1.9E+01	1.4E+01	1.1E+04	4.9E+03	.	.	.	4.8E+00	2.4E-18
Palladium (46)	Pd-112	4.65E-10	1.8E-10 (S)	6.82E-10	6.00E-14	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	6.9E-02	.	1.5E+07	1.0E-01	7.6E-02	6.2E+01	2.7E+01	.	.	.	2.7E-02	7.5E-19
Palladium (46)	Pd-114	0.00E+00	0.00E+00	0.00E+00	6.44E-12	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	7.7E-15
Palladium (46)	Pd-96	0.00E+00	0.00E+00	0.00E+00	3.57E-10	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	2.6E+03	.	.	.	.	.	.	.	2.6E+03	9.9E-17
Palladium (46)	Pd-97	0.00E+00	0.00E+00	0.00E+00	6.19E-10	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	8.8E-17

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Palladium (46)	Pd-98	3.16E-12	1.5E-12 (S)	4.38E-12	9.69E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	1.0E+01	.	9.4E+03	1.6E+01	1.2E+01	9.7E+03	4.2E+03	.	.	.	4.1E+00	1.4E-18
Palladium (46)	Pd-99	2.04E-12	9.4E-13 (S)	2.84E-12	3.22E-10	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	1.6E+01	.	2.8E+03	2.5E+01	1.8E+01	1.5E+04	6.5E+03	.	.	.	6.3E+00	2.6E-18
Promethium (61)	Pm-136	0.00E+00	0.00E+00	0.00E+00	6.78E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	6.4E-17
Promethium (61)	Pm-137m	0.00E+00	0.00E+00	0.00E+00	4.35E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	1.4E-16
Promethium (61)	Pm-139	0.00E+00	0.00E+00	0.00E+00	2.32E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	3.9E+03	.	.	.	.	.	.	.	3.9E+03	4.5E-16
Promethium (61)	Pm-140	0.00E+00	0.00E+00	0.00E+00	2.63E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	1.5E-17
Promethium (61)	Pm-140m	0.00E+00	0.00E+00	0.00E+00	7.61E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.2E+03	.	.	.	.	.	.	.	1.2E+03	2.0E-16
Promethium (61)	Pm-141	1.74E-12	7.5E-13 (S)	2.42E-12	1.82E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.8E+01	.	5.0E+03	2.9E+01	7.1E+00	1.8E+03	1.3E+04	.	3.9E+05	7.9E+04	4.4E+00	2.5E-18
Promethium (61)	Pm-142	0.00E+00	0.00E+00	0.00E+00	2.12E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	4.3E+03	.	.	.	.	.	.	.	4.3E+03	8.1E-17
Promethium (61)	Pm-143	2.37E-11	2.5E-10 (F)	3.35E-11	7.42E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.3E+00	.	1.2E+04	1.9E+00	5.1E-01	1.3E+02	9.2E+02	.	2.8E+04	5.7E+03	3.1E-01	3.3E-15
Promethium (61)	Pm-144	9.04E-11	1.5E-09 (F)	1.27E-10	3.82E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	3.5E-01	.	2.4E+03	4.9E-01	1.4E-01	3.3E+01	2.4E+02	.	7.5E+03	1.5E+03	8.1E-02	1.2E-15
Promethium (61)	Pm-145	1.42E-11	3.4E-10 (F)	2.05E-11	2.80E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	2.2E+00	.	3.3E+05	1.3E+00	8.4E-01	2.1E+02	1.5E+03	.	4.6E+04	9.3E+03	4.2E-01	1.1E-13
Promethium (61)	Pm-146	1.11E-10	2.8E-09 (F)	1.59E-10	1.83E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	2.9E-01	.	5.0E+03	2.6E-01	1.1E-01	2.7E+01	1.9E+02	.	6.0E+03	1.2E+03	6.0E-02	5.0E-15
Promethium (61)	Pm-147	4.57E-11	4.3E-10 (S)	6.70E-11	5.36E-15	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	7.0E-01	.	1.7E+08	7.7E-01	2.6E-01	6.3E+01	4.6E+02	.	1.4E+04	2.8E+03	1.5E-01	6.0E-15
Promethium (61)	Pm-148	4.67E-10	2.9E-10 (S)	6.84E-10	1.50E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	6.8E-02	.	6.1E+03	1.0E-01	2.5E-02	6.2E+00	4.5E+01	.	1.4E+03	2.8E+02	1.6E-02	3.5E-18
Promethium (61)	Pm-148m	2.16E-10	5.7E-10 (S)	3.10E-10	4.95E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.5E-01	.	1.8E+03	2.3E-01	5.6E-02	1.4E+01	1.0E+02	.	3.1E+03	6.1E+02	3.4E-02	5.9E-17
Promethium (61)	Pm-149	1.79E-10	9.9E-11 (S)	2.63E-10	3.06E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.8E-01	.	3.0E+05	2.7E-01	6.6E-02	1.6E+01	1.2E+02	.	3.6E+03	7.2E+02	4.1E-02	3.8E-18
Promethium (61)	Pm-150	2.94E-11	1.2E-11 (S)	4.25E-11	3.82E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.1E+00	.	2.4E+03	1.7E+00	4.1E-01	1.0E+02	7.3E+02	.	2.2E+04	4.5E+03	2.5E-01	1.2E-18
Promethium (61)	Pm-151	1.21E-10	6.4E-11 (S)	1.77E-10	7.79E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	2.6E-01	.	1.2E+04	4.0E-01	9.7E-02	2.4E+01	1.7E+02	.	5.4E+03	1.1E+03	6.0E-02	3.1E-18
Promethium (61)	Pm-152	0.00E+00	0.00E+00	0.00E+00	7.51E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.2E+04	.	.	.	.	.	.	.	1.2E+04	1.5E-15
Promethium (61)	Pm-152m	0.00E+00	0.00E+00	0.00E+00	3.88E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	5.3E-16
Promethium (61)	Pm-153	0.00E+00	0.00E+00	0.00E+00	1.62E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	5.6E+04	.	.	.	.	.	.	.	5.6E+04	8.9E-15
Promethium (61)	Pm-154	0.00E+00	0.00E+00	0.00E+00	4.80E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	1.0E-16
Promethium (61)	Pm-154m	0.00E+00	0.00E+00	0.00E+00	4.67E-10	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	2.0E+03	.	.	.	.	.	.	.	2.0E+03	1.6E-16
Polonium (84)	Po-203	3.67E-12	3.1E-12 (S)	5.11E-12	4.17E-10	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	8.7E+00	.	2.2E+03	1.4E+01	2.8E+00	3.3E+02	1.7E+03	.	1.5E+02	2.4E+02	1.8E+00	2.6E-18
Polonium (84)	Po-204	2.37E-11	3.9E-11 (S)	3.34E-11	2.84E-10	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	1.3E+00	.	3.2E+03	2.1E+00	4.3E-01	5.1E+01	2.6E+02	.	2.4E+01	3.7E+01	2.8E-01	2.3E-18
Polonium (84)	Po-205	4.38E-12	2.9E-12 (S)	6.06E-12	4.04E-10	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	7.3E+00	.	2.3E+03	1.2E+01	2.4E+00	2.8E+02	1.5E+03	.	1.3E+02	2.0E+02	1.5E+00	6.1E-18
Polonium (84)	Po-206	8.70E-10	5.9E-09 (S)	1.14E-09	2.93E-10	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	3.7E-02	.	3.1E+03	6.2E-02	1.3E-02	1.5E+00	7.7E+00	.	6.9E-01	1.1E+00	7.9E-03	4.1E-18
Polonium (84)	Po-207	1.03E-11	6.7E-12 (S)	1.44E-11	3.22E-10	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	3.1E+00	.	2.8E+03	4.9E+00	1.0E+00	1.2E+02	6.1E+02	.	5.5E+01	8.5E+01	6.4E-01	9.1E-18
Polonium (84)	Po-208	5.99E-08	6.1E-07 (S)	7.60E-08	5.14E-15	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	5.3E-04	.	1.8E+08	6.7E-04	1.9E-04	2.2E-02	1.2E-01	.	1.0E-02	1.6E-02	1.1E-04	7.1E-18
Polonium (84)	Po-209	5.95E-08	7.6E-07 (S)	7.54E-08	1.51E-12	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	5.4E-04	.	6.0E+05	2.8E-04	1.9E-04	2.3E-02	1.2E-01	.	1.0E-02	1.6E-02	9.2E-05	2.0E-16
Polonium (84)	Po-210	4.80E-08	3.9E-07 (S)	6.09E-08	2.45E-15	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	6.6E-04	.	3.7E+08	1.1E-03	2.4E-04	2.8E-02	1.5E-01	.	1.3E-02	2.0E-02	1.5E-04	1.2E-18
Polonium (84)	Po-211	0.00E+00	0.00E+00	0.00E+00	2.05E-12	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	4.5E+05	.	.	.	.	.	.	.	4.5E+05	1.6E-16
Polonium (84)	Po-212	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	.	.	.	.	.	.	.	.	.	.
Polonium (84)	Po-212m	0.00E+00	0.00E+00	0.00E+00	2.22E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	4.1E+04	.	.	.	.	.	.	.	4.1E+04	1.3E-15
Polonium (84)	Po-213	0.00E+00	0.00E+00	0.00E+00	9.44E-15	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	9.7E+07	.	.	.	.	.	.	.	9.7E+07	2.8E-19
Polonium (84)	Po-214	0.00E+00	0.00E+00	0.00E+00	2.09E-14	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	4.4E+07	.	.	.	.	.	.	.	4.4E+07	5.1E-18
Polonium (84)	Po-215	0.00E+00	0.00E+00	0.00E+00	4.29E-14	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	2.1E+07	.	.	.	.	.	.	.	2.1E+07	2.7E-17
Polonium (84)	Po-216	0.00E+00	0.00E+00	0.00E+00	3.85E-15	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	2.4E+08	.	.	.	.	.	.	.	2.4E+08	2.4E-14
Polonium (84)	Po-218	0.00E+00	0.00E+00	0.00E+00	1.37E-18	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	6.7E+11	.	.	.	.	.	.	.	6.7E+11	8.9E-08
Praseodymium (59)	Pr-134	3.10E-12	1.2E-12 (S)	4.35E-12	7.89E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.0E+01	.	1.2E+03	1.6E+01	1.2E+00	9.8E+02	7.1E+03	.	1.5E+04	1.7E+05	1.0E+00	2.9E-19
Praseodymium (59)	Pr-134m	5.17E-12	2.1E-12 (S)	7.27E-12	5.93E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	6.2E+00	.	1.5E+03	9.8E+00	7.1E-01	5.8E+02	4.3E+03	.	8.7E+03	1.0E+05	6.0E-01	2.7E-19
Praseodymium (59)	Pr-135	2.50E-12	1.2E-12 (S)	3.49E-12	2.12E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.3E+01	.	4.3E+03	2.0E+01	1.5E+00	1.2E+03	8.9E+03	.	1.8E+04	2.2E+05	1.2E+00	8.0E-19
Praseodymium (59)	Pr-136	1.61E-12	5.9E-13 (S)	2.22E-12	5.46E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.0E+01	.	1.7E+03	3.2E+01	2.3E+00	1.9E+03	1.4E+04	.	2.9E+04	3.4E+05	2.0E+00	6.9E-19
Praseodymium (59)	Pr-137	3.16E-12	1.4E-12 (S)	4.52E-12	8.84E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.0E+01	.	1.0E+04	1.6E+01	1.1E+00	9.4E+02	6.8E+03	.	1.4E+04	1.7E+05	9.6E-01	2.0E-18
Praseodymium (59)	Pr-138	0.00E+00	0.00E+00	0.00E+00	2.01E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	4.6E+03	.	.	.	.	.	.	.	4.6E+03	1.8E-16
Praseodymium (59)	Pr-138m	1.14E-11	4.8E-12 (S)	1.61E-11	6.22E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.8E+00	.	1.5E+03	4.4E+00	3.2E-01	2.6E+02	1.9E+03	.	3.9E+03	4.7E+04	2.7E-01	9.4E-19
Praseodymium (59)	Pr-139	4.05E-12	1.9E-12 (S)	5.86E-12	2.78E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	7.9E+00	.	3.3E+04	1.2E+01	8.8E-01	7.2E+02	5.3E+03	.	1.1E+04	1.3E+05	7.4E-01	5.4E-18
Praseodymium (59)	Pr-140	0.00E+00	0.00E+00	0.00E+00	1.32E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	6.9E+03	.	.	.	.	.	.	.	6.9E+03	6.5E-16
Praseodymium (59)	Pr-142	2.33E-10	9.1E-11 (S)	3.41E-10	1.65E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.4E-01	.	5.5E+04	2.1E-01	1.5E-02	1.2E+01	9.1E+01	.	1.9E+02	2.2E+03	1.3E-02	4.1E-19
Praseodymium (59)	Pr-142m	2.99E-12	1.2E-12 (S)	4.38E-12	0.00E+00	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.1E+01	.	.	1.6E+01	1.2E+00	9.7E+02	7.1E+03	.	1.4E+04	1.7E+05	1.0E+00	4.1E-19
Praseodymium (59)	Pr-143	2.14E-10	2.6E-10 (S)	3.15E-10	1.44E-13	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.5E-01	.	6.4E+06	2.3E-01	1.6E-02	1.3E+01	9.8E+01	.	2.0E+02	2.4E+03	1.4E-02	7.6E-18
Praseodymium (59)	Pr-144	2.19E-12	9.7E-13 (S)	3.03E-12	9.40E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.5E+01	.	9.7E+04	2.4E+01	1.7E+00	1.4E+03	1.0E+04	.	2.1E+04	2.5E+05	1.4E+00	7.0E-19
Praseodymium (59)	Pr-144m	0.00E+00	0.00E+00	0.00E+00	1.31E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	7.0E+05	.	.	.	.	.	.	.	7.0E+05	1.4E-13
Praseodymium (59)	Pr-145	6.19E-11	2.5E-11 (S)	9.07E-11	5.21E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	5.1E-01	.	1.8E+05	7.9E-01	5.7E-02	4.7E+01	3.4E+02	.	7.0E+02	8.4E+03	4.8E-02	4.9E-19
Praseodymium (59)	Pr-146	3.73E-12	1.6E-12 (S)	5.18E-12	2.67E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	8.5E+00	.	3.4E+03	1.4E+01	1.0E+00	8.2E+02	6.0E+03	.	1.2E+04	1.5E+05	8.4E-01	5.8E-19
Praseodymium (59)	Pr-147	1.58E-12	9.6E-13 (S)	2.19E-12	1.17E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.0E+01	.	7.8E+03	3.3E+01	2.4E+00	1.9E+03	1.4E+04	.	2.9E+04	3.5E+05	2.0E+00	7.7E-19
Praseodymium (59)	Pr-148	0.00E+00	0.00E+00	0.00E+00	2.60E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	2.3E-16
Praseodymium (59)	Pr-148m	0.00E+00	0.00E+00	0.00E+00	2.34E-10	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	3.9E+03	.	.	.	.	.	.	.	3.9E+03	2.3E-16
Platinum (78)	Pt-184	2.55E-12	1.7E-12 (S)	3.62E-12	1.65E-10	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.2E+01	.	5.5E+03	2.0E+01	.	1.2E+04	5.1E+03	.	.	.	7.6E+00	4.8E-18
Platinum (78)	Pt-186	1.17E-11	5.7E-12 (S)	1.67E-11	1.64E-10	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	2.7E+00	.	5.6E+03	4.3E+00	.	2.5E+03	1.1E+03	.	.	.	1.7E+00	7.6E-18
Platinum (78)	Pt-187	9.48E-12	5.8E-12 (S)	1.36E-11	1.46E-10	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.4E+00	.	6.3E+03	5.2E+00	.	3.1E+03	1.4E+03	.	.	.	2.0E+00	1.1E-17
Platinum (78)	Pt-188	1.09E-10	2.1E-10 (S)	1.57E-10	4.39E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	2.9E-01	.	2.1E+04	4.5E-01	.	2.7E+02	1.2E+02	.	.	.	1.8E-01	9.6E-17
Platinum (78)	Pt-189	2.63E-11	1.7E-11 (S)	3.80E-11	1.13E-10	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.2E+00	.	8.1E+03	1.9E+00	.	1.1E+03	4.9E+02	.	.	.	7.3E-01	1.8E-17
Platinum (78)	Pt-190	8.14E-10	4.1E-07 (S)	1.14E-09	0.00E+00	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.9E-02	.	.	1.4E-02	.	3.7E+01	1.6E+01	.	.	.	1.0E-02	1.3E-04
Platinum (78)	Pt-191	5.30E-11	4.1E-11 (S)	7.70E-11	6.44E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	6.0E-01	.	1.4E+04	9.2E-01	.	5.5E+02	2.4E+02	.	.	.	3.6E-01	5.5E-17
Platinum (78)	Pt-193	6.54E-12	5.3E-11 (S)	9.59E-12	1.16E-15	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	4.9E+00	.	7.9E+08	1.9E+00	.	4.4E+03	1.9E+03	.	.	.	1.4E+00	1.4E-12
Platinum (78)	Pt-193m	8.26E-11	1.0E-10 (S)	1.21E-10	1.85E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.9E-01	.	4.9E+05	5.9E-01	.	3.5E+02	1.5E+02	.	.	.	2.3E-01	5.5E-17
Platinum (78)	Pt-195m	1.13E-10	1.3E-10 (S)	1.66E-10	1.31E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	2.8E-01	.	7.0E+04	4.3E-01	.	2.6E+02	1.1E+02	.	.	.	1.7E-01	3.8E-17
Platinum (78)	Pt-197	7.56E-11	4.7E-11 (S)	1.11E-10	4.89E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	4.2E-01	.	1.9E+05	6.4E-01	.	3.8E+02	1.7E+02	.	.	.	2.5E-01	1.2E-17
Platinum (78)	Pt-197m	1.08E-11	7.4E-12 (S)	1.57E-11	1.70E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	2.9E+00	.	5.4E+04	4.5E+00	.	2.7E+03	1.2E+03	.	.	.	1.8E+00	6.6E-18
Platinum (78)	Pt-199	2.43E-12	1.9E-12 (S)	3.43E-12	4.89E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.3E+01	.	1.9E+04	2.1E+01	.	1.2E+04	5.4E+03	.	.	.	8.0E+00	9.7E-18
Platinum (78)	Pt-200	2.04E-10	9.0E-11 (S)	3.00E-10	1.23E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.6E-01	.	7.4E+04	2.4E-01	.	1.4E+02	6.2E+01	.	.	.	9.4E-02	2.8E-18
Platinum (78)	Pt-202	7.89E-10	3.4E-10 (S)	1.16E-09	5.30E-13	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	4.0E-02	.	1.7E+06	6.1E-02	.	3.7E+01	1.6E+01	.	.	.	2.4E-02	2.6E-18
Platinum (78)	Pt-202+D	7.89E-10	3.4E-10 (S)	1.16E-09	4.58E-11	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	4.0E-02	.	2.0E+04	6.1E-02	.	3.7E+01	1.6E+01	.	.	.	2.4E-02	2.6E-18
Plutonium (94)	Pu-232	8.00E-12	1.7E-09 (S)	1.13E-11	1.26E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	4.0E+00	.	7.3E+04	6.3E+00	2.2E-03	6.8E+05	1.6E+04	8.1E+04	5.6E+04	2.8E+05	2.2E-03	3.4E-21
Plutonium (94)	Pu-234	2.23E-11	2.2E-09 (S)	3.25E-11	1.36E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	1.4E+00	.	6.7E+04	2.2E+00	7.6E-04	2.4E+05	5.7E+03	2.8E+04	1.9E+04	9.8E+04	7.6E-04	1.8E-20
Plutonium (94)	Pu-235	1.25E-13	7.4E-14 (S)	1.73E-13	1.88E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.5E+02	.	4.9E+04	4.1E+02	1.4E-01	4.5E+07	1.1E+06	5.3E+06	3.7E+06	1.8E+07	1.4E-01	1.7E-19
Plutonium (94)	Pu-236	2.04E-09	8.0E-07 (S)	2.71E-09	2.11E-14	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	1.6E-02	.	4.3E+07	1.9E-02	9.1E-06	2.8E+03	6.8E+01	3.4E+02	2.3E+02	1.2E+03	9.1E-06	6.4E-19
Plutonium (94)	Pu-237	1.74E-11	4.0E-11 (S)	2.53E-11	9.72E-12	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	1.8E+00	.	9.4E+04	2.8E+00	9.7E-04	3.1E+05	7.3E+03	3.6E+04	2.5E+04	1.3E+05	9.7E-04	3.0E-18
Plutonium (94)	Pu-238	3.55E-09	1.4E-06 (F)	4.58E-09	1.61E-14	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	9.0E-03	.	5.7E+07	4.7E-03	5.4E-06	1.7E+03	4.0E+01	2.0E+02	1.4E+02	6.9E+02	5.4E-06	1.2E-17
Plutonium (94)	Pu-239	3.65E-09	1.5E-06 (F)	4.71E-09	1.96E-14	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	8.7E-03	.	4.7E+07	4.3E-03	5.2E-06	1.6E+03	3.9E+01	1.9E+02	1.3E+02	6.7E+02	5.2E-06	3.1E-15
Plutonium (94)	Pu-239+D	3.65E-09	1.5E-06 (F)	4.71E-09	1.96E-14	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	8.7E-03	.	4.7E+07

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Plutonium (94)	Pu-241	4.77E-11	2.3E-08 (F)	6.17E-11	3.35E-16	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	6.7E-01	.	2.7E+09	4.8E-01	4.0E-04	1.3E+05	3.0E+03	1.5E+04	1.0E+04	5.1E+04	4.0E-04	1.4E-16
Plutonium (94)	Pu-242	3.47E-09	1.4E-06 (F)	4.48E-09	3.35E-14	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	9.2E-03	.	2.7E+07	4.5E-03	5.5E-06	1.7E+03	4.1E+01	2.0E+02	1.4E+02	7.1E+02	5.5E-06	5.2E-14
Plutonium (94)	Pu-243	1.28E-11	8.6E-12 (S)	1.87E-11	4.89E-12	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.5E+00	.	1.9E+05	3.8E+00	1.3E-03	4.1E+05	9.9E+03	4.9E+04	3.4E+04	1.7E+05	1.3E-03	1.9E-20
Plutonium (94)	Pu-244	3.88E-09	1.4E-06 (F)	5.08E-09	5.33E-12	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	8.2E-03	.	1.7E+05	4.0E-03	4.9E-06	1.5E+03	3.7E+01	1.8E+02	1.2E+02	6.2E+02	4.8E-06	9.8E-12
Plutonium (94)	Pu-244+D	4.07E-09	1.4E-06 (F)	5.35E-09	8.68E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	7.8E-03	.	1.1E+04	3.8E-03	4.6E-06	1.4E+03	3.5E+01	1.7E+02	1.2E+02	5.9E+02	4.6E-06	9.3E-12
Plutonium (94)	Pu-245	1.15E-10	5.8E-11 (S)	1.69E-10	9.85E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.8E-01	.	9.3E+03	4.2E-01	1.5E-04	4.6E+04	1.1E+03	5.4E+03	3.7E+03	1.9E+04	1.5E-04	4.4E-21
Plutonium (94)	Pu-246	4.66E-10	5.1E-10 (S)	6.80E-10	2.95E-11	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	6.8E-02	.	3.1E+04	1.0E-01	3.6E-05	1.1E+04	2.7E+02	1.3E+03	9.3E+02	4.7E+03	3.6E-05	2.7E-20
Radium (88)	Ra-219	0.00E+00	0.00E+00	0.00E+00	4.04E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	2.3E+04	.	.	.	.	.	.	.	2.3E+04	1.6E-19
Radium (88)	Ra-219+D	0.00E+00	0.00E+00	0.00E+00	4.04E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	2.3E+04	.	.	.	.	.	.	.	2.3E+04	1.6E-19
Radium (88)	Ra-220	0.00E+00	0.00E+00	0.00E+00	1.14E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	8.0E+05	.	.	.	.	.	.	.	8.0E+05	1.0E-17
Radium (88)	Ra-221	0.00E+00	0.00E+00	0.00E+00	7.95E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	2.3E-15
Radium (88)	Ra-221+D	0.00E+00	0.00E+00	0.00E+00	7.95E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	2.3E-15
Radium (88)	Ra-222	0.00E+00	0.00E+00	0.00E+00	2.21E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	4.1E+05	.	.	.	.	.	.	.	4.1E+05	1.1E-14
Radium (88)	Ra-223	6.44E-09	7.9E-07 (S)	9.15E-09	3.13E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	4.9E-03	.	2.9E+04	7.8E-03	1.4E-02	5.5E-01	5.3E-01	.	.	.	2.5E-03	1.8E-18
Radium (88)	Ra-223+D	6.44E-09	7.9E-07 (S)	9.15E-09	4.54E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	4.9E-03	.	2.0E+04	7.8E-03	1.4E-02	5.5E-01	5.3E-01	.	.	.	2.5E-03	1.8E-18
Radium (88)	Ra-224	4.51E-09	3.1E-07 (S)	6.44E-09	2.46E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	7.1E-03	2.5E-05	3.7E+05	1.1E-02	2.0E-02	7.8E-01	7.6E-01	.	.	.	2.5E-05	5.8E-21
Radium (88)	Ra-224+D	4.51E-09	3.1E-07 (S)	6.44E-09	2.62E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	7.1E-03	.	3.5E+05	1.1E-02	2.0E-02	7.8E-01	7.6E-01	.	.	.	3.5E-03	8.2E-19
Radium (88)	Ra-225	3.09E-09	7.1E-07 (S)	4.15E-09	1.15E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.0E-02	.	8.0E+05	1.7E-02	3.1E-02	1.2E+00	1.2E+00	.	.	.	5.3E-03	5.0E-18
Radium (88)	Ra-226	1.04E-08	7.6E-07 (S)	1.39E-08	1.69E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	3.1E-03	1.0E-05	5.4E+05	1.4E-03	9.3E-03	3.6E-01	3.5E-01	.	.	.	1.0E-05	3.8E-16
Radium (88)	Ra-226+D	1.04E-08	7.6E-07 (S)	1.39E-08	4.54E-10	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	3.1E-03	1.0E-05	2.0E+03	1.4E-03	9.3E-03	3.6E-01	3.5E-01	.	.	.	1.0E-05	3.8E-16
Radium (88)	Ra-227	2.89E-12	1.7E-11 (S)	4.01E-12	3.38E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.1E+01	.	2.7E+04	1.8E+01	3.2E+01	1.2E+03	1.2E+03	.	.	.	5.6E+00	1.1E-17
Radium (88)	Ra-228	2.80E-08	1.2E-06 (S)	3.85E-08	1.36E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.1E-03	.	6.7E+07	1.0E-03	3.4E-03	1.3E-01	1.3E-01	.	.	.	4.6E-04	6.3E-17
Radium (88)	Ra-228+D	2.81E-08	1.2E-06 (S)	3.86E-08	2.20E-10	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.1E-03	.	4.1E+03	1.0E-03	3.4E-03	1.3E-01	1.3E-01	.	.	.	4.6E-04	6.3E-17
Radium (88)	Ra-230	1.61E-11	9.5E-12 (S)	2.31E-11	1.78E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	2.0E+00	.	5.1E+04	3.1E+00	5.6E+00	2.2E+02	2.1E+02	.	.	.	9.8E-01	4.1E-18
Rubidium (37)	Rb-77	0.00E+00	0.00E+00	0.00E+00	3.85E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	1.4E-16
Rubidium (37)	Rb-78	3.27E-12	1.3E-12 (S)	4.47E-12	1.13E-09	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	9.7E+00	.	8.1E+02	1.6E+01	2.4E-02	6.3E+01	4.1E+01	.	.	.	2.4E-02	6.4E-21
Rubidium (37)	Rb-78m	0.00E+00	0.00E+00	0.00E+00	8.33E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	9.7E-17
Rubidium (37)	Rb-79	2.26E-12	1.3E-12 (S)	3.10E-12	3.57E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.4E+01	.	2.6E+03	2.3E+01	3.4E-02	9.1E+01	6.0E+01	.	.	.	3.4E-02	1.2E-20
Rubidium (37)	Rb-80	0.00E+00	0.00E+00	0.00E+00	2.97E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	2.7E-17
Rubidium (37)	Rb-81	3.16E-12	4.3E-12 (S)	4.28E-12	1.24E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.0E+01	.	7.4E+03	1.7E+01	2.5E-02	6.6E+01	4.3E+01	.	.	.	2.5E-02	1.1E-19
Rubidium (37)	Rb-81m	5.26E-13	1.1E-12 (S)	7.16E-13	5.84E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	6.1E+01	.	1.6E+05	1.0E+02	1.5E-01	4.0E+02	2.6E+02	.	.	.	1.5E-01	7.2E-20
Rubidium (37)	Rb-82	0.00E+00	0.00E+00	0.00E+00	2.75E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	3.3E+03	.	.	.	.	.	.	.	3.3E+03	6.8E-17
Rubidium (37)	Rb-82m	9.83E-12	6.8E-12 (S)	1.31E-11	7.42E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	3.2E+00	.	1.2E+03	5.4E+00	8.1E-03	2.2E+01	1.4E+01	.	.	.	8.0E-03	5.0E-20
Rubidium (37)	Rb-83	1.45E-10	1.4E-10 (S)	1.91E-10	1.19E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.2E-01	.	7.7E+03	3.3E-01	5.5E-04	1.5E+00	9.7E-01	.	.	.	5.5E-04	1.1E-18
Rubidium (37)	Rb-84	2.41E-10	2.8E-10 (S)	3.21E-10	2.27E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.3E-01	.	4.0E+03	2.1E-01	3.3E-04	8.8E-01	5.8E-01	.	.	.	3.3E-04	2.6E-19
Rubidium (37)	Rb-84m	3.95E-13	4.0E-13 (S)	5.36E-13	9.18E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	8.1E+01	.	1.0E+04	1.3E+02	2.0E-01	5.3E+02	3.5E+02	.	.	.	2.0E-01	6.6E-20
Rubidium (37)	Rb-86	2.67E-10	4.5E-10 (S)	3.63E-10	2.46E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.2E-01	.	3.7E+04	1.9E-01	2.9E-04	7.8E-01	5.1E-01	.	.	.	2.9E-04	1.3E-19
Rubidium (37)	Rb-86m	0.00E+00	0.00E+00	0.00E+00	1.34E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	6.8E+03	.	.	.	.	.	.	.	6.8E+03	1.2E-16
Rubidium (37)	Rb-87	1.45E-10	1.2E-09 (S)	1.98E-10	1.87E-14	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.2E-01	.	4.9E+07	3.2E-02	5.3E-04	1.4E+00	9.4E-01	.	.	.	5.2E-04	2.3E-07
Rubidium (37)	Rb-88	3.79E-12	1.5E-12 (S)	5.20E-12	1.79E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	8.4E+00	.	5.1E+03	1.4E+01	2.0E-02	5.4E+01	3.6E+01	.	.	.	2.0E-02	6.2E-21
Rubidium (37)	Rb-89	2.08E-12	1.1E-12 (S)	2.84E-12	6.03E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.5E+01	.	1.5E+03	2.5E+01	3.7E-02	1.0E+02	6.5E+01	.	.	.	3.7E-02	9.8E-21
Rubidium (37)	Rb-90	0.00E+00	0.00E+00	0.00E+00	5.93E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	7.2E-17
Rubidium (37)	Rb-90m	0.00E+00	0.00E+00	0.00E+00	8.99E-10	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	1.0E+03	.	.	.	.	.	.	.	1.0E+03	7.8E-17
Rhenium (75)	Re-178	1.32E-12	7.1E-13 (S)	1.81E-12	4.51E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.4E+01	.	2.0E+03	3.9E+01	.	4.7E+02	5.1E+02	.	.	.	1.4E+01	6.5E-18
Rhenium (75)	Re-179	7.51E-13	5.0E-13 (S)	1.03E-12	2.70E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	4.2E+01	.	3.4E+03	6.9E+01	.	8.2E+02	9.0E+02	.	.	.	2.5E+01	1.7E-17
Rhenium (75)	Re-180	0.00E+00	0.00E+00	0.00E+00	2.99E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	2.6E-16
Rhenium (75)	Re-181	3.84E-11	2.3E-11 (S)	5.44E-11	1.93E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	8.3E-01	.	4.7E+03	1.3E+00	.	1.6E+01	1.7E+01	.	.	.	4.8E-01	2.0E-17
Rhenium (75)	Re-182	1.29E-10	1.3E-10 (S)	1.82E-10	4.45E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.5E-01	.	2.1E+03	3.9E-01	.	4.7E+00	5.1E+00	.	.	.	1.4E-01	2.0E-17
Rhenium (75)	Re-182m	2.46E-11	1.6E-11 (S)	3.45E-11	3.08E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.3E+00	.	3.0E+03	2.1E+00	.	2.5E+01	2.7E+01	.	.	.	7.5E-01	2.1E-17
Rhenium (75)	Re-183	9.01E-11	3.4E-10 (S)	1.28E-10	2.99E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	3.5E-01	.	3.1E+04	5.3E-01	.	6.6E+00	7.2E+00	.	.	.	2.0E-01	7.3E-16
Rhenium (75)	Re-184	8.57E-11	2.2E-10 (S)	1.19E-10	2.20E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	3.7E-01	.	4.2E+03	5.8E-01	.	7.1E+00	7.8E+00	.	.	.	2.1E-01	4.3E-16
Rhenium (75)	Re-184m	1.33E-10	9.6E-10 (S)	1.89E-10	8.96E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.4E-01	.	1.0E+04	3.4E-01	.	4.5E+00	4.9E+00	.	.	.	1.3E-01	1.2E-15
Rhenium (75)	Re-186	1.46E-10	1.2E-10 (S)	2.10E-10	4.45E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.2E-01	.	2.1E+05	3.4E-01	.	4.0E+00	4.4E+00	.	.	.	1.2E-01	2.5E-17
Rhenium (75)	Re-186m	1.99E-10	4.4E-09 (S)	2.84E-10	2.27E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.6E-01	.	4.0E+05	4.6E-02	.	3.0E+00	3.3E+00	.	.	.	3.5E-02	1.3E-10
Rhenium (75)	Re-186m+D	3.45E-10	4.5E-09 (S)	4.94E-10	6.72E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	9.2E-02	.	1.4E+05	2.6E-02	.	1.7E+00	1.9E+00	.	.	.	2.0E-02	7.7E-11
Rhenium (75)	Re-187	4.51E-13	3.0E-12 (S)	6.47E-13	0.00E+00	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	7.1E+01	.	.	2.0E+01	.	1.3E+03	1.4E+03	.	.	.	1.5E+01	1.2E-02
Rhenium (75)	Re-188	1.33E-10	6.1E-11 (S)	1.91E-10	1.54E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.4E-01	.	5.9E+04	3.7E-01	.	4.4E+00	4.9E+00	.	.	.	1.4E-01	5.2E-18
Rhenium (75)	Re-188m	2.67E-12	1.4E-12 (S)	3.83E-12	1.22E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.2E+01	.	7.5E+04	1.9E+01	.	2.2E+02	2.4E+02	.	.	.	6.8E+00	4.7E-18
Rhenium (75)	Re-189	7.34E-11	4.6E-11 (S)	1.06E-10	1.30E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	4.3E-01	.	7.0E+04	6.7E-01	.	8.0E+00	8.7E+00	.	.	.	2.5E-01	1.3E-17
Rhenium (75)	Re-190	0.00E+00	0.00E+00	0.00E+00	3.31E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	.	.	2.8E+03	.	.	.	.	.	.	.	2.8E+03	3.2E-16
Rhenium (75)	Re-190m	2.92E-11	1.6E-11 (S)	4.15E-11	2.25E-10	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.1E+00	.	4.1E+03	1.7E+00	.	2.0E+01	2.2E+01	.	.	.	6.3E-01	4.5E-18
Rhodium (45)	Rh-100	6.55E-11	2.6E-11 (S)	9.23E-11	7.29E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	4.9E-01	.	1.3E+03	7.7E-01	5.6E-01	4.6E+01	4.0E+01	.	.	.	1.9E-01	4.8E-18
Rhodium (45)	Rh-100m	0.00E+00	0.00E+00	0.00E+00	1.11E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	7.5E-15
Rhodium (45)	Rh-101	5.54E-11	4.6E-10 (S)	7.73E-11	6.41E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	5.8E-01	.	1.4E+04	6.2E-01	6.7E-01	5.5E+01	4.8E+01	.	.	.	2.0E-01	7.1E-15
Rhodium (45)	Rh-101m	2.47E-11	1.9E-11 (S)	3.54E-11	6.63E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.3E+00	.	1.4E+04	2.0E+00	1.5E+00	1.2E+02	1.0E+02	.	.	.	5.1E-01	6.3E-17
Rhodium (45)	Rh-102	1.67E-10	7.0E-10 (S)	2.41E-10	1.23E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.9E-01	.	7.4E+03	2.7E-01	2.1E-01	1.8E+01	1.5E+01	.	.	.	7.3E-02	4.4E-16
Rhodium (45)	Rh-102m	2.20E-10	1.8E-09 (S)	2.98E-10	5.36E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.4E-01	.	1.7E+03	1.5E-01	1.7E-01	1.4E+01	1.2E+01	.	.	.	5.2E-02	2.0E-15
Rhodium (45)	Rh-103m	2.52E-13	2.5E-13 (S)	3.58E-13	2.60E-14	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.3E+02	.	3.5E+07	2.0E+02	1.4E+02	1.2E+04	1.0E+04	.	.	.	5.0E+01	5.7E-17
Rhodium (45)	Rh-104	0.00E+00	0.00E+00	0.00E+00	4.17E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.2E+05	.	.	.	.	.	.	.	2.2E+05	3.2E-15
Rhodium (45)	Rh-104m	0.00E+00	0.00E+00	0.00E+00	4.83E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.7E-14
Rhodium (45)	Rh-105	6.32E-11	4.3E-11 (S)	9.26E-11	1.87E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	5.0E-01	.	4.9E+04	7.7E-01	5.6E-01	4.6E+01	4.0E+01	.	.	.	2.0E-01	8.6E-18
Rhodium (45)	Rh-106	0.00E+00	0.00E+00	0.00E+00	5.33E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.7E+04	.	.	.	.	.	.	.	1.7E+04	1.8E-16
Rhodium (45)	Rh-106m	1.53E-11	7.5E-12 (S)	2.16E-11	7.26E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	2.1E+00	.	1.3E+03	3.3E+00	2.4E+00	2.0E+02	1.7E+02	.	.	.	8.2E-01	2.3E-18
Rhodium (45)	Rh-107	1.12E-12	7.8E-13 (S)	1.56E-12	7.61E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	2.8E+01	.	1.2E+04	4.6E+01	3.3E+01	2.7E+03	2.4E+03	.	.	.	1.1E+01	5.2E-18
Rhodium (45)	Rh-108	0.00E+00	0.00E+00	0.00E+00	8.14E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	6.7E-17
Rhodium (45)	Rh-109	0.00E+00	0.00E+00	0.00E+00	7.26E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.3E+04	.	.	.	.	.	.	.	1.3E+04	3.6E-16
Rhodium (45)	Rh-94	0.00E+00	0.00E+00	0.00E+00	9.85E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	9.3E+02	.	.	.	.	.	.	.	9.3E+02	2.0E-17
Rhodium (45)	Rh-95	0.00E+00	0.00E+00	0.00E+00	6.66E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.4E+03	.	.	.	.	.	.	.	1.4E+03	1.3E-16
Rhodium (45)	Rh-95m	0.00E+00	0.00E+00	0.00E+00	2.37E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	3.9E+03	.	.	.	.	.	.	.	3.9E+03	1.4E-16
Rhodium (45)	Rh-96	0.00E+00	0.00E+00	0.00E+00	9.97E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	9.2E+02	.	.	.	.	.	.	.	9.2E+02	1.7E-16
Rhodium (45)	Rh-96m	0.00E+00	0.00E+00	0.00E+00	3.31E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.8E+03	.	.	.	.	.	.	.	2.8E+03	7.9E-17
Rhodium (45)	Rh-97	2.66E-12	1.2E-12 (S)	3.69E-12	3.63E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.2E+01	.	2.5E+03	1.9E+01	1.4E+01	1.2E+03	1.0E+03	.	.	.	4.8E+00	2.8E-18
Rhodium (45)	Rh-97m	3.23E-12	1.4E-12 (S)	4.50E-12	5.90E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	9.9E+00	.	1.5E+03	1.6E+01	1.1E+01	9.4E+02	8.2E+02	.	.	.	3.9E+00	3.5E-18
Rhodium (45)	Rh-98	0.00E+00	0.00E+00	0.00E+00	4.54E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.0E+03	.	.	.	.	.	.	.	2.0E+03	3.4E-16

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Rhodium (45)	Rh-99	7.12E-11	1.3E-10 (S)	1.02E-10	1.33E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	4.5E-01	.	6.9E+03	6.9E-01	5.1E-01	4.2E+01	3.6E+01	.	.	.	1.8E-01	7.9E-17
Rhodium (45)	Rh-99m	6.65E-12	2.8E-12 (S)	9.43E-12	1.59E-10	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	4.8E+00	.	5.7E+03	7.6E+00	5.5E+00	4.5E+02	3.9E+02	.	.	.	1.9E+00	1.0E-17
Radon (86)	Rn-207	0.00E+00	0.00E+00	0.00E+00	2.42E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.8E+03	.	.	.	.	.	.	.	3.8E+03	1.4E-15
Radon (86)	Rn-209	0.00E+00	0.00E+00	0.00E+00	3.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.0E+03	.	.	.	.	.	.	.	3.0E+03	3.6E-15
Radon (86)	Rn-210	0.00E+00	0.00E+00	0.00E+00	1.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.2E+04	.	.	.	.	.	.	.	6.2E+04	3.7E-13
Radon (86)	Rn-211	0.00E+00	0.00E+00	0.00E+00	4.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.9E+03	.	.	.	.	.	.	.	1.9E+03	7.0E-14
Radon (86)	Rn-212	0.00E+00	0.00E+00	0.00E+00	8.43E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.1E+07	.	.	.	.	.	.	.	1.1E+07	1.1E-11
Radon (86)	Rn-215	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Radon (86)	Rn-216	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Radon (86)	Rn-217	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Radon (86)	Rn-218	0.00E+00	0.00E+00	0.00E+00	1.87E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.9E+06	.	.	.	.	.	.	.	4.9E+06	1.2E-16
Radon (86)	Rn-219	0.00E+00	0.00E+00	0.00E+00	1.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.5E+04	.	.	.	.	.	.	.	6.5E+04	1.9E-16
Radon (86)	Rn-219+D	0.00E+00	0.00E+00	0.00E+00	1.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.5E+04	.	.	.	.	.	.	.	6.5E+04	1.9E-16
Radon (86)	Rn-220	0.00E+00	0.00E+00	0.00E+00	1.54E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	5.9E+06	.	.	.	.	.	.	.	5.9E+06	2.4E-13
Radon (86)	Rn-222	0.00E+00	8.60E-10	0.00E+00	9.50E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	9.0E-03	9.6E+06	.	.	.	.	.	.	.	9.0E-03	2.2E-18
Radon (86)	Rn-222+D	0.00E+00	8.60E-10	0.00E+00	9.50E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	9.0E-03	9.6E+06	.	.	.	.	.	.	.	9.0E-03	2.2E-18
Radon (86)	Rn-223	0.00E+00	0.00E+00	0.00E+00	8.39E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	1.2E-14
Ruthenium (44)	Ru-103	9.85E-11	2.8E-10 (S)	1.42E-10	1.21E-10	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	3.2E-01	.	7.5E+03	4.9E-01	6.6E-02	1.8E+01	1.4E+03	1.7E+02	1.7E+00	6.7E+03	4.8E-02	5.5E-17
Ruthenium (44)	Ru-105	3.87E-11	2.7E-11 (V)	5.63E-11	1.85E-10	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	8.2E-01	.	4.9E+03	1.3E+00	1.7E-01	4.6E+01	3.5E+03	4.3E+02	4.2E+00	1.7E+04	1.2E-01	6.7E-19
Ruthenium (44)	Ru-106	1.14E-09	6.1E-09 (S)	1.65E-09	0.00E+00	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	2.8E-02	.	.	3.8E-02	5.7E-03	1.6E+00	1.2E+02	1.5E+01	1.4E-01	5.8E+02	4.1E-03	4.6E-17
Ruthenium (44)	Ru-106+D	1.14E-09	6.1E-09 (S)	1.65E-09	5.33E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	2.8E-02	.	1.7E+04	3.8E-02	5.7E-03	1.6E+00	1.2E+02	1.5E+01	1.4E-01	5.8E+02	4.1E-03	4.6E-17
Ruthenium (44)	Ru-107	0.00E+00	0.00E+00	0.00E+00	8.90E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	1.0E+04	.	.	.	.	.	.	.	1.0E+04	8.1E-16
Ruthenium (44)	Ru-108	0.00E+00	0.00E+00	0.00E+00	1.44E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	6.3E+04	.	.	.	.	.	.	.	6.3E+04	6.1E-15
Ruthenium (44)	Ru-92	0.00E+00	0.00E+00	0.00E+00	5.18E-10	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	1.8E+03	.	.	.	.	.	.	.	1.8E+03	1.2E-16
Ruthenium (44)	Ru-94	8.34E-12	6.0E-12 (V)	1.19E-11	1.26E-10	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	3.8E+00	.	7.3E+03	6.0E+00	7.9E-01	2.2E+02	1.7E+04	2.0E+03	2.0E+01	8.0E+04	5.7E-01	5.5E-19
Ruthenium (44)	Ru-95	5.18E-12	3.9E-12 (V)	7.27E-12	3.13E-10	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	6.2E+00	.	2.9E+03	9.8E+00	1.3E+00	3.5E+02	2.7E+04	3.3E+03	3.3E+01	1.3E+05	9.3E-01	1.7E-18
Ruthenium (44)	Ru-97	1.72E-11	1.5E-11 (V)	2.45E-11	5.46E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	1.9E+00	.	1.7E+04	2.9E+00	3.8E-01	1.0E+02	8.1E+03	9.9E+02	9.7E+00	3.9E+04	2.8E-01	2.2E-17
Sulfur (16)	S-35	1.39E-11	1.8E-10 (S)	1.89E-11	1.78E-15	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	2.3E+00	.	5.1E+08	3.4E+00	2.7E-02	2.2E+00	1.2E+01	.	.	.	2.6E-02	2.3E-17
Sulphur (16)	S-37	0.00E+00	0.00E+00	0.00E+00	8.58E-10	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	3.9E-17
Sulphur (16)	S-38	2.62E-11	3.3E-11 (S)	3.40E-11	4.70E-10	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	1.2E+00	.	1.9E+03	2.1E+00	1.5E-02	1.2E+00	6.9E+00	.	.	.	1.5E-02	1.9E-20
Antimony (51)	Sb-111	0.00E+00	0.00E+00	0.00E+00	3.66E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	6.8E-17
Antimony (51)	Sb-113	0.00E+00	0.00E+00	0.00E+00	3.11E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	2.9E+03	.	.	.	.	.	.	.	2.9E+03	4.4E-16
Antimony (51)	Sb-114	0.00E+00	0.00E+00	0.00E+00	6.94E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	1.0E-16
Antimony (51)	Sb-115	1.38E-12	6.6E-13 (S)	1.91E-12	2.16E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.3E+01	.	4.2E+03	3.7E+01	7.3E+00	3.7E+03	2.6E+04	.	.	.	4.8E+00	3.5E-18
Antimony (51)	Sb-116	1.53E-12	6.0E-13 (S)	2.10E-12	5.93E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.1E+01	.	1.5E+03	3.4E+01	6.7E+00	3.4E+03	2.3E+04	.	.	.	4.4E+00	1.6E-18
Antimony (51)	Sb-116m	4.63E-12	2.4E-12 (S)	6.42E-12	7.92E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	6.9E+00	.	1.2E+03	1.1E+01	2.2E+00	1.1E+03	7.6E+03	.	.	.	1.4E+00	2.0E-18
Antimony (51)	Sb-117	1.81E-12	1.2E-12 (S)	2.59E-12	3.94E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.8E+01	.	2.3E+04	2.8E+01	5.4E+00	2.7E+03	1.9E+04	.	.	.	3.6E+00	1.4E-17
Antimony (51)	Sb-118	0.00E+00	0.00E+00	0.00E+00	1.98E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	4.6E+03	.	.	.	.	.	.	.	4.6E+03	3.9E-16
Antimony (51)	Sb-118m	1.89E-11	7.4E-12 (S)	2.65E-11	6.66E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.7E+00	.	1.4E+03	2.7E+00	5.3E-01	2.7E+02	1.8E+03	.	.	.	3.5E-01	2.4E-18
Antimony (51)	Sb-119	1.31E-11	5.0E-12 (S)	1.91E-11	7.01E-13	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.4E+00	.	1.3E+06	3.7E+00	7.3E-01	3.7E+02	2.6E+03	.	.	.	4.9E-01	2.6E-17
Antimony (51)	Sb-120	6.70E-13	3.2E-13 (S)	9.23E-13	1.09E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	4.8E+01	.	8.4E+03	7.7E+01	1.5E+01	7.7E+03	5.3E+04	.	.	.	1.0E+01	3.8E-18
Antimony (51)	Sb-120m	1.19E-10	9.6E-11 (S)	1.68E-10	6.25E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.7E-01	.	1.5E+03	4.2E-01	8.3E-02	4.2E+01	2.9E+02	.	.	.	5.5E-02	1.1E-17
Antimony (51)	Sb-122	2.87E-10	1.6E-10 (S)	4.19E-10	1.10E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.1E-01	.	8.3E+03	1.7E-01	3.3E-02	1.7E+01	1.2E+02	.	.	.	2.2E-02	2.1E-18
Antimony (51)	Sb-122m	0.00E+00	0.00E+00	0.00E+00	9.40E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	9.7E+04	.	.	.	.	.	.	.	9.7E+04	9.8E-15
Antimony (51)	Sb-124	3.47E-10	8.6E-10 (S)	5.00E-10	4.86E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	9.2E-02	.	1.9E+03	1.4E-01	2.8E-02	1.4E+01	9.8E+01	.	.	.	1.9E-02	3.9E-17
Antimony (51)	Sb-124m	0.00E+00	0.00E+00	0.00E+00	1.09E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	8.4E+03	.	.	.	.	.	.	.	8.4E+03	3.2E-16
Antimony (51)	Sb-124n	5.33E-13	4.0E-13 (S)	7.39E-13	2.62E-17	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	6.0E+01	.	3.5E+10	9.6E+01	1.9E+01	9.6E+03	6.6E+04	.	.	.	1.2E+01	6.2E-18
Antimony (51)	Sb-125	1.20E-10	1.1E-09 (S)	1.68E-10	1.04E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.7E-01	.	8.8E+03	3.1E-01	8.3E-02	4.2E+01	2.9E+02	.	.	.	5.2E-02	1.9E-15
Antimony (51)	Sb-126	3.42E-10	3.8E-10 (S)	4.91E-10	6.85E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	9.3E-02	.	1.3E+03	1.4E-01	2.8E-02	1.4E+01	9.9E+01	.	.	.	1.9E-02	8.4E-18
Antimony (51)	Sb-126m	1.90E-12	9.3E-13 (S)	2.63E-12	3.85E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.7E+01	.	2.4E+03	2.7E+01	5.3E+00	2.7E+03	1.9E+04	.	.	.	3.5E+00	1.7E-18
Antimony (51)	Sb-127	2.73E-10	2.2E-10 (S)	3.98E-10	1.72E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.2E-01	.	5.3E+03	1.8E-01	3.5E-02	1.8E+01	1.2E+02	.	.	.	2.3E-02	3.3E-18
Antimony (51)	Sb-128	1.02E-10	4.4E-11 (S)	1.47E-10	7.73E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	3.1E-01	.	1.2E+03	4.8E-01	9.5E-02	4.8E+01	3.3E+02	.	.	.	6.3E-02	8.6E-19
Antimony (51)	Sb-128m	1.57E-12	6.2E-13 (S)	2.16E-12	4.77E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.0E+01	.	1.9E+03	3.3E+01	6.5E+00	3.3E+03	2.3E+04	.	.	.	4.3E+00	1.1E-18
Antimony (51)	Sb-129	5.99E-11	2.8E-11 (S)	8.72E-11	3.76E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	5.3E-01	.	2.4E+03	8.2E-01	1.6E-01	8.1E+01	5.6E+02	.	.	.	1.1E-01	7.2E-19
Antimony (51)	Sb-130	5.68E-12	2.8E-12 (S)	7.89E-12	8.27E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	5.6E+00	.	1.1E+03	9.0E+00	1.8E+00	9.0E+02	6.2E+03	.	.	.	1.2E+00	1.2E-18
Antimony (51)	Sb-130m	0.00E+00	0.00E+00	0.00E+00	6.91E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	2.1E-16
Antimony (51)	Sb-131	7.19E-12	2.7E-12 (M)	1.01E-11	5.43E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	4.4E+00	.	1.7E+03	7.1E+00	1.4E+00	7.0E+02	4.8E+03	.	.	.	9.2E-01	5.5E-19
Antimony (51)	Sb-133	0.00E+00	0.00E+00	0.00E+00	7.35E-10	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	1.2E+03	.	.	.	.	.	.	.	1.2E+03	8.2E-17
Scandium (21)	Sc-42m	0.00E+00	0.00E+00	0.00E+00	1.09E-09	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	.	.	8.4E+02	.	.	.	.	.	.	.	8.4E+02	7.2E-18
Scandium (21)	Sc-43	2.70E-11	1.2E-11 (S)	3.91E-11	2.41E-10	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	1.2E+00	.	3.8E+03	1.8E+00	7.0E-02	1.1E+02	7.9E+02	.	.	.	6.3E-02	1.3E-19
Scandium (21)	Sc-44	4.27E-11	1.8E-11 (S)	6.17E-11	5.43E-10	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	7.5E-01	.	1.7E+03	1.2E+00	4.4E-02	6.9E+01	5.0E+02	.	.	.	4.0E-02	8.3E-20
Scandium (21)	Sc-44m	3.74E-10	1.9E-10 (S)	5.44E-10	6.66E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	8.5E-02	.	1.4E+04	1.3E-01	5.0E-03	7.8E+00	5.7E+01	.	.	.	4.6E-03	1.4E-19
Scandium (21)	Sc-46	1.68E-10	6.7E-10 (S)	2.39E-10	5.18E-10	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	1.9E-01	.	1.8E+03	2.9E-01	1.1E-02	1.8E+01	1.3E+02	.	.	.	1.0E-02	1.1E-17
Scandium (21)	Sc-47	9.43E-11	8.3E-11 (S)	1.38E-10	2.54E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	3.4E-01	.	3.6E+04	5.2E-01	2.0E-02	3.1E+01	2.2E+02	.	.	.	1.8E-02	8.0E-19
Scandium (21)	Sc-48	1.94E-10	1.1E-10 (S)	2.78E-10	8.71E-10	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	1.6E-01	.	1.0E+03	2.6E-01	9.8E-03	1.5E+01	1.1E+02	.	.	.	8.9E-03	2.2E-19
Scandium (21)	Sc-49	5.48E-12	2.9E-12 (S)	7.80E-12	1.05E-12	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	5.8E+00	.	8.7E+05	9.1E+00	3.5E-01	5.4E+02	4.0E+03	.	.	.	3.2E-01	1.8E-19
Scandium (21)	Sc-50	0.00E+00	0.00E+00	0.00E+00	8.43E-10	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+03	.	.	.	.	.	.	.	1.1E+03	1.8E-17
Selenium (34)	Se-70	6.96E-12	4.6E-12 (S)	9.74E-12	1.72E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	4.6E+00	.	5.3E+03	7.3E+00	8.9E-03	8.7E+00	4.8E+01	2.3E+01	2.0E+01	2.4E+01	8.8E-03	5.0E-21
Selenium (34)	Se-71	0.00E+00	0.00E+00	0.00E+00	4.01E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	2.3E+03	.	.	.	.	.	.	.	2.3E+03	1.5E-16
Selenium (34)	Se-72	4.47E-10	4.2E-10 (S)	6.06E-10	3.19E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	7.1E-02	.	2.9E+05	1.2E-01	1.4E-04	1.4E-01	7.7E-01	3.8E-01	3.2E-01	3.9E-01	1.4E-04	2.4E-20
Selenium (34)	Se-73	2.16E-11	2.3E-11 (S)	3.07E-11	2.63E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.5E+00	.	3.5E+03	2.3E+00	2.8E-03	2.8E+00	1.5E+01	7.4E+00	6.4E+00	7.7E+00	2.8E-03	1.7E-20
Selenium (34)	Se-73m	2.25E-12	2.1E-12 (S)	3.17E-12	6.41E-11	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.4E+01	.	1.4E+04	2.2E+01	2.7E-02	2.7E+01	1.5E+02	7.2E+01	6.2E+01	7.5E+01	2.7E-02	1.6E-20
Selenium (34)	Se-75	2.17E-10	1.3E-10 (S)	2.87E-10	9.09E-11	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.5E-01	.	1.0E+04	2.3E-01	3.0E-04	3.0E-01	1.6E+00	7.9E-01	6.8E-01	8.3E-01	3.0E-04	7.6E-19
Selenium (34)	Se-77m	0.00E+00	0.00E+00	0.00E+00	2.01E-11	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	4.6E+04	.	.	.	.	.	.	.	4.6E+04	2.0E-16
Selenium (34)	Se-79	1.87E-10	5.0E-10 (S)	2.48E-10	1.82E-15	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.7E-01	.	5.0E+08	6.3E-02	3.5E-04	3.4E-01	1.9E+00	9.2E-01	7.9E-01	9.6E-01	3.4E-04	8.3E-13
Selenium (34)	Se-79m	0.00E+00	0.00E+00	0.00E+00	1.94E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	4.7E+05	.	.	.	.	.	.	.	4.7E+05	2.9E-14
Selenium (34)	Se-81	1.15E-12	7.0E-13 (S)	1.59E-12	2.42E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	2.8E+01	.	3.8E+05	4.5E+01	5.4E-02	5.3E+01	2.9E+02	1.4E+02	1.2E+02	1.5E+02	5.4E-02	1.6E-20
Selenium (34)	Se-81m	3.53E-12	3.9E-12 (S)	5.01E-12	2.99E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	9.0E+00	.	3.1E+05	1.4E+01	1.7E-02	1.7E+01	9.3E+01	4.5E+01	3.9E+01	4.7E+01	1.7E-02	1.6E-20
Selenium (34)	Se-83	2.71E-12	1.9E-12 (S)	3.76E-12	6.82E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.2E+01	.	1.3E+03	1.9E+01	2.3E-02	2.3E+01	1.2E+02	6.1E+01	5.2E+01	6.3E+01	2.3E-02	8.3E-21
Selenium (34)	Se-83m	0.00E+00	0.00E+00	0.00E+00	2.59E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	6.7E-17
Selenium (34)	Se-84	0.00E+00	0.00E+00	0.00E+00	1.02E-10	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	8.9E+03	.	.	.	.	.	.	.	8.9E+03	4.6E-16
Silicon (14)	Si-31	1.75E-11	8.2E-12 (S)	2.54E-11	6.60E-13	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	1.8E+00	.	1.4E+06	2.8E+00	.	1.1E+03	3.7E+03	.	.	.	1.1E+00	1.1E-18
Silicon (14)	Si-32	9.61E-11	7.8E-09 (S)	1.40E-10	5.49E-15	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	3.3E-01	.	1.7E+08	1.4E-01	.	2.0E+02	6.6E+02	.	.	.	1.0E-01	4.4E-14
Silicon (14)	Si-32+D	3.38E-10	8.2E-09 (S)	4.72E-10	5.71E-13	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	9.4E-02	.	1.6E+06	4.3E-02	.	6.0E+01	2.0E+02	.	.	.	2.9E-02	1.3E-14

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Samarium (62)	Sm-139	0.00E+00	0.00E+00	0.00E+00	3.63E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	1.8E-16
Samarium (62)	Sm-140	5.03E-12	2.0E-12 (S)	7.02E-12	1.39E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.3E+00	.	6.6E+03	1.0E+01	2.9E+00	6.0E+02	4.4E+03	.	.	.	1.7E+00	6.9E-19
Samarium (62)	Sm-141	1.90E-12	7.8E-13 (S)	2.63E-12	3.53E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.7E+01	.	2.6E+03	2.7E+01	7.9E+00	1.6E+03	1.2E+04	.	.	.	4.5E+00	1.3E-18
Samarium (62)	Sm-141m	3.63E-12	1.7E-12 (S)	5.06E-12	4.89E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	8.8E+00	.	1.9E+03	1.4E+01	4.1E+00	8.4E+02	6.1E+03	.	.	.	2.3E+00	1.5E-18
Samarium (62)	Sm-142	1.42E-11	6.0E-12 (S)	2.02E-11	2.26E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.2E+00	.	4.0E+04	3.5E+00	1.0E+00	2.1E+02	1.5E+03	.	.	.	5.8E-01	1.2E-18
Samarium (62)	Sm-143	0.00E+00	0.00E+00	0.00E+00	1.28E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	7.1E+03	.	.	.	.	.	.	.	7.1E+03	1.8E-15
Samarium (62)	Sm-143m	0.00E+00	0.00E+00	0.00E+00	1.71E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	5.3E+03	.	.	.	.	.	.	.	5.3E+03	1.7E-16
Samarium (62)	Sm-145	3.09E-11	1.6E-10 (F)	4.49E-11	6.34E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.0E+00	.	1.4E+05	1.4E+00	4.6E-01	9.5E+01	6.9E+02	.	.	.	2.6E-01	3.6E-15
Samarium (62)	Sm-146	1.10E-09	3.7E-07 (F)	1.41E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.9E-02	.	.	1.4E-02	1.5E-02	3.0E+00	2.2E+01	.	.	.	5.8E-03	9.0E-09
Samarium (62)	Sm-147	1.01E-09	3.4E-07 (F)	1.29E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.2E-02	.	.	1.5E-02	1.6E-02	3.3E+00	2.4E+01	.	.	.	6.3E-03	1.0E-05
Samarium (62)	Sm-148	8.65E-10	2.9E-07 (F)	1.11E-09	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.7E-02	.	.	1.8E-02	1.9E-02	3.8E+00	2.8E+01	.	.	.	7.3E-03	7.9E-01
Samarium (62)	Sm-151	1.51E-11	2.5E-10 (F)	2.20E-11	1.21E-16	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.1E+00	.	7.6E+09	9.8E-01	9.4E-01	1.9E+02	1.4E+03	.	.	.	3.9E-01	5.5E-13
Samarium (62)	Sm-153	1.29E-10	8.6E-11 (S)	1.90E-10	1.08E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.5E-01	.	8.4E+04	3.7E-01	1.1E-01	2.2E+01	1.6E+02	.	.	.	6.3E-02	5.3E-18
Samarium (62)	Sm-155	1.36E-12	9.1E-13 (S)	1.88E-12	2.23E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.3E+01	.	4.1E+04	3.8E+01	1.1E+01	2.3E+03	1.6E+04	.	.	.	6.2E+00	4.3E-18
Samarium (62)	Sm-156	4.11E-11	2.9E-11 (S)	6.01E-11	2.54E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.8E-01	.	3.6E+04	1.2E+00	3.4E-01	7.1E+01	5.1E+02	.	.	.	2.0E-01	3.4E-18
Samarium (62)	Sm-157	0.00E+00	0.00E+00	0.00E+00	1.02E-10	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	9.0E+03	.	.	.	.	.	.	.	9.0E+03	2.2E-15
Tin (50)	Sn-106	0.00E+00	0.00E+00	0.00E+00	2.97E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	3.1E+03	.	.	.	.	.	.	.	3.1E+03	1.2E-16
Tin (50)	Sn-108	1.44E-12	6.4E-13 (S)	2.01E-12	1.63E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.2E+01	.	5.6E+03	3.5E+01	8.6E-02	4.2E+02	9.2E+02	.	.	.	8.5E-02	1.9E-20
Tin (50)	Sn-109	1.33E-12	5.0E-13 (S)	1.84E-12	5.84E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.4E+01	.	1.6E+03	3.9E+01	9.4E-02	4.6E+02	1.0E+03	.	.	.	9.3E-02	3.6E-20
Tin (50)	Sn-110	5.24E-11	2.0E-11 (S)	7.61E-11	6.63E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	6.1E-01	.	1.4E+04	9.4E-01	2.3E-03	1.1E+01	2.4E+01	.	.	.	2.3E-03	1.2E-20
Tin (50)	Sn-111	1.37E-12	7.5E-13 (S)	1.92E-12	1.21E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.3E+01	.	7.5E+03	3.7E+01	9.0E-02	4.4E+02	9.7E+02	.	.	.	8.9E-02	6.9E-20
Tin (50)	Sn-113	1.19E-10	4.0E-10 (S)	1.74E-10	1.80E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.7E-01	.	5.1E+05	3.7E-01	9.9E-04	4.9E+00	1.1E+01	.	.	.	9.8E-04	3.6E-18
Tin (50)	Sn-113m	1.61E-13	3.2E-13 (S)	2.24E-13	4.86E-13	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.0E+02	.	1.9E+06	3.2E+02	7.7E-01	3.8E+03	8.3E+03	.	.	.	7.7E-01	3.7E-19
Tin (50)	Sn-117m	1.19E-10	2.8E-10 (S)	1.74E-10	3.31E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.7E-01	.	2.8E+04	4.0E-01	9.9E-04	4.9E+00	1.1E+01	.	.	.	9.9E-04	4.5E-19
Tin (50)	Sn-119m	6.09E-11	3.3E-10 (S)	8.91E-11	4.29E-13	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	5.2E-01	.	2.1E+06	6.4E-01	1.9E-03	9.5E+00	2.1E+01	.	.	.	1.9E-03	1.9E-17
Tin (50)	Sn-121	4.09E-11	3.0E-11 (S)	6.01E-11	2.17E-14	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	7.8E-01	.	4.2E+07	1.2E+00	2.9E-03	1.4E+01	3.1E+01	.	.	.	2.9E-03	1.1E-19
Tin (50)	Sn-121m	6.38E-11	1.2E-09 (S)	9.30E-11	2.12E-13	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	5.0E-01	.	4.3E+06	1.4E-01	1.9E-03	9.1E+00	2.0E+01	.	.	.	1.8E-03	1.0E-15
Tin (50)	Sn-121m+D	9.55E-11	1.2E-09 (S)	1.40E-10	2.29E-13	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	3.3E-01	.	4.0E+06	9.4E-02	1.2E-03	6.1E+00	1.3E+01	.	.	.	1.2E-03	6.7E-16
Tin (50)	Sn-123	3.80E-10	1.3E-09 (S)	5.56E-10	2.14E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	8.4E-02	.	4.3E+05	1.2E-01	3.1E-04	1.5E+00	3.3E+00	.	.	.	3.1E-04	1.4E-18
Tin (50)	Sn-123m	2.17E-12	1.6E-12 (S)	3.05E-12	3.25E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.5E+01	.	2.8E+04	2.3E+01	5.7E-02	2.8E+02	6.1E+02	.	.	.	5.6E-02	5.5E-20
Tin (50)	Sn-125	5.39E-10	4.2E-10 (S)	7.90E-10	8.77E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	5.9E-02	.	1.0E+04	9.0E-02	2.2E-04	1.1E+00	2.3E+00	.	.	.	2.2E-04	7.4E-20
Tin (50)	Sn-125m	0.00E+00	0.00E+00	0.00E+00	8.49E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	2.5E-15
Tin (50)	Sn-126	6.97E-10	1.1E-08 (S)	1.01E-09	9.75E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	4.6E-02	.	9.4E+04	1.1E-02	1.7E-04	8.4E-01	1.8E+00	.	.	.	1.7E-04	5.0E-13
Tin (50)	Sn-126+D	7.47E-10	1.2E-08 (S)	1.08E-09	4.89E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	4.3E-02	.	1.9E+03	1.0E-02	1.6E-04	7.9E-01	1.7E+00	.	.	.	1.6E-04	4.7E-13
Tin (50)	Sn-127	2.21E-11	1.3E-11 (S)	3.17E-11	4.99E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.4E+00	.	1.8E+03	2.2E+00	5.4E-03	2.7E+01	5.9E+01	.	.	.	5.4E-03	1.7E-20
Tin (50)	Sn-127m	0.00E+00	0.00E+00	0.00E+00	1.43E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	6.4E+03	.	.	.	.	.	.	.	6.4E+03	6.6E-16
Tin (50)	Sn-128	1.21E-11	6.6E-12 (S)	1.71E-11	1.38E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.6E+00	.	6.6E+03	4.2E+00	1.0E-02	5.0E+01	1.1E+02	.	.	.	1.0E-02	1.5E-20
Tin (50)	Sn-129	0.00E+00	0.00E+00	0.00E+00	2.58E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	2.0E-16
Tin (50)	Sn-130	0.00E+00	0.00E+00	0.00E+00	2.28E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	4.0E+03	.	.	.	.	.	.	.	4.0E+03	3.8E-16
Tin (50)	Sn-130m	0.00E+00	0.00E+00	0.00E+00	2.26E-10	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	4.0E+03	.	.	.	.	.	.	.	4.0E+03	1.8E-16
Strontium (38)	Sr-79	0.00E+00	0.00E+00	0.00E+00	2.89E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	3.2E+03	.	.	.	.	.	.	.	3.2E+03	1.1E-16
Strontium (38)	Sr-80	3.37E-11	1.5E-11 (S)	4.82E-11	1.05E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	9.5E-01	.	8.7E+03	1.5E+00	3.7E+00	1.4E+02	3.0E+01	6.1E+02	2.0E+03	2.3E+02	4.9E-01	8.2E-19
Strontium (38)	Sr-81	3.86E-12	1.9E-12 (S)	5.38E-12	3.41E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	8.3E+00	.	2.7E+03	1.3E+01	3.3E+01	1.2E+03	2.7E+02	5.4E+03	1.8E+04	2.0E+03	4.3E+00	1.5E-18
Strontium (38)	Sr-82	8.50E-10	1.2E-09 (S)	1.22E-09	2.22E-14	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	3.7E-02	.	4.1E+07	5.8E-02	1.5E-01	5.4E+00	1.2E+00	2.4E+01	7.8E+01	8.9E+00	1.9E-02	1.1E-17
Strontium (38)	Sr-82+D	8.50E-10	1.2E-09 (S)	1.22E-09	2.75E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	3.7E-02	.	3.3E+03	5.8E-02	1.5E-01	5.4E+00	1.2E+00	2.4E+01	7.8E+01	8.9E+00	1.9E-02	1.1E-17
Strontium (38)	Sr-83	6.32E-11	4.0E-11 (S)	9.07E-11	2.03E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	5.0E-01	.	4.5E+03	7.9E-01	2.0E+00	7.2E+01	1.6E+01	3.2E+02	1.0E+03	1.2E+02	2.6E-01	8.3E-18
Strontium (38)	Sr-85	6.00E-11	8.6E-11 (S)	8.24E-11	1.21E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	5.3E-01	.	7.6E+03	8.4E-01	2.2E+00	7.9E+01	1.7E+01	3.5E+02	1.2E+03	1.3E+02	2.8E-01	4.3E-16
Strontium (38)	Sr-85m	4.41E-13	2.5E-13 (S)	6.10E-13	5.14E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	7.2E+01	.	1.8E+04	1.2E+02	2.9E+02	1.1E+04	2.3E+03	4.8E+04	1.6E+05	1.8E+04	3.8E+01	4.3E-17
Strontium (38)	Sr-87m	2.90E-12	1.7E-12 (S)	4.12E-12	7.73E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.1E+01	.	1.2E+04	1.7E+01	4.3E+01	1.6E+03	3.5E+02	7.1E+03	2.3E+04	2.6E+03	5.7E+00	1.6E-17
Strontium (38)	Sr-89	3.47E-10	8.2E-10 (S)	4.97E-10	4.51E-13	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	9.2E-02	.	2.0E+06	1.4E-01	3.6E-01	1.3E+01	2.9E+00	5.9E+01	1.9E+02	2.2E+01	4.7E-02	6.0E-17
Strontium (38)	Sr-90	1.51E-09	1.2E-08 (S)	1.86E-09	6.00E-14	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	2.1E-02	.	1.5E+07	1.1E-02	9.6E-02	3.5E+00	7.7E-01	1.6E+01	5.1E+01	5.8E+00	6.6E-03	1.8E-15
Strontium (38)	Sr-90+D	2.00E-09	1.2E-08 (S)	2.57E-09	1.07E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.6E-02	.	8.5E+05	7.9E-03	6.9E-02	2.5E+00	5.6E-01	1.1E+01	3.7E+01	4.2E+00	4.8E-03	1.3E-15
Strontium (38)	Sr-91	8.84E-11	5.3E-11 (S)	1.28E-10	1.81E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	3.6E-01	.	5.1E+03	5.6E-01	1.4E+00	5.1E+01	1.1E+01	2.3E+02	7.4E+02	8.5E+01	1.8E-01	1.9E-18
Strontium (38)	Sr-92	5.97E-11	3.0E-11 (S)	8.67E-11	3.53E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	5.3E-01	.	2.6E+03	8.2E-01	2.1E+00	7.5E+01	1.6E+01	3.4E+02	1.1E+03	1.3E+02	2.7E-01	7.9E-19
Strontium (38)	Sr-93	0.00E+00	0.00E+00	0.00E+00	5.87E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	2.1E-16
Strontium (38)	Sr-94	0.00E+00	0.00E+00	0.00E+00	3.82E-10	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	5.6E-17
Tantalum (73)	Ta-170	0.00E+00	0.00E+00	0.00E+00	2.62E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	.	.	3.5E+03	.	.	.	.	.	.	.	3.5E+03	7.9E-16
Tantalum (73)	Ta-172	3.36E-12	2.0E-12 (S)	4.68E-12	4.29E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	9.5E+00	.	2.1E+03	1.5E+01	1.1E+00	3.6E+05	7.9E+04	.	.	.	9.3E-01	1.2E-18
Tantalum (73)	Ta-173	1.28E-11	7.4E-12 (S)	1.84E-11	1.41E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.5E+00	.	6.5E+03	3.9E+00	2.8E-01	9.2E+04	2.0E+04	.	.	.	2.4E-01	1.5E-18
Tantalum (73)	Ta-174	5.37E-12	3.3E-12 (S)	7.61E-12	2.45E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	5.9E+00	.	3.7E+03	9.4E+00	6.8E-01	2.2E+05	4.9E+04	.	.	.	5.7E-01	1.3E-18
Tantalum (73)	Ta-175	2.62E-11	1.3E-11 (S)	3.73E-11	2.81E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.2E+00	.	3.3E+03	1.9E+00	1.4E-01	4.6E+04	9.9E+03	.	.	.	1.2E-01	2.5E-18
Tantalum (73)	Ta-176	3.23E-11	1.6E-11 (S)	4.57E-11	5.90E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	9.9E-01	.	1.5E+03	1.6E+00	1.1E-01	3.7E+04	8.1E+03	.	.	.	9.5E-02	1.6E-18
Tantalum (73)	Ta-177	1.62E-11	1.2E-11 (S)	2.35E-11	1.17E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.0E+00	.	7.8E+04	3.0E+00	2.2E-01	7.2E+04	1.6E+04	.	.	.	1.9E-01	2.2E-17
Tantalum (73)	Ta-178	0.00E+00	0.00E+00	0.00E+00	2.58E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	1.2E-14
Tantalum (73)	Ta-178m	7.96E-12	5.5E-12 (S)	1.13E-11	2.69E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	4.0E+00	.	3.4E+03	6.3E+00	4.6E-01	1.5E+05	3.3E+04	.	.	.	3.9E-01	1.9E-18
Tantalum (73)	Ta-179	8.77E-12	4.8E-11 (S)	1.27E-11	3.72E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	3.6E+00	.	2.5E+05	4.5E+00	4.1E-01	1.3E+05	2.9E+04	.	.	.	3.4E-01	1.1E-14
Tantalum (73)	Ta-180	8.44E-12	5.2E-12 (S)	1.23E-11	7.51E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	3.8E+00	.	1.2E+05	5.8E+00	4.2E-01	1.4E+05	3.0E+04	.	.	.	3.6E-01	6.2E-18
Tantalum (73)	Ta-182	2.11E-10	1.0E-09 (S)	3.05E-10	3.28E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.5E-01	.	2.8E+03	2.2E-01	1.7E-02	5.6E+03	1.2E+03	.	.	.	1.4E-02	8.4E-17
Tantalum (73)	Ta-182m	5.72E-13	9.7E-13 (S)	7.90E-13	5.68E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	5.6E+01	.	1.6E+04	9.0E+01	6.6E+00	2.1E+06	4.7E+05	.	.	.	5.5E+00	3.1E-18
Tantalum (73)	Ta-183	2.31E-10	2.5E-10 (S)	3.38E-10	6.47E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.4E-01	.	1.4E+04	2.1E-01	1.5E-02	5.0E+03	1.1E+03	.	.	.	1.3E-02	3.4E-18
Tantalum (73)	Ta-184	9.44E-11	4.6E-11 (S)	1.37E-10	3.88E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	3.4E-01	.	2.4E+03	5.2E-01	3.8E-02	1.2E+04	2.7E+03	.	.	.	3.2E-02	6.0E-19
Tantalum (73)	Ta-185	4.33E-12	3.3E-12 (S)	6.14E-12	3.44E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	7.4E+00	.	2.7E+04	1.2E+01	8.4E-01	2.8E+05	6.0E+04	.	.	.	7.1E-01	1.3E-18
Tantalum (73)	Ta-186	1.55E-12	7.4E-13 (S)	2.13E-12	3.50E-10	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.1E+01	.	2.6E+03	3.3E+01	2.4E+00	8.0E+05	1.7E+05	.	.	.	2.0E+00	7.9E-19
Terbium (65)	Tb-146	0.00E+00	0.00E+00	0.00E+00	9.59E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	9.5E+02	.	.	.	.	.	.	.	9.5E+02	1.1E-17
Terbium (65)	Tb-147	1.13E-11	5.3E-12 (S)	1.60E-11	5.62E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.8E+00	.	1.6E+03	4.5E+00	7.9E-02	2.7E+02	1.9E+03	.	.	.	7.5E-02	2.2E-19
Terbium (65)	Tb-147m	0.00E+00	0.00E+00	0.00E+00	5.05E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.8E+03	.	.	.	.	.	.	.	1.8E+03	9.8E-17
Terbium (65)	Tb-148	8.72E-12	4.2E-12 (S)	1.23E-11	6.12E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	3.7E+00	.	1.5E+03	5.8E+00	1.0E-01	3.5E+02	2.5E+03	.	.	.	9.8E-02	1.7E-19
Terbium (65)	Tb-148m	0.00E+00	0.00E+00	0.00E+00	7.83E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.2E+03	.	.	.	.	.	.	.	1.2E+03	7.5E-17
Terbium (65)	Tb-149	2.09E-11	4.1E-10 (S)	2.99E-11	3.47E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.5E+00	.	2.6E+03	2.4E+00	4.2E-02	1.4E+02	1.0E+03	.	.	.	4.0E-02	2.9E-19
Terbium (65)	Tb-149m	0.00E+00	0.00E+00	0.00E+00	3.41E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.7E+03	.	.	.	.	.	.	.	2.7E+03	3.3E-16
Terbium (65)	Tb-150	2.28E-11	8.6E-12 (S)	3.26E-11	6.50E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.4E+00	.	1.4E+03	2.2E+00	3.9E-02	1.3E+02	9.5E+02	.	.	.	3.7E-02	2.3E-19
Terbium (65)	Tb-150m	0.00E+00	0.00E+00	0.00E+00	6.19E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	2.5E-16
Terbium (65)	Tb-151	4.22E-11	2.3E-11 (S)	6.04E-11	2.39E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	7.5E-01	.	3.8E+03	1.2E+00	2.1E-02	7.0E+01	5.1E+02	.	.	.	2.0E-02	6.3E-19
Terbium (65)	Tb-151m	0.00E+00	0.00E+00	0.00E+00	1.75E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	5.2E+04	.	.	.	.	.	.	.	5.2E+04	6.5E-16

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Terbium (65)	Tb-152	9.41E-11	3.6E-11 (S)	1.36E-10	3.85E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	3.4E-01	.	2.4E+03	5.2E-01	9.3E-03	3.1E+01	2.3E+02	.	.	.	8.9E-03	2.8E-19
Terbium (65)	Tb-152m	0.00E+00	0.00E+00	0.00E+00	1.80E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	5.1E+03	.	.	.	.	.	.	.	5.1E+03	6.4E-16
Terbium (65)	Tb-153	3.79E-11	2.6E-11 (S)	5.47E-11	7.38E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	8.4E-01	.	1.2E+04	1.3E+00	2.3E-02	7.8E+01	5.7E+02	.	.	.	2.2E-02	2.2E-18
Terbium (65)	Tb-154	6.46E-11	3.0E-11 (S)	9.16E-11	6.12E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	4.9E-01	.	1.5E+03	7.8E-01	1.4E-02	4.6E+01	3.4E+02	.	.	.	1.3E-02	5.2E-19
Terbium (65)	Tb-155	3.73E-11	3.4E-11 (S)	5.41E-11	3.41E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	8.5E-01	.	2.7E+04	1.3E+00	2.3E-02	7.8E+01	5.7E+02	.	.	.	2.2E-02	5.2E-18
Terbium (65)	Tb-156	1.26E-10	1.2E-10 (S)	1.80E-10	4.89E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.5E-01	.	1.9E+03	4.0E-01	7.0E-03	2.4E+01	1.7E+02	.	.	.	6.7E-03	1.6E-18
Terbium (65)	Tb-156m	2.00E-11	2.2E-11 (S)	2.87E-11	4.86E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.6E+00	.	1.9E+05	2.5E+00	4.4E-02	1.5E+02	1.1E+03	.	.	.	4.2E-02	1.9E-18
Terbium (65)	Tb-156n	1.16E-11	1.2E-11 (S)	1.68E-11	5.18E-13	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.7E+00	.	1.8E+06	4.2E+00	7.5E-02	2.5E+02	1.8E+03	.	.	.	7.2E-02	7.0E-19
Terbium (65)	Tb-157	5.63E-12	1.0E-10 (F)	8.19E-12	5.11E-13	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	5.7E+00	.	1.8E+06	2.7E+00	1.5E-01	5.2E+02	3.8E+03	.	.	.	1.4E-01	1.6E-13
Terbium (65)	Tb-158	1.30E-10	4.7E-09 (F)	1.86E-10	1.98E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.5E-01	.	4.6E+03	1.1E-01	6.8E-03	2.3E+01	1.7E+02	.	.	.	6.2E-03	1.8E-14
Terbium (65)	Tb-160	2.37E-10	8.2E-10 (S)	3.44E-10	2.86E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.3E-01	.	3.2E+03	2.0E-01	3.7E-03	1.2E+01	9.0E+01	.	.	.	3.5E-03	1.2E-17
Terbium (65)	Tb-161	1.33E-10	1.6E-10 (S)	1.95E-10	4.51E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.4E-01	.	2.0E+05	3.6E-01	6.5E-03	2.2E+01	1.6E+02	.	.	.	6.2E-03	2.0E-18
Terbium (65)	Tb-162	0.00E+00	0.00E+00	0.00E+00	2.76E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.3E+03	.	.	.	.	.	.	.	3.3E+03	8.0E-16
Terbium (65)	Tb-163	1.05E-12	7.6E-13 (S)	1.44E-12	1.92E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	3.0E+01	.	4.8E+03	4.9E+01	8.8E-01	2.9E+03	2.1E+04	.	.	.	8.4E-01	5.2E-19
Terbium (65)	Tb-164	0.00E+00	0.00E+00	0.00E+00	6.25E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	1.4E-16
Terbium (65)	Tb-165	0.00E+00	0.00E+00	0.00E+00	2.20E-10	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	4.1E+03	.	.	.	.	.	.	.	4.1E+03	2.9E-16
Technetium (43)	Tc-101	8.20E-13	5.1E-13 (S)	1.13E-12	8.17E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	3.9E+01	.	1.1E+04	6.3E+01	2.3E+01	7.5E+04	1.6E+03	4.3E+05	5.6E+04	1.1E+03	1.2E+01	3.3E-18
Technetium (43)	Tc-102	0.00E+00	0.00E+00	0.00E+00	2.46E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	3.7E+04	.	.	.	.	.	.	.	3.7E+04	6.6E-17
Technetium (43)	Tc-102m	0.00E+00	0.00E+00	0.00E+00	6.53E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	1.4E+03	.	.	.	.	.	.	.	1.4E+03	1.2E-16
Technetium (43)	Tc-104	3.81E-12	1.5E-12 (S)	5.26E-12	6.03E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	8.4E+00	.	1.5E+03	1.4E+01	4.9E+00	1.6E+04	3.5E+02	9.2E+04	1.2E+04	2.4E+02	2.5E+00	9.3E-19
Technetium (43)	Tc-105	0.00E+00	0.00E+00	0.00E+00	2.04E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	4.5E+03	.	.	.	.	.	.	.	4.5E+03	7.1E-16
Technetium (43)	Tc-91	0.00E+00	0.00E+00	0.00E+00	6.60E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	1.4E+03	.	.	.	.	.	.	.	1.4E+03	7.8E-17
Technetium (43)	Tc-91m	0.00E+00	0.00E+00	0.00E+00	3.57E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	2.6E+03	.	.	.	.	.	.	.	2.6E+03	1.5E-16
Technetium (43)	Tc-92	0.00E+00	0.00E+00	0.00E+00	9.85E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	9.3E+02	.	.	.	.	.	.	.	9.3E+02	7.2E-17
Technetium (43)	Tc-93	5.73E-12	2.6E-12 (S)	7.99E-12	4.13E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	5.6E+00	.	2.2E+03	8.9E+00	3.2E+00	1.1E+04	2.3E+02	6.1E+04	7.9E+03	1.6E+02	1.6E+00	4.9E-18
Technetium (43)	Tc-93m	2.36E-12	1.1E-12 (S)	3.29E-12	2.59E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.3E+01	.	3.5E+03	2.2E+01	7.9E+00	2.6E+04	5.6E+02	1.5E+05	1.9E+04	3.9E+02	4.0E+00	3.2E-18
Technetium (43)	Tc-94	1.70E-11	7.8E-12 (S)	2.38E-11	6.69E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.9E+00	.	1.4E+03	3.0E+00	1.1E+00	3.6E+03	7.8E+01	2.0E+04	2.7E+03	5.3E+01	5.5E-01	3.0E-18
Technetium (43)	Tc-94m	6.47E-12	2.8E-12 (S)	9.09E-12	5.02E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	4.9E+00	.	1.8E+03	7.8E+00	2.8E+00	9.3E+03	2.0E+02	5.3E+04	7.0E+03	1.4E+02	1.4E+00	1.4E-18
Technetium (43)	Tc-95	1.56E-11	7.4E-12 (S)	2.17E-11	1.98E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	2.0E+00	.	4.6E+03	3.3E+00	1.2E+00	3.9E+03	8.5E+01	2.2E+04	2.9E+03	5.8E+01	6.0E-01	1.4E-17
Technetium (43)	Tc-95m	4.93E-11	1.3E-10 (S)	6.87E-11	1.68E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	6.5E-01	.	5.4E+03	9.2E-01	3.8E-01	1.2E+03	2.7E+01	7.1E+03	9.2E+02	1.8E+01	1.9E-01	3.1E-16
Technetium (43)	Tc-96	9.23E-11	5.7E-11 (S)	1.27E-10	6.31E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	3.5E-01	.	1.4E+03	5.6E-01	2.0E-01	6.7E+02	1.5E+01	3.8E+03	5.0E+02	1.0E+01	1.0E-01	1.2E-17
Technetium (43)	Tc-96m	9.64E-13	5.8E-13 (S)	1.34E-12	1.07E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	3.3E+01	.	8.5E+04	5.3E+01	1.9E+01	6.3E+04	1.4E+03	3.6E+05	4.7E+04	9.5E+02	9.7E+00	9.5E-18
Technetium (43)	Tc-97	7.33E-12	1.3E-10 (S)	1.06E-11	1.03E-13	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	4.3E+00	.	8.9E+06	4.6E-01	2.4E+00	8.0E+03	1.7E+02	4.6E+04	6.0E+03	1.2E+02	3.5E-01	9.2E-09
Technetium (43)	Tc-97m	6.43E-11	3.9E-10 (S)	9.33E-11	1.67E-13	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	5.0E-01	.	5.5E+06	6.4E-01	2.8E-01	9.1E+02	2.0E+01	5.2E+03	6.8E+02	1.4E+01	1.4E-01	3.4E-16
Technetium (43)	Tc-98	1.79E-10	3.2E-09 (S)	2.54E-10	3.53E-10	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.8E-01	.	2.6E+03	1.9E-02	1.0E-01	3.3E+02	7.3E+00	1.9E+03	2.5E+02	5.0E+00	1.5E-02	6.3E-10
Technetium (43)	Tc-99	7.44E-11	1.0E-09 (S)	1.08E-10	1.52E-14	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	4.3E-01	.	6.0E+07	4.5E-02	2.4E-01	7.9E+02	1.7E+01	4.5E+03	5.9E+02	1.2E+01	3.5E-02	7.5E-11
Technetium (43)	Tc-99m	2.15E-12	1.6E-12 (S)	3.06E-12	2.88E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.5E+01	.	3.2E+04	2.3E+01	8.5E+00	2.8E+04	6.1E+02	1.6E+05	2.1E+04	4.1E+02	4.3E+00	3.0E-17
Tellurium (52)	Te-113	0.00E+00	0.00E+00	0.00E+00	5.74E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	6.0E-17
Tellurium (52)	Te-114	3.26E-12	2.3E-12 (V)	4.48E-12	3.28E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	9.8E+00	.	2.8E+03	1.6E+01	7.7E-01	2.7E+02	1.2E+03	.	7.1E+02	1.7E+02	6.8E-01	2.3E-19
Tellurium (52)	Te-115	0.00E+00	0.00E+00	0.00E+00	5.74E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	2.1E-16
Tellurium (52)	Te-115m	0.00E+00	0.00E+00	0.00E+00	6.75E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	1.4E+03	.	.	.	.	.	.	.	1.4E+03	2.1E-16
Tellurium (52)	Te-116	2.11E-11	1.1E-11 (S)	3.03E-11	1.99E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.5E+00	.	4.6E+04	2.4E+00	1.1E-01	4.0E+01	1.8E+02	.	1.0E+02	2.5E+01	1.0E-01	3.4E-19
Tellurium (52)	Te-117	3.98E-12	2.0E-12 (V)	5.58E-12	4.01E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	8.0E+00	.	2.3E+03	1.3E+01	6.2E-01	2.2E+02	9.8E+02	.	5.7E+02	1.3E+02	5.4E-01	7.8E-19
Tellurium (52)	Te-118	4.77E-10	3.4E-10 (S)	6.95E-10	7.10E-13	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	6.7E-02	.	1.3E+06	1.0E-01	5.0E-03	1.7E+00	7.8E+00	.	4.6E+00	1.1E+00	4.4E-03	8.8E-19
Tellurium (52)	Te-118+D	4.77E-10	3.4E-10 (S)	6.95E-10	1.98E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	6.7E-02	.	4.6E+03	1.0E-01	5.0E-03	1.7E+00	7.8E+00	.	4.6E+00	1.1E+00	4.4E-03	8.8E-19
Tellurium (52)	Te-119	1.83E-11	8.7E-12 (S)	2.59E-11	1.89E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.7E+00	.	4.8E+03	2.8E+00	1.3E-01	4.7E+01	2.1E+02	.	1.2E+02	2.9E+01	1.2E-01	2.7E-18
Tellurium (52)	Te-119m	6.81E-11	5.4E-11 (V)	9.51E-11	3.85E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.7E-01	.	2.4E+03	7.5E-01	3.6E-02	1.3E+01	5.7E+01	.	3.3E+01	7.8E+00	3.2E-02	5.1E-18
Tellurium (52)	Te-121	4.08E-11	5.3E-11 (V)	5.61E-11	1.38E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	7.8E-01	.	6.6E+03	1.3E+00	6.1E-02	2.2E+01	9.7E+01	.	5.6E+01	1.3E+01	5.4E-02	3.6E-17
Tellurium (52)	Te-121m	1.75E-10	5.6E-10 (S)	2.32E-10	4.92E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.8E-01	.	1.9E+04	2.8E-01	1.5E-02	5.2E+00	2.4E+01	.	1.4E+01	3.2E+00	1.3E-02	6.9E-17
Tellurium (52)	Te-123	2.93E-11	8.3E-11 (V)	3.56E-11	1.23E-15	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.1E+00	.	7.4E+08	4.5E-01	9.7E-02	3.4E+01	1.5E+02	.	8.9E+01	2.1E+01	7.4E-02	5.7E-01
Tellurium (52)	Te-123m	1.11E-10	4.8E-10 (S)	1.52E-10	3.16E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.9E-01	.	2.9E+04	4.4E-01	2.3E-02	8.0E+00	3.6E+01	.	2.1E+01	4.9E+00	2.0E-02	8.3E-17
Tellurium (52)	Te-125m	9.00E-11	3.9E-10 (S)	1.27E-10	1.57E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	3.5E-01	.	5.8E+05	5.5E-01	2.7E-02	9.5E+00	4.3E+01	.	2.5E+01	5.9E+00	2.4E-02	4.9E-17
Tellurium (52)	Te-127	2.73E-11	1.8E-11 (S)	4.02E-11	1.26E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.2E+00	.	7.3E+05	1.8E+00	8.6E-02	3.0E+01	1.4E+02	.	7.9E+01	1.9E+01	7.6E-02	1.1E-18
Tellurium (52)	Te-127m	2.34E-10	9.4E-10 (S)	3.24E-10	5.21E-13	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.4E-01	.	1.8E+06	2.1E-01	1.1E-02	3.7E+00	1.7E+01	.	9.8E+00	2.3E+00	9.4E-03	3.7E-17
Tellurium (52)	Te-129	4.62E-12	3.1E-12 (V)	6.60E-12	1.47E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	6.9E+00	.	6.2E+04	1.1E+01	5.2E-01	1.8E+02	8.3E+02	.	4.8E+02	1.1E+02	4.6E-01	8.2E-19
Tellurium (52)	Te-129m	4.14E-10	8.1E-10 (S)	5.94E-10	7.86E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	7.7E-02	.	1.2E+05	1.2E-01	5.8E-03	2.0E+00	9.2E+00	.	5.3E+00	1.3E+00	5.1E-03	6.3E-18
Tellurium (52)	Te-131	5.85E-12	6.6E-12 (V)	8.23E-12	1.03E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	5.4E+00	.	8.9E+03	8.7E+00	4.2E-01	1.5E+02	6.6E+02	.	3.8E+02	9.1E+01	3.7E-01	2.4E-19
Tellurium (52)	Te-131m	2.19E-10	2.6E-10 (V)	3.14E-10	3.69E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.5E-01	.	2.5E+03	2.3E-01	1.1E-02	3.9E+00	1.7E+01	.	1.0E+01	2.4E+00	9.7E-03	4.5E-19
Tellurium (52)	Te-132	4.58E-10	5.7E-10 (V)	6.57E-10	5.08E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	7.0E-02	.	1.8E+04	1.1E-01	5.3E-03	1.8E+00	8.3E+00	.	4.8E+00	1.1E+00	4.6E-03	5.6E-19
Tellurium (52)	Te-133	5.14E-12	5.8E-12 (V)	7.28E-12	3.11E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	6.2E+00	.	2.9E+03	9.8E+00	4.7E-01	1.7E+02	7.5E+02	.	4.3E+02	1.0E+02	4.2E-01	1.4E-19
Tellurium (52)	Te-133m	2.15E-11	2.3E-11 (V)	3.06E-11	4.77E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.5E+00	.	1.9E+03	2.3E+00	1.1E-01	4.0E+01	1.8E+02	.	1.0E+02	2.4E+01	9.9E-02	1.4E-19
Tellurium (52)	Te-134	7.46E-12	8.0E-12 (V)	1.04E-11	2.12E-10	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.3E+00	.	4.3E+03	6.9E+00	3.3E-01	1.2E+02	5.2E+02	.	3.0E+02	7.2E+01	2.9E-01	3.2E-19
Thorium (90)	Th-223	0.00E+00	0.00E+00	0.00E+00	1.51E-11	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	6.1E+04	.	.	.	.	.	.	.	6.1E+04	2.7E-17
Thorium (90)	Th-224	0.00E+00	0.00E+00	0.00E+00	5.33E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	1.3E-16
Thorium (90)	Th-226	1.78E-11	4.2E-09 (S)	2.50E-11	1.74E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.8E+00	.	5.3E+05	2.9E+00	3.4E+00	1.5E+03	1.5E+04	.	.	.	8.3E-01	1.1E-18
Thorium (90)	Th-227	1.30E-09	9.5E-07 (S)	1.90E-09	2.85E-11	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	2.5E-02	.	3.2E+04	3.7E-02	4.5E-02	1.9E+01	2.0E+02	.	.	.	1.1E-02	1.3E-17
Thorium (90)	Th-228	2.91E-09	3.6E-06 (S)	4.00E-09	4.48E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.1E-02	.	2.0E+06	1.4E-02	2.2E-02	9.2E+00	9.3E+01	.	.	.	4.8E-03	2.2E-16
Thorium (90)	Th-229	6.04E-09	4.7E-06 (S)	7.85E-09	1.81E-11	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	5.3E-03	.	5.1E+04	2.5E-03	1.1E-02	4.7E+00	4.7E+01	.	.	.	1.5E-03	2.6E-13
Thorium (90)	Th-229+D	9.13E-09	5.4E-06 (S)	1.20E-08	1.92E-11	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	3.5E-03	.	4.8E+04	1.7E-03	7.2E-03	3.1E+00	3.1E+01	.	.	.	9.7E-04	1.7E-13
Thorium (90)	Th-230	2.47E-09	9.2E-07 (F)	3.22E-09	8.14E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.3E-02	.	1.1E+07	6.2E-03	2.7E-02	1.1E+01	1.2E+02	.	.	.	3.6E-03	6.5E-12
Thorium (90)	Th-231	5.93E-11	4.1E-11 (S)	8.69E-11	2.40E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	5.4E-01	.	3.8E+05	8.2E-01	9.9E-01	4.2E+02	4.3E+03	.	.	.	2.4E-01	1.7E-17
Thorium (90)	Th-232	2.73E-09	1.2E-06 (S)	3.60E-09	4.17E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.2E-02	.	2.2E+07	5.5E-03	2.4E-02	1.0E+01	1.0E+02	.	.	.	3.2E-03	1.1E-06
Thorium (90)	Th-232+D	3.08E-08	2.4E-06 (S)	4.22E-08	2.20E-10	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.0E-03	.	4.1E+03	4.7E-04	2.0E-03	8.7E-01	8.8E+00	.	.	.	2.8E-04	9.5E-08
Thorium (90)	Th-233	1.07E-12	1.0E-12 (S)	1.50E-12	8.58E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	3.0E+01	.	1.1E+05	4.8E+01	5.7E+01	2.5E+04	2.5E+05	.	.	.	1.4E+01	1.4E-17
Thorium (90)	Th-234	6.24E-10	8.3E-10 (S)	9.17E-10	1.73E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	5.1E-02	.	5.3E+05	7.7E-02	9.4E-02	4.0E+01	4.0E+02	.	.	.	2.3E-02	3.7E-17
Thorium (90)	Th-234+D	6.24E-10	8.3E-10 (S)	9.17E-10	6.66E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	5.1E-02	.	1.4E+05	7.7E-02	9.4E-02	4.0E+01	4.0E+02	.	.	.	2.3E-02	3.7E-17
Thorium (90)	Th-235	0.00E+00	0.00E+00	0.00E+00	1.38E-11	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	6.6E+04	.	.	.	.	.	.	.	6.6E+04	2.2E-14
Thorium (90)	Th-236	5.28E-12	3.5E-12 (S)	7.44E-12	8.14E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	6.0E+00	.	1.1E+05	9.6E+00	1.2E+01	5.0E+03	5.0E+04	.	.	.	2.8E+00	4.9E-18
Titanium (22)	Ti-44	6.91E-10	9.3E-09 (S)	9.81E-10	2.64E-11	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	4.6E-02	.	3.5E+04	2.3E-02	2.8E-03	4.3E-01	1.9E-01	.	.	.	2.3E-03	6.3E-16
Titanium (22)	Ti-44+D	7.34E-10	9.3E-09 (S)	1.04E-09	5.68E-10	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	4.3E-02	.	1.6E+03	2.2E-02	2.6E-03	4.1E-01	1.8E-01	.	.	.	2.2E-03	6.0E-16
Titanium (22)	Ti-45	1.74E-11	8.3E-12 (S)	2.52E-11	2.13E-10	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	1.8E+00	.	4.3E+

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Thallium (81)	Tl-190m	0.00E+00	0.00E+00	0.00E+00	6.09E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	2.1E-16
Thallium (81)	Tl-194	2.12E-12	1.0E-12 (S)	2.90E-12	2.23E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.5E+01	.	4.1E+03	2.5E+01	2.0E-01	1.5E+02	2.1E+02	.	.	.	1.9E-01	2.4E-19
Thallium (81)	Tl-194m	2.10E-12	1.3E-12 (S)	2.85E-12	6.22E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.5E+01	.	1.5E+03	2.5E+01	2.0E-01	1.5E+02	2.2E+02	.	.	.	2.0E-01	2.5E-19
Thallium (81)	Tl-195	1.60E-12	1.4E-12 (S)	2.16E-12	3.19E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	2.0E+01	.	2.9E+03	3.3E+01	2.7E-01	2.0E+02	2.9E+02	.	.	.	2.6E-01	7.0E-19
Thallium (81)	Tl-196	3.16E-12	1.8E-12 (S)	4.27E-12	4.86E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.0E+01	.	1.9E+03	1.7E+01	1.3E-01	9.9E+01	1.4E+02	.	.	.	1.3E-01	5.6E-19
Thallium (81)	Tl-197	1.74E-12	2.8E-12 (S)	2.38E-12	1.11E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.8E+01	.	8.3E+03	3.0E+01	2.4E-01	1.8E+02	2.6E+02	.	.	.	2.4E-01	1.6E-18
Thallium (81)	Tl-198	5.59E-12	3.3E-12 (S)	7.47E-12	5.27E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	5.7E+00	.	1.7E+03	9.5E+00	7.7E-02	5.7E+01	8.3E+01	.	.	.	7.5E-02	9.3E-19
Thallium (81)	Tl-198m	3.53E-12	3.7E-12 (S)	4.76E-12	2.94E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	9.0E+00	.	3.1E+03	1.5E+01	1.2E-01	8.9E+01	1.3E+02	.	.	.	1.2E-01	5.2E-19
Thallium (81)	Tl-199	2.07E-12	3.4E-12 (S)	2.81E-12	5.65E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.5E+01	.	1.6E+04	2.5E+01	2.0E-01	1.5E+02	2.2E+02	.	.	.	2.0E-01	3.5E-18
Thallium (81)	Tl-200	1.67E-11	1.1E-11 (S)	2.23E-11	3.28E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.9E+00	.	2.8E+03	3.2E+00	2.6E-02	1.9E+01	2.8E+01	.	.	.	2.5E-02	1.6E-18
Thallium (81)	Tl-201	1.00E-11	1.9E-11 (S)	1.38E-11	1.76E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	3.2E+00	.	5.2E+04	5.2E+00	4.2E-02	3.1E+01	4.5E+01	.	.	.	4.1E-02	7.1E-18
Thallium (81)	Tl-202	4.03E-11	3.7E-11 (S)	5.44E-11	1.10E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	7.9E-01	.	8.3E+03	1.3E+00	1.1E-02	7.8E+00	1.1E+01	.	.	.	1.0E-02	7.2E-18
Thallium (81)	Tl-204	1.57E-10	1.6E-09 (S)	2.22E-10	3.14E-13	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	2.0E-01	.	2.9E+06	1.7E-01	2.6E-03	1.9E+00	2.8E+00	.	.	.	2.5E-03	2.0E-16
Thallium (81)	Tl-206	0.00E+00	0.00E+00	0.00E+00	3.98E-13	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	2.3E+06	.	.	.	.	.	.	.	2.3E+06	3.9E-13
Thallium (81)	Tl-206m	0.00E+00	0.00E+00	0.00E+00	6.00E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	1.5E+03	.	.	.	.	.	.	.	1.5E+03	2.3E-16
Thallium (81)	Tl-207	0.00E+00	0.00E+00	0.00E+00	9.21E-13	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	9.9E+05	.	.	.	.	.	.	.	9.9E+05	1.9E-13
Thallium (81)	Tl-208	0.00E+00	0.00E+00	0.00E+00	9.34E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	9.8E+02	.	.	.	.	.	.	.	9.8E+02	1.2E-16
Thallium (81)	Tl-209	0.00E+00	0.00E+00	0.00E+00	5.62E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	1.6E+03	.	.	.	.	.	.	.	1.6E+03	1.5E-16
Thallium (81)	Tl-210	0.00E+00	0.00E+00	0.00E+00	7.26E-10	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	1.3E+03	.	.	.	.	.	.	.	1.3E+03	6.8E-17
Thulium (69)	Tm-161	2.94E-12	1.6E-12 (S)	4.13E-12	3.25E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.1E+01	.	2.8E+03	1.7E+01	.	1.0E+03	7.5E+03	.	.	.	6.6E+00	6.3E-18
Thulium (69)	Tm-162	2.02E-12	9.7E-13 (S)	2.79E-12	5.05E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	1.8E+03	2.6E+01	.	1.5E+03	1.1E+04	.	.	.	9.6E+00	6.7E-18
Thulium (69)	Tm-163	4.56E-12	2.4E-12 (S)	6.41E-12	3.31E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.0E+00	.	2.8E+03	1.1E+01	.	6.6E+02	4.8E+03	.	.	.	4.3E+00	1.5E-17
Thulium (69)	Tm-164	0.00E+00	0.00E+00	0.00E+00	1.94E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.7E+03	.	.	.	.	.	.	.	4.7E+03	3.0E-16
Thulium (69)	Tm-165	4.51E-11	2.4E-11 (S)	6.50E-11	1.31E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.1E-01	.	7.0E+03	1.1E+00	.	6.5E+01	4.8E+02	.	.	.	4.3E-01	2.5E-17
Thulium (69)	Tm-166	2.95E-11	1.5E-11 (S)	4.19E-11	5.14E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.1E+00	.	1.8E+03	1.7E+00	.	1.0E+02	7.4E+02	.	.	.	6.6E-01	9.9E-18
Thulium (69)	Tm-167	9.71E-11	1.4E-10 (S)	1.42E-10	2.95E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E-01	.	3.1E+04	5.0E-01	.	3.0E+01	2.2E+02	.	.	.	2.0E-01	8.6E-17
Thulium (69)	Tm-168	1.21E-10	5.0E-10 (S)	1.74E-10	3.03E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.6E-01	.	3.0E+03	4.0E-01	.	2.4E+01	1.8E+02	.	.	.	1.6E-01	7.0E-16
Thulium (69)	Tm-170	2.39E-10	8.9E-10 (S)	3.50E-10	8.33E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.3E-01	.	1.1E+06	1.9E-01	.	1.2E+01	8.8E+01	.	.	.	7.8E-02	4.9E-16
Thulium (69)	Tm-171	1.88E-11	1.2E-10 (S)	2.76E-11	9.03E-14	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.7E+00	.	1.0E+07	2.0E+00	.	1.5E+02	1.1E+03	.	.	.	9.2E-01	3.1E-14
Thulium (69)	Tm-172	2.92E-10	1.6E-10 (S)	4.28E-10	1.25E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.1E-01	.	7.3E+03	1.7E-01	.	9.9E+00	7.2E+01	.	.	.	6.5E-02	8.5E-18
Thulium (69)	Tm-173	4.55E-11	2.2E-11 (S)	6.64E-11	9.37E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.0E-01	.	9.8E+03	1.1E+00	.	6.4E+01	4.7E+02	.	.	.	4.2E-01	7.1E-18
Thulium (69)	Tm-174	0.00E+00	0.00E+00	0.00E+00	4.42E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	2.1E+03	.	.	.	.	.	.	.	2.1E+03	3.8E-16
Thulium (69)	Tm-175	1.36E-12	9.2E-13 (S)	1.89E-12	2.72E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.3E+01	.	3.4E+03	3.8E+01	.	2.2E+03	1.6E+04	.	.	.	1.4E+01	7.5E-18
Thulium (69)	Tm-176	0.00E+00	0.00E+00	0.00E+00	5.18E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.8E+03	.	.	.	.	.	.	.	1.8E+03	1.1E-16
Uranium (92)	U-227	0.00E+00	0.00E+00	0.00E+00	2.64E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	1.7E-15
Uranium (92)	U-228	0.00E+00	0.00E+00	0.00E+00	8.65E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	.	.	1.1E+06	.	.	.	.	.	.	.	1.1E+06	4.3E-13
Uranium (92)	U-230	5.65E-09	1.5E-06 (S)	8.05E-09	2.46E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	5.6E-03	.	3.7E+06	8.8E-03	6.7E-02	2.7E+00	1.3E-01	2.1E-01	3.1E-01	4.3E-01	3.1E-03	4.2E-18
Uranium (92)	U-231	5.74E-11	5.7E-11 (S)	8.40E-11	1.45E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	5.6E-01	.	6.3E+04	8.5E-01	6.4E+00	2.6E+02	1.2E+01	2.0E+01	3.0E+01	4.1E+01	3.0E-01	8.3E-17
Uranium (92)	U-232	7.85E-09	2.5E-06 (S)	1.04E-08	5.65E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.1E-03	.	1.6E+07	2.1E-03	5.2E-02	2.1E+00	9.9E-02	1.6E-01	2.4E-01	3.3E-01	1.3E-03	2.2E-15
Uranium (92)	U-233	1.94E-09	7.7E-07 (S)	2.62E-09	5.65E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.6E-02	.	1.6E+07	7.5E-03	2.1E-01	8.3E+00	3.9E-01	6.3E-01	9.7E-01	1.3E+00	4.9E-03	1.9E-11
Uranium (92)	U-234	1.91E-09	7.5E-07 (S)	2.58E-09	3.15E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.7E-02	.	2.9E+07	7.7E-03	2.1E-01	8.4E+00	4.0E-01	6.4E-01	9.8E-01	1.3E+00	5.0E-03	3.0E-11
Uranium (92)	U-235	1.88E-09	6.8E-07 (S)	2.55E-09	3.76E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.7E-02	.	2.4E+04	7.8E-03	2.1E-01	8.5E+00	4.0E-01	6.5E-01	9.9E-01	1.4E+00	5.0E-03	8.6E-08
Uranium (92)	U-235+D	1.94E-09	6.8E-07 (S)	2.64E-09	4.01E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.6E-02	.	2.3E+04	7.5E-03	2.0E-01	8.2E+00	3.9E-01	6.3E-01	9.6E-01	1.3E+00	4.9E-03	8.4E-08
Uranium (92)	U-235m	2.06E-16	5.1E-17 (M)	2.87E-16	0.00E+00	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.5E+05	.	.	2.5E+05	1.9E+06	7.6E+07	3.6E+06	5.8E+06	8.8E+06	1.2E+07	8.6E+04	1.0E-13
Uranium (92)	U-236	1.80E-09	6.9E-07 (S)	2.43E-09	1.89E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.8E-02	.	4.8E+07	8.1E-03	2.2E-01	9.0E+00	4.2E-01	6.8E-01	1.0E+00	1.4E+00	5.3E-03	3.0E-09
Uranium (92)	U-237	1.35E-10	2.0E-10 (S)	1.97E-10	2.86E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	2.4E-01	.	3.2E+04	3.6E-01	2.7E+00	1.1E+02	5.2E+00	8.4E+00	1.3E+01	1.8E+01	1.3E-01	5.8E-17
Uranium (92)	U-238	1.73E-09	6.4E-07 (S)	2.34E-09	1.62E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.8E-02	.	5.7E+07	8.5E-03	2.3E-01	9.3E+00	4.4E-01	7.1E-01	1.1E+00	1.5E+00	5.5E-03	6.0E-07
Uranium (92)	U-238+D	2.35E-09	6.4E-07 (S)	3.26E-09	7.26E-12	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.4E-02	.	1.3E+05	6.1E-03	1.7E-01	6.7E+00	3.2E-01	5.1E-01	7.8E-01	1.1E+00	4.0E-03	4.4E-07
Uranium (92)	U-239	2.01E-12	1.7E-12 (S)	2.86E-12	1.02E-11	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.6E+01	.	9.0E+04	2.5E+01	1.9E+02	7.6E+03	3.6E+02	5.8E+02	8.9E+02	1.2E+03	8.7E+00	9.6E-18
Uranium (92)	U-240	1.87E-10	8.4E-11 (S)	2.74E-10	9.78E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.7E-01	.	9.3E+05	2.6E-01	2.0E+00	7.9E+01	3.8E+00	6.0E+00	9.2E+00	1.3E+01	9.2E-02	3.7E-18
Uranium (92)	U-242	2.34E-12	1.4E-12 (S)	3.23E-12	9.53E-12	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.4E+01	.	9.6E+04	2.2E+01	1.7E+02	6.7E+03	3.2E+02	5.1E+02	7.8E+02	1.1E+03	7.6E+00	6.1E-18
Vanadium (23)	V-47	3.38E-12	1.7E-12 (S)	4.71E-12	2.45E-10	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	9.4E+00	.	3.7E+03	1.5E+01	1.1E+00	1.8E+02	7.9E+02	.	.	.	9.4E-01	2.8E-19
Vanadium (23)	V-48	2.24E-10	2.8E-10 (S)	3.19E-10	7.51E-10	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	1.4E-01	.	1.2E+03	2.2E-01	1.7E-02	2.7E+00	1.2E+01	.	.	.	1.4E-02	3.0E-18
Vanadium (23)	V-49	3.27E-12	7.6E-12 (S)	4.79E-12	0.00E+00	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	9.7E+00	.	.	1.3E+01	1.1E+00	1.8E+02	7.7E+02	.	.	.	9.2E-01	4.2E-15
Vanadium (23)	V-50	1.60E-10	2.6E-09 (F)	2.15E-10	3.82E-10	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	2.0E-01	.	2.4E+03	9.3E-02	2.5E-02	3.9E+00	1.7E+01	.	.	.	1.8E-02	1.4E+01
Vanadium (23)	V-52	0.00E+00	0.00E+00	0.00E+00	3.85E-10	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	9.1E-17
Vanadium (23)	V-53	0.00E+00	0.00E+00	0.00E+00	2.69E-10	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	.	.	3.4E+03	.	.	.	.	.	.	.	3.4E+03	5.7E-17
Tungsten (74)	W-177	5.21E-12	3.2E-12 (S)	7.37E-12	2.19E-10	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	6.1E+00	.	4.2E+03	9.7E+00	5.9E-02	2.9E+01	1.3E+03	.	.	.	5.7E-02	2.7E-19
Tungsten (74)	W-178	3.71E-11	8.4E-11 (S)	5.39E-11	2.32E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	8.6E-01	.	3.9E+05	1.3E+00	8.0E-03	3.9E+00	1.8E+02	.	.	.	7.9E-03	8.6E-18
Tungsten (74)	W-178+D	3.71E-11	8.4E-11 (S)	5.39E-11	2.81E-11	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	8.6E-01	.	3.3E+04	1.3E+00	8.0E-03	3.9E+00	1.8E+02	.	.	.	7.9E-03	8.6E-18
Tungsten (74)	W-179	2.05E-13	8.0E-14 (S)	2.87E-13	7.73E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	1.6E+02	.	1.2E+05	2.5E+02	1.5E+00	7.4E+02	3.4E+04	.	.	.	1.5E+00	1.9E-18
Tungsten (74)	W-179m	0.00E+00	0.00E+00	0.00E+00	1.05E-11	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	.	.	8.7E+04	.	.	.	.	.	.	.	8.7E+04	2.0E-14
Tungsten (74)	W-181	1.22E-11	3.1E-11 (S)	1.76E-11	6.15E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	2.6E+00	.	1.5E+05	3.4E+00	2.5E-02	1.2E+01	5.5E+02	.	.	.	2.4E-02	1.5E-16
Tungsten (74)	W-185	7.92E-11	3.7E-10 (S)	1.16E-10	3.66E-14	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	4.0E-01	.	2.5E+07	5.5E-01	3.7E-03	1.8E+00	8.4E+01	.	.	.	3.7E-03	1.4E-17
Tungsten (74)	W-185m	0.00E+00	0.00E+00	0.00E+00	4.95E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	1.1E-14
Tungsten (74)	W-187	9.42E-11	5.3E-11 (S)	1.37E-10	1.09E-10	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	3.4E-01	.	8.4E+03	5.2E-01	3.1E-03	1.5E+00	7.1E+01	.	.	.	3.1E-03	1.6E-19
Tungsten (74)	W-188	3.77E-10	1.5E-09 (S)	5.52E-10	4.54E-13	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	8.5E-02	.	2.0E+06	1.2E-01	7.8E-04	3.8E-01	1.8E+01	.	.	.	7.7E-04	2.9E-18
Tungsten (74)	W-190	4.44E-12	3.9E-12 (S)	6.19E-12	3.02E-11	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	7.2E+00	.	3.0E+04	1.2E+01	7.0E-02	3.4E+01	1.6E+03	.	.	.	6.8E-02	7.7E-20
Xenon (54)	Xe-120	0.00E+00	0.00E+00	0.00E+00	9.06E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.0E+04	.	.	.	.	.	.	.	1.0E+04	9.6E-15
Xenon (54)	Xe-121	0.00E+00	0.00E+00	0.00E+00	3.82E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	2.3E-15
Xenon (54)	Xe-122	0.00E+00	0.00E+00	0.00E+00	1.18E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	7.7E+04	.	.	.	.	.	.	.	7.7E+04	2.2E-12
Xenon (54)	Xe-123	0.00E+00	0.00E+00	0.00E+00	1.57E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	5.8E+03	.	.	.	.	.	.	.	5.8E+03	1.8E-14
Xenon (54)	Xe-125	0.00E+00	0.00E+00	0.00E+00	5.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	3.9E-13
Xenon (54)	Xe-127	0.00E+00	0.00E+00	0.00E+00	6.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	2.0E-11
Xenon (54)	Xe-127m	0.00E+00	0.00E+00	0.00E+00	3.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.6E+04	.	.	.	.	.	.	.	2.6E+04	7.4E-16
Xenon (54)	Xe-129m	0.00E+00	0.00E+00	0.00E+00	4.42E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.1E+05	.	.	.	.	.	.	.	2.1E+05	6.7E-11
Xenon (54)	Xe-131m	0.00E+00	0.00E+00	0.00E+00	1.62E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	5.6E+05	.	.	.	.	.	.	.	5.6E+05	2.5E-10
Xenon (54)	Xe-133	0.00E+00	0.00E+00	0.00E+00	7.16E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	2.5E-11
Xenon (54)	Xe-133m	0.00E+00	0.00E+00	0.00E+00	6.47E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	1.2E-11
Xenon (54)	Xe-135	0.00E+00	0.00E+00	0.00E+00	5.96E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.5E+04	.	.	.	.	.	.	.	1.5E+04	2.2E-13
Xenon (54)	Xe-135m	0.00E+00	0.00E+00	0.00E+00	1.04E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	8.8E+03	.	.	.	.	.	.	.	8.8E+03	3.6E-15
Xenon (54)	Xe-137	0.00E+00	0.00E+00	0.00E+00	5.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.8E+04	.	.	.	.	.	.	.	1.8E+04	1.9E-15
Xenon (54)	Xe-138	0.00E+00	0.00E+00	0.00E+00	3.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.0E+03	.	.	.	.	.	.	.	3.0E+03	1.2E-15
Yttrium (39)	Y-81	0.00E+00	0.00E+00	0.00E+00	2.87E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	3.2E+03	.	.	.	.	.	.	.	3.2E+03	6.0E-17

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/Bq)	Inhalation Slope Factor (Lungtype) (risk/Bq)	Food Ingestion Slope Factor (risk/Bq)	Immersion Slope Factor (risk/yr per Bq/L)	Wet Soil-to-plant transfer factor (L/kg)	Fish Bioconcentration Factor (pCi/kg per pCi/L)	Plant to Beef Transfer Factor (pCi/kg per pCi/d)	Plant to Milk Transfer Factor (pCi/kg per pCi/d)	Plant to Swine Transfer Factor (pCi/kg per pCi/d)	Plant to Poultry Transfer Factor (pCi/kg per pCi/d)	Plant to Egg Transfer Factor (pCi/kg per pCi/d)	Ingestion PRG (Bq/L)	Inhalation PRG (Bq/L)	Immersion PRG (Bq/L)	Produce Consumption PRG (Bq/L)	Fish Consumption PRG (Bq/L)	Beef Consumption PRG (Bq/L)	Dairy Consumption PRG (Bq/L)	Swine Consumption PRG (Bq/L)	Poultry Consumption PRG (Bq/L)	Egg Consumption PRG (Bq/L)	Total PRG (Bq/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	3.98E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.1E-14
Yttrium (39)	Y-83	0.00E+00	0.00E+00	0.00E+00	3.35E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	2.7E+03	.	.	.	.	.	.	.	2.7E+03	3.2E-16
Yttrium (39)	Y-83m	0.00E+00	0.00E+00	0.00E+00	2.04E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	4.5E+03	.	.	.	.	.	.	.	4.5E+03	2.1E-16
Yttrium (39)	Y-84m	8.19E-12	3.4E-12 (S)	1.14E-11	1.01E-09	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	3.9E+00	.	9.1E+02	6.3E+00	1.1E+00	3.7E+02	2.7E+03	.	1.7E+04	1.7E+05	7.7E-01	5.0E-19
Yttrium (39)	Y-85	2.01E-11	8.6E-12 (S)	2.89E-11	2.65E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.6E+00	.	3.5E+03	2.5E+00	4.5E-01	1.5E+02	1.1E+03	.	6.6E+03	6.6E+04	3.1E-01	8.2E-19
Yttrium (39)	Y-85m	4.88E-11	1.9E-11 (S)	7.08E-11	3.41E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	6.5E-01	.	2.7E+03	1.0E+00	1.8E-01	6.0E+01	4.4E+02	.	2.7E+03	2.7E+04	1.2E-01	6.1E-19
Yttrium (39)	Y-86	1.07E-10	4.2E-11 (S)	1.53E-10	9.28E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	3.0E-01	.	9.9E+02	4.7E-01	8.5E-02	2.8E+01	2.0E+02	.	1.2E+03	1.2E+04	5.8E-02	8.6E-19
Yttrium (39)	Y-86m	6.22E-12	2.5E-12 (S)	8.88E-12	5.24E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	5.1E+00	.	1.7E+04	8.0E+00	1.5E+00	4.8E+02	3.5E+03	.	2.1E+04	2.1E+05	9.9E-01	8.1E-19
Yttrium (39)	Y-87	6.94E-11	4.0E-11 (S)	9.99E-11	1.07E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	4.6E-01	.	8.6E+03	7.1E-01	1.3E-01	4.2E+01	3.1E+02	.	1.9E+03	1.9E+04	8.8E-02	7.3E-18
Yttrium (39)	Y-87m	3.00E-11	1.5E-11 (S)	4.34E-11	7.42E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.1E+00	.	1.2E+04	1.6E+00	3.0E-01	9.8E+01	7.1E+02	.	4.4E+03	4.4E+04	2.0E-01	2.8E-18
Yttrium (39)	Y-88	1.14E-10	5.5E-10 (F)	1.59E-10	7.23E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	2.8E-01	.	1.3E+03	4.3E-01	8.1E-02	2.7E+01	1.9E+02	.	1.2E+03	1.2E+04	5.5E-02	1.5E-16
Yttrium (39)	Y-89m	0.00E+00	0.00E+00	0.00E+00	2.29E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	4.0E+03	.	.	.	.	.	.	.	4.0E+03	1.8E-17
Yttrium (39)	Y-90	4.87E-10	2.3E-10 (S)	7.15E-10	1.01E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	6.5E-02	.	9.0E+05	1.0E-01	1.8E-02	5.9E+00	4.3E+01	.	2.7E+02	2.7E+03	1.2E-02	8.5E-19
Yttrium (39)	Y-90m	2.82E-11	1.3E-11 (S)	4.11E-11	1.53E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.1E+00	.	6.0E+03	1.7E+00	3.1E-01	1.0E+02	7.5E+02	.	4.6E+03	4.6E+04	2.2E-01	7.3E-19
Yttrium (39)	Y-91	4.34E-10	9.1E-10 (S)	6.37E-10	1.27E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	7.3E-02	.	7.2E+05	1.1E-01	2.0E-02	6.7E+00	4.9E+01	.	3.0E+02	3.0E+03	1.4E-02	2.1E-17
Yttrium (39)	Y-91m	9.52E-13	8.2E-13 (S)	1.34E-12	1.30E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	3.3E+01	.	7.0E+03	5.3E+01	9.7E+00	3.2E+03	2.3E+04	.	1.4E+05	1.4E+06	6.5E+00	5.8E-18
Yttrium (39)	Y-92	6.71E-11	2.5E-11 (S)	9.79E-11	6.72E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	4.7E-01	.	1.4E+04	7.3E-01	1.3E-01	4.3E+01	3.2E+02	.	1.9E+03	1.9E+04	9.0E-02	3.5E-19
Yttrium (39)	Y-93	1.96E-10	7.2E-11 (S)	2.87E-10	2.68E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.6E-01	.	3.4E+04	2.5E-01	4.5E-02	1.5E+01	1.1E+02	.	6.6E+02	6.6E+03	3.1E-02	3.5E-19
Yttrium (39)	Y-94	3.79E-12	1.5E-12 (S)	5.24E-12	2.04E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	8.4E+00	.	4.5E+03	1.4E+01	2.5E+00	8.1E+02	5.9E+03	.	3.6E+04	3.6E+05	1.7E+00	5.8E-19
Yttrium (39)	Y-95	1.82E-12	7.4E-13 (S)	2.51E-12	3.13E-10	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.8E+01	.	2.9E+03	2.8E+01	5.2E+00	1.7E+03	1.2E+04	.	7.6E+04	7.6E+05	3.5E+00	6.7E-19
Ytterbium (70)	Yb-162	1.88E-12	1.0E-12 (S)	2.62E-12	5.49E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.7E+01	.	1.7E+04	2.7E+01	.	1.6E+03	1.2E+04	.	.	.	1.0E+01	6.2E-18
Ytterbium (70)	Yb-163	9.66E-13	4.5E-13 (S)	1.34E-12	1.81E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E+01	.	5.1E+03	5.3E+01	.	3.2E+03	2.3E+04	.	.	.	2.0E+01	7.2E-18
Ytterbium (70)	Yb-164	7.40E-12	3.5E-12 (S)	1.06E-11	8.65E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.3E+00	.	1.1E+05	6.7E+00	.	4.0E+02	2.9E+03	.	.	.	2.6E+00	6.4E-18
Ytterbium (70)	Yb-165	0.00E+00	0.00E+00	0.00E+00	7.51E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.2E+04	.	.	.	.	.	.	.	1.2E+04	3.9E-15
Ytterbium (70)	Yb-166	1.15E-10	7.7E-11 (S)	1.65E-10	1.26E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.8E-01	.	7.3E+04	4.3E-01	.	2.6E+01	1.9E+02	.	.	.	1.7E-01	1.9E-17
Ytterbium (70)	Yb-167	4.34E-13	4.7E-13 (S)	6.08E-13	5.18E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.3E+01	.	1.8E+04	1.2E+02	.	7.0E+03	5.1E+04	.	.	.	4.5E+01	2.6E-17
Ytterbium (70)	Yb-169	1.27E-10	3.4E-10 (S)	1.84E-10	6.44E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.5E-01	.	1.4E+04	3.8E-01	.	2.3E+01	1.7E+02	.	.	.	1.5E-01	2.3E-16
Ytterbium (70)	Yb-175	7.81E-11	8.0E-11 (S)	1.15E-10	9.21E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.1E-01	.	9.9E+04	6.2E-01	.	3.7E+01	2.7E+02	.	.	.	2.4E-01	5.1E-17
Ytterbium (70)	Yb-177	9.59E-12	6.5E-12 (S)	1.39E-11	4.89E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E+00	.	1.9E+04	5.1E+00	.	3.1E+02	2.2E+03	.	.	.	2.0E+00	8.0E-18
Ytterbium (70)	Yb-178	1.03E-11	6.3E-12 (S)	1.49E-11	9.21E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.1E+00	.	9.9E+04	4.8E+00	.	2.8E+02	2.1E+03	.	.	.	1.9E+00	4.8E-18
Ytterbium (70)	Yb-179	0.00E+00	0.00E+00	0.00E+00	2.40E-10	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	3.8E+03	.	.	.	.	.	.	.	3.8E+03	1.1E-15
Zinc (30)	Zn-60	0.00E+00	0.00E+00	0.00E+00	3.76E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	2.4E+03	.	.	.	.	.	.	.	2.4E+03	6.9E-17
Zinc (30)	Zn-61	0.00E+00	0.00E+00	0.00E+00	3.91E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	2.3E+03	.	.	.	.	.	.	.	2.3E+03	4.2E-17
Zinc (30)	Zn-62	1.33E-10	7.9E-11 (S)	1.95E-10	1.06E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	2.4E-01	.	8.6E+03	3.7E-01	7.8E-04	2.7E-01	3.5E+00	2.2E+00	2.1E+01	1.4E+01	7.7E-04	5.2E-21
Zinc (30)	Zn-63	4.41E-12	2.2E-12 (S)	6.18E-12	2.71E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	7.2E+00	.	3.4E+03	1.2E+01	2.5E-02	8.6E+00	1.1E+02	6.9E+01	6.5E+02	4.4E+02	2.4E-02	1.2E-20
Zinc (30)	Zn-65	3.14E-10	2.0E-10 (F)	4.14E-10	1.50E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	1.0E-01	.	6.1E+03	1.0E-01	3.7E-04	1.3E-01	1.7E+00	1.0E+00	9.8E+00	6.6E+00	3.6E-04	1.6E-18
Zinc (30)	Zn-69	1.93E-12	1.8E-12 (S)	2.75E-12	1.48E-13	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	1.7E+01	.	6.2E+06	2.6E+01	5.5E-02	1.9E+01	2.5E+02	1.6E+02	1.5E+03	9.9E+02	5.5E-02	4.2E-20
Zinc (30)	Zn-69m	5.05E-11	3.9E-11 (S)	7.39E-11	1.01E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	6.3E-01	.	9.0E+03	9.6E-01	2.1E-03	7.2E-01	9.3E+00	5.8E+00	5.5E+01	3.7E+01	2.0E-03	2.3E-20
Zinc (30)	Zn-71	0.00E+00	0.00E+00	0.00E+00	7.98E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	1.1E+04	.	.	.	.	.	.	.	1.1E+04	3.9E-16
Zinc (30)	Zn-71m	2.63E-11	1.6E-11 (S)	3.79E-11	3.85E-10	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	1.2E+00	.	2.4E+03	1.9E+00	4.0E-03	1.4E+00	1.8E+01	1.1E+01	1.1E+02	7.2E+01	4.0E-03	1.3E-20
Zinc (30)	Zn-72	1.80E-10	1.7E-10 (S)	2.58E-10	3.38E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	1.8E-01	.	2.7E+04	2.7E-01	5.9E-04	2.1E-01	2.7E+00	1.7E+00	1.6E+01	1.1E+01	5.8E-04	2.3E-20
Zirconium (40)	Zr-85	0.00E+00	0.00E+00	0.00E+00	3.66E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	.	.	2.5E+03	.	.	.	.	.	.	.	2.5E+03	3.3E-16
Zirconium (40)	Zr-86	1.03E-10	4.4E-11 (S)	1.48E-10	6.56E-11	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	3.1E-01	.	1.4E+04	4.8E-01	1.6E-01	4.8E+04	3.5E+03	.	2.1E+05	1.3E+05	8.6E-02	1.4E-18
Zirconium (40)	Zr-87	1.82E-11	8.1E-12 (S)	2.62E-11	2.29E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	1.8E+00	.	4.0E+03	2.7E+00	9.0E-01	2.7E+05	2.0E+04	.	1.2E+06	7.3E+05	4.9E-01	8.4E-19
Zirconium (40)	Zr-88	4.19E-11	3.6E-10 (S)	5.81E-11	9.28E-11	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	7.6E-01	.	9.9E+03	1.2E+00	4.0E-01	1.2E+05	8.9E+03	.	5.4E+05	3.3E+05	2.2E-01	4.5E-16
Zirconium (40)	Zr-89	9.73E-11	5.5E-11 (S)	1.40E-10	2.91E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	3.3E-01	.	3.1E+03	5.1E-01	1.7E-01	5.1E+04	3.7E+03	.	2.3E+05	1.4E+05	9.1E-02	7.5E-18
Zirconium (40)	Zr-89m	0.00E+00	0.00E+00	0.00E+00	1.58E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	.	.	5.8E+03	.	.	.	.	.	.	.	5.8E+03	4.2E-16
Zirconium (40)	Zr-93	2.93E-11	4.0E-10 (F)	3.80E-11	2.12E-19	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	1.1E+00	.	4.3E+12	5.3E-01	6.2E-01	1.9E+05	1.4E+04	.	8.3E+05	5.0E+05	2.3E-01	3.3E-09
Zirconium (40)	Zr-95	1.25E-10	5.7E-10 (S)	1.80E-10	1.84E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	2.5E-01	.	5.0E+03	3.9E-01	1.3E-01	3.9E+04	2.9E+03	.	1.8E+05	1.1E+05	7.1E-02	1.2E-16
Zirconium (40)	Zr-97	3.38E-10	1.4E-10 (S)	4.94E-10	2.22E-10	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	9.4E-02	.	4.1E+03	1.4E-01	4.8E-02	1.4E+04	1.0E+03	.	6.4E+04	3.8E+04	2.6E-02	5.0E-19