Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Actinium (89)	Ac-223+D	0.00E+00	0.00E+00	0.00E+00	1.80E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	5.1E+06	.	.	.	.	.	.	.	5.1E+06	1.3E-11
Actinium (89)	Ac-224	5.33E-12	3.8E-10 (S)	7.66E-12	1.88E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	6.0E+00	.	4.9E+05	9.3E+00	4.5E+00	5.5E+04	1.2E+05	.	.	.	2.0E+00	4.0E-16
Actinium (89)	Ac-225	1.89E-10	2.9E-08 (S)	2.72E-10	1.14E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	1.7E-01	.	8.0E+06	2.6E-01	1.3E-01	1.6E+03	3.4E+03	.	.	.	5.7E-02	9.8E-16
Actinium (89)	Ac-225+D	1.89E-10	2.9E-08 (S)	2.72E-10	3.70E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	1.7E-01	.	2.5E+06	2.6E-01	1.3E-01	1.6E+03	3.4E+03	.	.	.	5.7E-02	9.8E-16
Actinium (89)	Ac-226	6.96E-11	4.4E-09 (S)	1.02E-10	1.12E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	4.6E-01	.	8.1E+05	7.0E-01	3.4E-01	4.1E+03	9.0E+03	.	.	.	1.5E-01	3.2E-16
Actinium (89)	Ac-227	2.01E-10	1.5E-07 (S)	2.45E-10	7.10E-16	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	1.6E-01	.	1.3E+09	1.1E-01	1.4E-01	1.7E+03	3.8E+03	.	.	.	4.4E-02	6.1E-13
Actinium (89)	Ac-228	1.88E-12	4.9E-11 (S)	2.73E-12	8.15E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	1.7E+01	.	1.1E+05	2.6E+01	1.3E+01	1.6E+05	3.4E+05	.	.	.	5.7E+00	2.5E-15
Actinium (89)	Ac-230	0.00E+00	0.00E+00	0.00E+00	5.34E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	4.3E-13
Actinium (89)	Ac-231	0.00E+00	0.00E+00	0.00E+00	3.65E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.5E+05	.	.	.	.	.	.	.	2.5E+05	2.3E-12
Actinium (89)	Ac-232	0.00E+00	0.00E+00	0.00E+00	1.15E-11	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	8.0E+04	.	.	.	.	.	.	.	8.0E+04	2.0E-13
Actinium (89)	Ac-233	0.00E+00	0.00E+00	0.00E+00	4.55E-12	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	2.0E+05	.	.	.	.	.	.	.	2.0E+05	6.0E-13
Silver (47)	Ag-100m	0.00E+00	0.00E+00	0.00E+00	2.69E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	4.1E-14
Silver (47)	Ag-101	5.96E-14	2.4E-14 (S)	8.25E-14	1.46E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	5.3E+02	.	6.3E+04	8.6E+02	5.7E+01	3.4E+04	3.7E+03	4.4E+04	1.2E+04	.	4.8E+01	2.8E-16
Silver (47)	Ag-102	7.44E-14	2.7E-14 (S)	1.02E-13	3.26E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	4.3E+02	.	2.8E+04	7.0E+02	4.6E+01	2.8E+04	3.0E+03	3.6E+04	9.3E+03	.	3.9E+01	2.7E-16
Silver (47)	Ag-102m	0.00E+00	0.00E+00	0.00E+00	1.98E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	4.6E+04	.	.	.	.	.	.	.	4.6E+04	1.9E-13
Silver (47)	Ag-103	1.05E-13	5.8E-14 (S)	1.47E-13	7.69E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.0E+02	.	1.2E+05	4.8E+02	3.2E+01	1.9E+04	2.1E+03	2.5E+04	6.4E+03	.	2.7E+01	9.6E-16
Silver (47)	Ag-104	1.67E-13	6.6E-14 (S)	2.31E-13	2.55E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.9E+02	.	3.6E+04	3.1E+02	2.0E+01	1.2E+04	1.3E+03	1.6E+04	4.1E+03	.	1.7E+01	6.5E-16
Silver (47)	Ag-104m	1.37E-13	5.9E-14 (S)	1.91E-13	1.72E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	2.3E+02	.	5.3E+04	3.7E+02	2.5E+01	1.5E+04	1.6E+03	1.9E+04	5.0E+03	.	2.1E+01	3.8E-16
Silver (47)	Ag-105	1.75E-12	3.1E-12 (S)	2.46E-12	4.48E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.8E+01	.	2.0E+05	2.9E+01	1.9E+00	1.2E+03	1.3E+02	1.5E+03	3.9E+02	.	1.6E+00	5.3E-14
Silver (47)	Ag-105m	0.00E+00	0.00E+00	0.00E+00	8.97E-15	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	1.0E+08	.	.	.	.	.	.	.	1.0E+08	4.1E-10
Silver (47)	Ag-106	5.81E-14	2.8E-14 (S)	8.07E-14	6.31E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	5.5E+02	.	1.4E+05	8.8E+02	5.8E+01	3.5E+04	3.8E+03	4.5E+04	1.2E+04	.	4.9E+01	6.6E-16
Silver (47)	Ag-106m	4.77E-12	3.5E-12 (S)	6.66E-12	2.63E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	6.7E+00	.	3.5E+04	1.1E+01	7.1E-01	4.2E+02	4.6E+01	5.5E+02	1.4E+02	.	5.9E-01	4.0E-15
Silver (47)	Ag-108	0.00E+00	0.00E+00	0.00E+00	1.83E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	5.0E+06	.	.	.	.	.	.	.	5.0E+06	6.8E-12
Silver (47)	Ag-108m	8.10E-12	1.1E-10 (S)	1.11E-11	1.47E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.9E+00	.	6.2E+04	1.8E+00	4.2E-01	2.5E+02	2.8E+01	3.3E+02	8.5E+01	.	3.1E-01	3.9E-11
Silver (47)	Ag-108m+D	8.10E-12	1.1E-10 (S)	1.11E-11	1.47E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.9E+00	.	6.2E+04	1.8E+00	4.2E-01	2.5E+02	2.8E+01	3.3E+02	8.5E+01	.	3.1E-01	3.9E-11
Silver (47)	Ag-109m	0.00E+00	0.00E+00	0.00E+00	3.02E-14	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	3.0E+07	.	.	.	.	.	.	.	3.0E+07	1.2E-11
Silver (47)	Ag-110	0.00E+00	0.00E+00	0.00E+00	3.40E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	2.7E+06	.	.	.	.	.	.	.	2.7E+06	6.5E-13
Silver (47)	Ag-110m	1.00E-11	4.6E-11 (S)	1.39E-11	2.60E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.2E+00	.	3.5E+04	4.7E+00	3.4E-01	2.0E+02	2.2E+01	2.6E+02	6.8E+01	.	2.8E-01	5.9E-14
Silver (47)	Ag-110m+D	1.00E-11	4.6E-11 (S)	1.39E-11	2.60E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.2E+00	.	3.5E+04	4.7E+00	3.4E-01	2.0E+02	2.2E+01	2.6E+02	6.8E+01	.	2.8E-01	5.9E-14
Silver (47)	Ag-111	8.21E-12	7.4E-12 (S)	1.20E-11	2.43E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	3.9E+00	.	3.8E+06	5.9E+00	3.9E-01	2.4E+02	2.6E+01	3.0E+02	7.9E+01	.	3.3E-01	2.1E-15
Silver (47)	Ag-111m	0.00E+00	0.00E+00	0.00E+00	3.34E-14	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	2.7E+07	.	.	.	.	.	.	.	2.7E+07	1.7E-11
Silver (47)	Ag-112	1.96E-12	7.7E-13 (S)	2.86E-12	6.75E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.6E+01	.	1.4E+05	2.5E+01	1.6E+00	9.9E+02	1.1E+02	1.3E+03	3.3E+02	.	1.4E+00	1.5E-16
Silver (47)	Ag-113	2.20E-12	9.0E-13 (S)	3.22E-12	6.80E-13	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	1.4E+01	.	1.3E+06	2.2E+01	1.5E+00	8.8E+02	9.6E+01	1.1E+03	2.9E+02	.	1.2E+00	2.4E-16
Silver (47)	Ag-113m	0.00E+00	0.00E+00	0.00E+00	1.91E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	4.8E+05	.	.	.	.	.	.	.	4.8E+05	3.3E-13
Silver (47)	Ag-114	0.00E+00	0.00E+00	0.00E+00	2.67E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	3.4E+05	.	.	.	.	.	.	.	3.4E+05	1.6E-14
Silver (47)	Ag-115	1.42E-13	7.4E-14 (S)	2.02E-13	4.76E-12	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	2.2E+02	.	1.9E+05	3.5E+02	2.3E+01	1.4E+04	1.5E+03	1.8E+04	4.7E+03	.	2.0E+01	2.4E-16
Silver (47)	Ag-116	0.00E+00	0.00E+00	0.00E+00	2.16E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	4.2E+04	.	.	.	.	.	.	.	4.2E+04	7.0E-14
Silver (47)	Ag-117	0.00E+00	0.00E+00	0.00E+00	1.32E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	6.9E+04	.	.	.	.	.	.	.	6.9E+04	5.3E-14
Silver (47)	Ag-99	0.00E+00	0.00E+00	0.00E+00	2.18E-11	4.00E-03	1.10E+02	3.00E-03	6.00E-03	2.00E-02	2.00E+00	.	.	.	4.2E+04	.	.	.	.	.	.	.	4.2E+04	4.6E-14
Aluminum (13)	Al-26	1.73E-11	2.9E-10 (S)	2.48E-11	2.63E-11	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	1.8E+00	.	3.5E+04	8.0E-01	4.1E-01	6.8E+02	3.7E+02	.	.	.	2.4E-01	1.2E-08
Aluminum (13	Al-28	0.00E+00	0.00E+00	0.00E+00	1.81E-11	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	.	.	5.1E+04	.	.	.	.	.	.	.	5.1E+04	1.7E-14
Aluminum (13)	Al-29	0.00E+00	0.00E+00	0.00E+00	1.37E-11	4.00E-03	5.10E+01	5.00E-04	2.00E-04	.	.	.	.	.	6.7E+04	.	.	.	.	.	.	.	6.7E+04	6.8E-14
Americium (95)	Am-237	5.25E-14	6.4E-14 (S)	7.40E-14	3.15E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	6.1E+02	.	2.9E+05	9.6E+02	2.9E+01	2.3E+05	6.0E+07	5.8E+06	4.3E+06	1.7E+07	2.7E+01	2.5E-15
Americium (95)	Am-238	9.55E-14	1.1E-13 (S)	1.34E-13	8.34E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	3.3E+02	.	1.1E+05	5.3E+02	1.6E+01	1.3E+05	3.3E+07	3.2E+06	2.4E+06	9.5E+06	1.5E+01	1.9E-15
Americium (95)	Am-239	1.42E-12	9.3E-13 (S)	2.08E-12	1.88E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.2E+01	.	4.9E+05	3.4E+01	1.0E+00	8.2E+03	2.1E+06	2.1E+05	1.5E+05	6.1E+05	9.6E-01	8.8E-16
Americium (95)	Am-240	2.64E-12	1.5E-12 (S)	3.77E-12	9.56E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.2E+01	.	9.6E+04	1.9E+01	5.7E-01	4.5E+03	1.2E+06	1.1E+05	8.4E+04	3.4E+05	5.3E-01	2.1E-15
Americium (95)	Am-241	1.04E-10	3.8E-08 (F)	1.34E-10	1.32E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	3.1E-01	.	6.9E+06	1.5E-01	1.6E-02	1.3E+02	3.3E+04	3.2E+03	2.4E+03	9.5E+03	1.4E-02	4.1E-12
Americium (95)	Am-242	1.81E-12	6.7E-11 (S)	2.64E-12	1.09E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.8E+01	.	8.4E+06	2.7E+01	8.2E-01	6.4E+03	1.7E+06	1.6E+05	1.2E+05	4.8E+05	7.6E-01	9.4E-16
Americium (95)	Am-242m	7.07E-11	3.4E-08 (F)	8.73E-11	3.68E-15	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	4.5E-01	.	2.5E+08	2.4E-01	2.5E-02	1.9E+02	5.1E+04	4.9E+03	3.6E+03	1.5E+04	2.1E-02	2.0E-12
Americium (95)	Am-242m+D	7.25E-11	3.4E-08 (F)	8.99E-11	1.37E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	4.4E-01	.	6.7E+06	2.3E-01	2.4E-02	1.9E+02	4.9E+04	4.8E+03	3.5E+03	1.4E+04	2.1E-02	2.0E-12
Americium (95)	Am-243	1.04E-10	3.7E-08 (F)	1.34E-10	3.83E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	3.1E-01	.	2.4E+06	1.5E-01	1.6E-02	1.3E+02	3.3E+04	3.2E+03	2.4E+03	9.5E+03	1.4E-02	7.0E-11
Americium (95)	Am-243+D	1.09E-10	3.7E-08 (F)	1.42E-10	1.86E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.9E-01	.	4.9E+05	1.4E-01	1.5E-02	1.2E+02	3.1E+04	3.0E+03	2.2E+03	8.9E+03	1.3E-02	6.6E-11
Americium (95)	Am-244	2.47E-12	3.8E-12 (S)	3.59E-12	7.29E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.3E+01	.	1.3E+05	2.0E+01	6.0E-01	4.7E+03	1.2E+06	1.2E+05	8.8E+04	3.5E+05	5.6E-01	4.4E-16
Americium (95)	Am-244m	5.22E-14	1.3E-13 (S)	7.29E-14	1.49E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	6.1E+02	.	6.1E+06	9.8E+02	3.0E+01	2.3E+05	6.1E+07	5.9E+06	4.3E+06	1.7E+07	2.7E+01	9.3E-16
Americium (95)	Am-245	2.22E-13	1.7E-13 (S)	3.22E-13	2.66E-13	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	1.4E+02	.	3.4E+06	2.2E+02	6.7E+00	5.3E+04	1.4E+07	1.3E+06	9.8E+05	3.9E+06	6.2E+00	1.0E-15
Americium (95)	Am-246	1.36E-13	1.5E-13 (S)	1.91E-13	6.60E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	2.3E+02	.	1.4E+05	3.7E+02	1.1E+01	8.9E+04	2.3E+07	2.3E+06	1.7E+06	6.7E+06	1.0E+01	5.4E-16
Americium (95)	Am-246m	6.59E-14	4.2E-14 (S)	9.10E-14	9.28E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	4.8E+02	.	9.8E+04	7.8E+02	2.4E+01	1.9E+05	4.9E+07	4.7E+06	3.5E+06	1.4E+07	2.2E+01	7.2E-16
Americium (95)	Am-247	5.29E-14	4.9E-14 (S)	7.33E-14	1.12E-12	1.91E-05	2.40E+02	5.00E-04	4.20E-07	1.70E-04	6.00E-03	3.00E-03	6.0E+02	.	8.1E+05	9.7E+02	2.9E+01	2.3E+05	6.0E+07	5.9E+06	4.3E+06	1.7E+07	2.7E+01	8.3E-16
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	2.64E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.5E+08	.	.	.	.	.	.	.	3.5E+08	1.0E-02
Argon (18)	Ar-41	0.00E+00	0.00E+00	0.00E+00	1.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	7.3E+04	.	.	.	.	.	.	.	7.3E+04	1.8E-12
Argon (18)	Ar-42	0.00E+00	0.00E+00	0.00E+00	2.97E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.1E+08	.	.	.	.	.	.	.	3.1E+08	1.2E-03
Argon (18)	Ar-42+D	1.26E-12	1.2E-12 (G)	1.74E-12	2.86E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	2.5E+01	.	3.2E+05	.	.	.	.	.	.	.	2.5E+01	9.8E-11
Argon (18)	Ar-43	0.00E+00	0.00E+00	0.00E+00	1.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.0E+04	.	.	.	.	.	.	.	6.0E+04	7.4E-14
Argon (18)	Ar-44	0.00E+00	0.00E+00	0.00E+00	1.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.7E+04	.	.	.	.	.	.	.	4.7E+04	1.3E-13
Arsenic (33)	As-68	0.00E+00	0.00E+00	0.00E+00	3.57E-11	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	.	.	2.6E+04	.	.	.	.	.	.	.	2.6E+04	2.3E-14
Arsenic (33)	As-69	9.92E-14	4.2E-14 (S)	1.38E-13	1.05E-11	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	3.2E+02	.	8.7E+04	5.2E+02	1.1E+01	3.1E+03	1.3E+05	.	.	.	1.1E+01	6.0E-17
Arsenic (33)	As-70	3.29E-13	1.5E-13 (S)	4.59E-13	4.08E-11	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	9.7E+01	.	2.2E+04	1.6E+02	3.4E+00	9.3E+02	4.0E+04	.	.	.	3.2E+00	6.3E-17
Arsenic (33)	As-71	2.25E-12	1.6E-12 (S)	3.25E-12	5.17E-12	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.4E+01	.	1.8E+05	2.2E+01	4.8E-01	1.3E+02	5.7E+03	.	.	.	4.6E-01	6.7E-16
Arsenic (33)	As-72	1.03E-11	4.5E-12 (S)	1.50E-11	1.66E-11	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	3.1E+00	.	5.5E+04	4.7E+00	1.0E-01	2.8E+01	1.2E+03	.	.	.	9.9E-02	5.9E-17
Arsenic (33)	As-73	1.57E-12	5.0E-12 (S)	2.29E-12	3.04E-14	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	2.0E+01	.	3.0E+07	3.0E+01	6.9E-01	1.9E+02	8.1E+03	.	.	.	6.5E-01	2.9E-14
Arsenic (33)	As-74	6.66E-12	9.6E-12 (S)	9.62E-12	6.90E-12	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	4.8E+00	.	1.3E+05	7.3E+00	1.6E-01	4.4E+01	1.9E+03	.	.	.	1.5E-01	1.6E-15
Arsenic (33)	As-76	9.58E-12	4.3E-12 (S)	1.40E-11	3.93E-12	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	3.3E+00	.	2.3E+05	5.1E+00	1.1E-01	3.0E+01	1.3E+03	.	.	.	1.1E-01	6.6E-17
Arsenic (33)	As-77	2.47E-12	1.9E-12 (S)	3.63E-12	7.69E-14	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	1.3E+01	.	1.2E+07	2.0E+01	4.3E-01	1.2E+02	5.1E+03	.	.	.	4.1E-01	3.9E-16
Arsenic (33)	As-78	5.88E-13	2.7E-13 (S)	8.44E-13	1.26E-11	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	5.4E+01	.	7.2E+04	8.4E+01	1.9E+00	5.0E+02	2.2E+04	.	.	.	1.8E+00	6.6E-17
Arsenic (33)	As-79	0.00E+00	0.00E+00	0.00E+00	3.42E-13	8.00E-02	3.30E+02	2.00E-02	1.00E-04	.	.	.	.	.	2.7E+06	.	.	.	.	.	.	.	2.7E+06	1.0E-11
Astatine (85)	At-204	0.00E+00	0.00E+00	0.00E+00	2.11E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	4.3E+04	.	.	.	.	.	.	.	4.3E+04	4.3E-13
Astatine (85)	At-205	1.44E-13	2.4E-12 (S)	1.96E-13	1.06E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	2.2E+02	.	8.6E+04	3.6E+02	.	4.3E+03	9.5E+02	.	.	.	1.2E+02	3.3E-15
Astatine (85)	At-206	1.65E-13	8.0E-13 (S)	2.25E-13	2.29E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	1.9E+02	.	4.0E+04	3.2E+02	.	3.8E+03	8.2E+02	.	.	.	1.0E+02	3.4E-15
Astatine (85)	At-207	6.51E-13	7.4E-12 (S)	8.92E-13	1.90E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	4.9E+01	.	4.8E+04	8.0E+01	.	9.5E+02	2.1E+02	.	.	.	2.6E+01	3.1E-15
Astatine (85)	At-208	2.38E-13	2.0E-12 (S)	3.23E-13	2.85E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	1.3E+02	.	3.2E+04	2.2E+02	.	2.6E+03	5.7E+02	.	.	.	7.1E+01	7.6E-15
Astatine (85)	At-209	1.13E-12	9.3E-12 (S)	1.54E-12	2.10E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	2.8E+01	.	4.3E+04	4.6E+01	.	5.5E+02	1.2E+02	.	.	.	1.5E+01	5.4E-15
Astatine (85)	At-210	2.70E-12	3.6E-11 (S)	3.69E-12	2.86E-11	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	1.2E+01	.	3.2E+04	1.9E+01	.	2.3E+02	5.0E+01	.	.	.	6.2E+00	3.4E-15
Astatine (85)	At-211	3.37E-11	4.0E-10 (S)	4.63E-11	2.56E-13	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	9.5E-01	.	3.6E+06	1.5E+00	.	1.8E+01	4.0E+00	.	.	.	5.0E-01	2.4E-16

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Astatine (85)	At-211+D	3.37E-11	4.0E-10 (S)	4.63E-11	3.00E-13	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	9.5E-01	.	3.0E+06	1.5E+00	.	1.8E+01	4.0E+00	.	.	.	5.0E-01	2.4E-16
Astatine (85)	At-215	0.00E+00	0.00E+00	0.00E+00	1.53E-15	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	6.0E+08	.	.	.	.	.	.	.	6.0E+08	1.1E-15
Astatine (85)	At-216	0.00E+00	0.00E+00	0.00E+00	1.91E-14	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	4.8E+07	.	.	.	.	.	.	.	4.8E+07	2.7E-16
Astatine (85)	At-217	0.00E+00	0.00E+00	0.00E+00	2.14E-15	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	4.3E+08	.	.	.	.	.	.	.	4.3E+08	2.7E-13
Astatine (85)	At-218	0.00E+00	0.00E+00	0.00E+00	5.13E-17	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	1.8E+10	.	.	.	.	.	.	.	1.8E+10	5.2E-10
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	4.08E-12	2.00E-01	.	1.00E-02	1.00E-02	.	.	.	.	.	2.2E+05	.	.	.	.	.	.	.	2.2E+05	9.8E-13
Gold (79)	Au-186	9.47E-14	4.1E-14 (S)	1.32E-13	1.39E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	3.4E+02	.	6.6E+04	5.4E+02	1.6E+01	1.3E+04	1.4E+06	.	.	.	1.5E+01	1.6E-16
Gold (79)	Au-187	0.00E+00	0.00E+00	0.00E+00	1.01E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	9.0E+04	.	.	.	.	.	.	.	9.0E+04	7.6E-13
Gold (79)	Au-190	1.02E-13	4.3E-14 (S)	1.41E-13	2.37E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	3.1E+02	.	3.9E+04	5.1E+02	1.5E+01	1.2E+04	1.3E+06	.	.	.	1.4E+01	6.1E-16
Gold (79)	Au-191	3.00E-13	2.0E-13 (S)	4.29E-13	5.17E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.1E+02	.	1.8E+05	1.7E+02	5.0E+00	4.0E+03	4.3E+05	.	.	.	4.7E+00	9.0E-16
Gold (79)	Au-192	6.29E-13	2.5E-13 (S)	8.92E-13	1.90E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	5.1E+01	.	4.8E+04	8.0E+01	2.4E+00	1.9E+03	2.1E+05	.	.	.	2.2E+00	6.8E-16
Gold (79)	Au-193	6.85E-13	4.0E-13 (S)	9.95E-13	1.28E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	4.7E+01	.	7.1E+05	7.2E+01	2.2E+00	1.7E+03	1.9E+05	.	.	.	2.0E+00	2.2E-15
Gold (79)	Au-193m	0.00E+00	0.00E+00	0.00E+00	1.69E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	5.4E+05	.	.	.	.	.	.	.	5.4E+05	3.6E-14
Gold (79)	Au-194	1.61E-12	7.6E-13 (S)	2.28E-12	9.83E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.0E+01	.	9.3E+04	3.1E+01	9.4E-01	7.4E+02	8.1E+04	.	.	.	8.8E-01	2.1E-15
Gold (79)	Au-195	1.55E-12	6.6E-12 (S)	2.26E-12	5.38E-13	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.1E+01	.	1.7E+06	2.9E+01	9.5E-01	7.5E+02	8.2E+04	.	.	.	8.8E-01	2.5E-13
Gold (79)	Au-195m	0.00E+00	0.00E+00	0.00E+00	1.72E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	5.3E+05	.	.	.	.	.	.	.	5.3E+05	2.8E-13
Gold (79)	Au-196	1.54E-12	1.3E-12 (S)	2.20E-12	4.10E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.1E+01	.	2.2E+05	3.2E+01	9.8E-01	7.7E+02	8.4E+04	.	.	.	9.1E-01	8.5E-15
Gold (79)	Au-196m	2.25E-12	1.8E-12 (S)	3.28E-12	1.94E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.4E+01	.	4.7E+05	2.2E+01	6.6E-01	5.2E+02	5.7E+04	.	.	.	6.1E-01	3.7E-16
Gold (79)	Au-198	6.29E-12	4.0E-12 (S)	9.18E-12	3.62E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	5.1E+00	.	2.5E+05	7.8E+00	2.3E-01	1.9E+02	2.0E+04	.	.	.	2.2E-01	8.9E-16
Gold (79)	Au-198m	7.10E-12	7.4E-12 (S)	1.04E-11	4.45E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	4.5E+00	.	2.1E+05	6.8E+00	2.1E-01	1.6E+02	1.8E+04	.	.	.	1.9E-01	6.6E-16
Gold (79)	Au-199	2.82E-12	3.2E-12 (S)	4.14E-12	7.95E-13	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	1.1E+01	.	1.1E+06	1.7E+01	5.2E-01	4.1E+02	4.5E+04	.	.	.	4.8E-01	2.3E-15
Gold (79)	Au-200	1.54E-13	8.5E-14 (S)	2.17E-13	2.63E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	2.1E+02	.	3.5E+05	3.3E+02	9.9E+00	7.8E+03	8.5E+05	.	.	.	9.2E+00	4.7E-16
Gold (79)	Au-200m	5.07E-12	2.6E-12 (S)	7.29E-12	1.80E-11	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	6.3E+00	.	5.1E+04	9.8E+00	3.0E-01	2.3E+02	2.5E+04	.	.	.	2.7E-01	3.3E-16
Gold (79)	Au-201	4.26E-14	3.2E-14 (S)	5.96E-14	3.15E-13	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	7.5E+02	.	2.9E+06	1.2E+03	3.6E+01	2.9E+04	3.1E+06	.	.	.	3.4E+01	9.3E-16
Gold (79)	Au-202	0.00E+00	0.00E+00	0.00E+00	1.67E-12	1.00E-01	2.40E+02	5.00E-03	1.00E-05	.	.	.	.	.	5.5E+05	.	.	.	.	.	.	.	5.5E+05	2.8E-13
Barium (56)	Ba-124	1.12E-13	4.0E-14 (S)	1.54E-13	5.09E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	2.9E+02	.	1.8E+05	4.6E+02	2.8E+03	3.9E+05	7.5E+04	.	6.5E+05	2.8E+04	1.2E+15	1.2E-15
Barium (56)	Ba-126	8.51E-13	3.6E-13 (S)	1.22E-12	5.21E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	3.7E+01	.	1.8E+05	5.8E+01	3.5E+02	5.0E+04	9.5E+03	.	8.2E+04	3.6E+03	2.1E+01	1.4E-15
Barium (56)	Ba-127	4.59E-14	2.0E-14 (S)	6.33E-14	6.60E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	6.9E+02	.	1.4E+05	1.1E+03	6.8E+03	9.6E+05	1.8E+05	.	1.6E+06	6.9E+04	4.0E+02	3.4E-15
Barium (56)	Ba-128	1.57E-11	7.9E-12 (S)	2.30E-11	4.23E-13	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	2.0E+00	.	2.2E+06	3.1E+00	1.9E+01	2.6E+03	5.0E+02	.	4.3E+03	1.9E+02	1.1E+00	2.7E-15
Barium (56)	Ba-129	1.79E-13	8.8E-14 (S)	2.56E-13	2.92E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.8E+02	.	3.1E+05	2.8E+02	1.7E+03	2.4E+05	4.5E+04	.	3.9E+05	1.7E+04	1.0E+02	9.3E-15
Barium (56)	Ba-129m	2.23E-13	1.0E-13 (S)	3.12E-13	1.47E-11	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.4E+02	.	6.2E+04	2.3E+02	1.4E+03	1.9E+05	3.7E+04	.	3.2E+05	1.4E+04	8.2E+01	7.3E-15
Barium (56)	Ba-131	2.03E-12	3.3E-12 (S)	2.90E-12	4.05E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.6E+01	.	2.3E+05	2.4E+01	1.5E+02	2.1E+04	4.0E+03	.	3.4E+04	1.5E+03	8.9E+00	1.0E-13
Barium (56)	Ba-131m	9.40E-15	1.8E-14 (S)	1.31E-14	5.31E-13	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	3.4E+03	.	1.7E+06	5.5E+03	3.3E+04	4.6E+06	8.9E+05	.	7.6E+06	3.3E+05	1.9E+03	2.0E-14
Barium (56)	Ba-133	6.88E-12	3.3E-11 (S)	9.47E-12	3.28E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	4.6E+00	.	2.8E+05	3.5E+00	4.6E+01	6.4E+03	1.2E+03	.	1.1E+04	4.6E+02	1.9E+00	7.4E-12
Barium (56)	Ba-133m	3.26E-12	2.3E-12 (S)	4.77E-12	4.81E-13	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	9.8E+00	.	1.9E+06	1.5E+01	9.0E+01	1.3E+04	2.4E+03	.	2.1E+04	9.2E+02	5.5E+00	9.1E-15
Barium (56)	Ba-135m	2.56E-12	1.7E-12 (S)	3.74E-12	4.15E-13	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.2E+01	.	2.2E+06	1.9E+01	1.2E+02	1.6E+04	3.1E+03	.	2.7E+04	1.2E+03	7.0E+00	8.7E-15
Barium (56)	Ba-137m	0.00E+00	0.00E+00	0.00E+00	5.46E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	3.1E-13
Barium (56)	Ba-139	3.74E-13	1.9E-13 (S)	5.37E-13	4.24E-13	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	8.5E+01	.	2.2E+06	1.3E+02	8.0E+02	1.1E+05	2.2E+04	.	1.9E+05	8.1E+03	4.8E+01	3.0E-15
Barium (56)	Ba-140	1.50E-11	2.3E-11 (S)	2.19E-11	1.61E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	2.1E+00	.	5.7E+05	3.2E+00	2.0E+01	2.8E+03	5.3E+02	.	4.6E+03	2.0E+02	1.2E+00	1.6E-14
Barium (56)	Ba-141	2.25E-13	1.1E-13 (S)	3.22E-13	8.69E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	1.4E+02	.	1.1E+05	2.2E+02	1.3E+03	1.9E+05	3.6E+04	.	3.1E+05	1.4E+04	8.0E+01	1.1E-15
Barium (56)	Ba-142	9.03E-14	4.6E-14 (S)	1.28E-13	9.82E-12	8.70E-04	1.20E+00	1.40E-04	1.60E-04	.	1.90E-02	8.70E-01	3.5E+02	.	9.3E+04	5.6E+02	3.4E+03	4.8E+05	9.1E+04	.	7.8E+05	3.4E+04	2.0E+02	1.6E-15
Beryllium (4)	Be-10	7.03E-12	9.4E-11 (S)	1.03E-11	3.25E-15	4.00E-03	1.00E+02	5.00E-03	8.30E-07	.	.	.	4.5E+00	.	2.8E+08	1.9E+00	5.0E-01	1.7E+02	2.2E+05	.	.	.	3.7E-01	1.5E-08
Beryllium (4)	Be-7	8.73E-14	2.2E-13 (S)	1.21E-13	4.51E-13	4.00E-03	1.00E+02	5.00E-03	8.30E-07	.	.	.	3.6E+02	.	2.0E+06	5.8E+02	4.3E+01	1.4E+04	1.8E+07	.	.	.	3.6E+01	1.0E-13
Bismuth (83)	Bi-197	0.00E+00	0.00E+00	0.00E+00	1.60E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	5.7E+04	.	.	.	.	.	.	.	5.7E+04	5.6E-13
Bismuth (83)	Bi-200	1.61E-13	8.3E-14 (S)	2.27E-13	2.23E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	2.0E+02	.	4.1E+04	3.1E+02	1.5E+02	1.9E+04	8.2E+03	.	.	.	6.7E+01	2.6E-15
Bismuth (83)	Bi-201	4.18E-13	2.0E-13 (S)	5.92E-13	1.66E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	7.6E+01	.	5.5E+04	1.2E+02	5.8E+01	7.2E+03	3.1E+03	.	.	.	2.6E+01	3.0E-15
Bismuth (83)	Bi-202	3.02E-13	1.3E-13 (S)	4.22E-13	2.57E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.1E+02	.	3.6E+04	1.7E+02	8.2E+01	1.0E+04	4.4E+03	.	.	.	3.6E+01	4.0E-15
Bismuth (83)	Bi-203	1.94E-12	8.6E-13 (S)	2.75E-12	2.31E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.6E+01	.	4.0E+04	2.6E+01	1.3E+01	1.5E+03	6.8E+02	.	.	.	5.5E+00	4.2E-15
Bismuth (83)	Bi-204	2.12E-12	8.8E-13 (S)	2.99E-12	2.74E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.5E+01	.	3.3E+04	2.4E+01	1.2E+01	1.4E+03	6.2E+02	.	.	.	5.1E+00	3.7E-15
Bismuth (83)	Bi-205	3.36E-12	3.7E-12 (S)	4.74E-12	1.63E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	9.5E+00	.	5.6E+04	1.5E+01	7.3E+00	9.0E+02	3.9E+02	.	.	.	3.2E+00	7.7E-14
Bismuth (83)	Bi-206	7.81E-12	6.4E-12 (S)	1.11E-11	3.08E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	4.1E+00	.	3.0E+04	6.4E+00	3.1E+00	3.8E+02	1.7E+02	.	.	.	1.4E+00	1.3E-14
Bismuth (83)	Bi-207	5.74E-12	1.1E-10 (S)	8.25E-12	1.44E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	5.6E+00	.	6.4E+04	2.4E+00	4.2E+00	5.1E+02	2.2E+02	.	.	.	1.2E+00	2.2E-11
Bismuth (83)	Bi-208	3.89E-12	1.0E-10 (S)	5.40E-12	2.79E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	8.2E+00	.	3.3E+04	2.9E+00	6.4E+00	7.9E+02	3.4E+02	.	.	.	1.6E+00	3.4E-07
Bismuth (83)	Bi-210	8.92E-12	4.6E-10 (S)	1.30E-11	7.82E-15	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	3.6E+00	.	1.2E+08	5.5E+00	2.6E+00	3.3E+02	1.4E+02	.	.	.	1.2E+00	9.5E-15
Bismuth (83)	Bi-210m	5.55E-11	2.9E-08 (S)	7.77E-11	2.31E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	5.7E-01	.	4.0E+05	2.0E-01	4.4E-01	5.5E+01	2.4E+01	.	.	.	1.1E-01	2.0E-07
Bismuth (83)	Bi-210m+D	5.55E-11	2.9E-08 (S)	7.77E-11	2.32E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	5.7E-01	.	3.9E+05	2.0E-01	4.4E-01	5.5E+01	2.4E+01	.	.	.	1.1E-01	2.0E-07
Bismuth (83)	Bi-211	0.00E+00	0.00E+00	0.00E+00	4.18E-13	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	2.2E+06	.	.	.	.	.	.	.	2.2E+06	5.3E-12
Bismuth (83)	Bi-212	7.18E-13	8.4E-11 (S)	1.01E-12	9.91E-13	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	4.4E+01	.	9.2E+05	7.1E+01	3.4E+01	4.2E+03	1.8E+03	.	.	.	1.5E+01	1.0E-15
Bismuth (83)	Bi-212+D	7.18E-13	8.4E-11 (S)	1.01E-12	9.91E-13	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	4.4E+01	.	9.2E+05	7.1E+01	3.4E+01	4.2E+03	1.8E+03	.	.	.	1.5E+01	1.0E-15
Bismuth (83)	Bi-212n	0.00E+00	0.00E+00	0.00E+00	1.38E-14	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	6.6E+07	.	.	.	.	.	.	.	6.6E+07	5.2E-10
Bismuth (83)	Bi-213	5.07E-13	7.4E-11 (S)	7.18E-13	1.16E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	6.3E+01	.	7.9E+05	9.9E+01	4.8E+01	5.9E+03	2.6E+03	.	.	.	2.1E+01	1.1E-15
Bismuth (83)	Bi-213+D	5.07E-13	7.4E-11 (S)	7.18E-13	1.16E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	6.3E+01	.	7.9E+05	9.9E+01	4.8E+01	5.9E+03	2.6E+03	.	.	.	2.1E+01	1.1E-15
Bismuth (83)	Bi-214	1.92E-13	3.1E-11 (S)	2.65E-13	1.45E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.7E+02	.	6.3E+04	2.7E+02	1.3E+02	1.6E+04	7.0E+03	.	.	.	5.7E+01	1.3E-15
Bismuth (83)	Bi-214+D	1.92E-13	3.1E-11 (S)	2.65E-13	1.45E-11	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	1.7E+02	.	6.3E+04	2.7E+02	1.3E+02	1.6E+04	7.0E+03	.	.	.	5.7E+01	1.3E-15
Bismuth (83)	Bi-215	0.00E+00	0.00E+00	0.00E+00	2.31E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	4.0E+05	.	.	.	.	.	.	.	4.0E+05	3.4E-12
Bismuth (83)	Bi-215+D	0.00E+00	0.00E+00	0.00E+00	2.31E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	4.0E+05	.	.	.	.	.	.	.	4.0E+05	3.4E-12
Bismuth (83)	Bi-216	0.00E+00	0.00E+00	0.00E+00	6.76E-12	1.00E-01	1.50E+01	2.00E-03	1.00E-03	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	3.4E-13
Berkelium (97)	Bk-245	3.47E-12	8.1E-12 (S)	5.07E-12	1.87E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	9.2E+00	.	4.9E+05	1.4E+01	.	8.4E+04	1.8E+05	.	.	.	5.6E+00	5.2E-14
Berkelium (97)	Bk-246	1.96E-12	9.5E-13 (S)	2.81E-12	7.79E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.6E+01	.	1.2E+05	2.5E+01	.	1.5E+05	3.3E+05	.	.	.	9.9E+00	3.4E-14
Berkelium (97)	Bk-247	1.25E-10	4.8E-08 (F)	1.61E-10	1.20E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.6E-01	.	7.6E+05	1.3E-01	.	2.6E+03	5.8E+03	.	.	.	8.4E-02	8.0E-11
Berkelium (97)	Bk-248m	2.47E-12	5.3E-11 (S)	3.62E-12	4.45E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.3E+01	.	2.1E+06	2.0E+01	.	1.2E+05	2.6E+05	.	.	.	7.8E+00	1.5E-14
Berkelium (97)	Bk-249	1.10E-12	1.2E-10 (F)	1.56E-12	1.90E-17	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.9E+01	.	4.8E+10	4.1E+01	.	2.7E+05	5.9E+05	.	.	.	1.7E+01	1.1E-11
Berkelium (97)	Bk-250	5.70E-13	1.4E-12 (S)	8.21E-13	8.50E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	5.6E+01	.	1.1E+05	8.7E+01	.	5.2E+05	1.1E+06	.	.	.	3.4E+01	8.7E-15
Berkelium (97)	Bk-251	9.32E-14	9.3E-14 (S)	1.33E-13	6.85E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	3.4E+02	.	1.3E+06	5.4E+02	.	3.2E+06	7.0E+06	.	.	.	2.1E+02	1.6E-14
Bromine (35)	Br-72	0.00E+00	0.00E+00	0.00E+00	2.84E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	3.2E+04	.	.	.	.	.	.	.	3.2E+04	1.6E-14
Bromine (35)	Br-73	0.00E+00	0.00E+00	0.00E+00	1.31E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	7.0E+04	.	.	.	.	.	.	.	7.0E+04	9.2E-14
Bromine (35)	Br-74	1.47E-13	6.6E-14 (S)	2.00E-13	4.72E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	2.2E+02	.	1.9E+04	3.6E+02	2.8E+01	8.5E+01	4.6E+01	.	.	.	1.3E+01	1.3E-16
Bromine (35)	Br-74m	2.48E-13	1.3E-13 (S)	3.38E-13	4.09E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	1.3E+02	.	2.2E+04	2.1E+02	1.7E+01	5.0E+01	2.7E+01	.	.	.	7.8E+00	1.4E-16
Bromine (35)	Br-75	1.55E-13	1.2E-13 (S)	2.12E-13	1.08E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	2.1E+02	.	8.4E+04	3.4E+02	2.7E+01	8.0E+01	4.4E+01	.	.	.	1.2E+01	4.8E-16
Bromine (35)	Br-76	1.44E-12	1.1E-12 (S)	1.95E-12	2.74E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	2.2E+01	.	3.3E+04	3.6E+01	2.9E+00	8.7E+00	4.7E+00	.	.	.	1.3E+00	5.3E-16
Bromine (35)	Br-76m	0.00E+00	0.00E+00	0.00E+00	1.90E-13	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	4.8E+06	.	.	.	.	.	.	.	4.8E+06	4.2E-14
Bromine (35)	Br-77	3.07E-13	2.2E-13 (S)	4.11E-13	2.85E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	1.0E+02	.	3.2E+05	1.7E+02	1.4E+01	4.1E+01	2.3E+01	.	.	.	6.4E+00	9.0E-15
Bromine (35)	Br-77m	0.00E+00	0.00E+00	0.00E+00	1.19E-13	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	7.7E+06	.	.	.	.	.	.	.	7.7E+06	1.3E-11

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Bromine (35)	Br-78	0.00E+00	0.00E+00	0.00E+00	9.41E-12	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	9.7E+04	.	.	.	.	.	.	.	9.7E+04	2.6E-13
Bromine (35)	Br-80	4.77E-14	2.6E-14 (S)	6.55E-14	7.17E-13	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	6.7E+02	.	1.3E+06	1.1E+03	8.7E+01	2.6E+02	1.4E+02	.	.	.	4.0E+01	3.0E-16
Bromine (35)	Br-80m	2.83E-13	3.5E-13 (S)	3.89E-13	4.43E-14	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	1.1E+02	.	2.1E+07	1.8E+02	1.5E+01	4.4E+01	2.4E+01	.	.	.	6.8E+00	7.7E-16
Bromine (35)	Br-82	1.72E-12	1.8E-12 (S)	2.32E-12	2.49E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	1.8E+01	.	3.7E+04	3.1E+01	2.5E+00	7.3E+00	4.0E+00	.	.	.	1.1E+00	1.1E-15
Bromine (35)	Br-82m	0.00E+00	0.00E+00	0.00E+00	2.80E-14	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	3.3E+07	.	.	.	.	.	.	.	3.3E+07	8.7E-11
Bromine (35)	Br-83	8.55E-14	1.3E-13 (S)	1.18E-13	6.80E-14	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	3.7E+02	.	1.3E+07	6.1E+02	4.8E+01	1.4E+02	7.9E+01	.	.	.	2.2E+01	1.4E-15
Bromine (35)	Br-84	1.48E-13	7.5E-14 (S)	2.03E-13	1.81E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	2.2E+02	.	5.1E+04	3.5E+02	2.8E+01	8.4E+01	4.6E+01	.	.	.	1.3E+01	1.8E-16
Bromine (35)	Br-84m	0.00E+00	0.00E+00	0.00E+00	2.66E-11	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	9.2E-14
Bromine (35)	Br-85	0.00E+00	0.00E+00	0.00E+00	6.74E-13	4.00E-01	9.10E+01	5.00E-01	2.00E-01	.	.	.	.	.	1.4E+06	.	.	.	.	.	.	.	1.4E+06	1.8E-12
Carbon (6)	C-10	0.00E+00	0.00E+00	0.00E+00	1.60E-11	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	.	.	5.7E+04	.	.	.	.	.	.	.	5.7E+04	9.8E-16
Carbon (6)	C-11	4.07E-14	2.9E-14 (S)	5.59E-14	9.24E-12	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	7.8E+02	.	9.9E+04	1.3E+03	2.3E-02	4.9E+03	2.8E+03	.	.	.	2.3E-02	2.8E-20
Carbon (6)	C-14	1.55E-12	1.7E-11 (S)	2.00E-12	5.80E-17	5.50E+00	4.00E+05	3.10E-02	1.20E-02	.	.	.	2.1E+01	4.6E-01	1.6E+10	6.2E-01	6.5E-04	1.4E+02	7.7E+01	.	.	.	6.5E-04	1.4E-13
Calcium (20)	Ca-41	4.14E-13	5.9E-13 (S)	5.11E-13	0.00E+00	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	7.7E+01	.	.	1.7E+01	8.4E+01	1.3E+03	3.6E+02	7.1E+04	8.4E+04	1.7E+04	1.1E+01	1.3E-07
Calcium (20)	Ca-45	2.47E-12	1.3E-11 (S)	3.36E-12	2.94E-16	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	1.3E+01	.	3.1E+09	1.8E+01	1.3E+01	1.9E+02	5.5E+01	1.1E+04	1.3E+04	2.6E+03	4.3E+00	2.4E-13
Calcium (20)	Ca-47	7.62E-12	9.0E-12 (S)	1.10E-11	1.02E-11	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	4.2E+00	.	8.9E+04	6.5E+00	3.9E+00	6.0E+01	1.7E+01	3.3E+03	3.9E+03	7.9E+02	1.4E+00	2.3E-15
Calcium (20)	Ca-49	0.00E+00	0.00E+00	0.00E+00	3.44E-11	5.00E-01	1.20E+01	1.30E-02	1.00E-02	2.00E-03	4.40E-02	4.40E-01	.	.	2.7E+04	.	.	.	.	.	.	.	2.7E+04	6.0E-14
Cadmium (48)	Cd-101	0.00E+00	0.00E+00	0.00E+00	2.38E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	3.8E+04	.	.	.	.	.	.	.	3.8E+04	2.8E-14
Cadmium (48)	Cd-102	0.00E+00	0.00E+00	0.00E+00	7.58E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	3.6E-13
Cadmium (48)	Cd-103	0.00E+00	0.00E+00	0.00E+00	2.04E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	4.5E+04	.	.	.	.	.	.	.	4.5E+04	1.8E-13
Cadmium (48)	Cd-104	3.07E-13	1.4E-13 (S)	4.40E-13	2.06E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.0E+02	.	4.4E+05	1.6E+02	5.9E+00	3.3E+03	2.2E+04	1.1E+04	2.5E+03	8.6E+04	5.4E+00	1.7E-16
Cadmium (48)	Cd-105	1.08E-13	5.0E-14 (S)	1.52E-13	1.25E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	2.9E+02	.	7.3E+04	4.7E+02	1.7E+01	9.6E+03	6.4E+04	3.2E+04	7.4E+03	2.5E+05	1.6E+01	4.8E-16
Cadmium (48)	Cd-107	3.53E-13	3.1E-13 (S)	5.14E-13	9.52E-14	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	9.0E+01	.	9.6E+06	1.4E+02	5.0E+00	2.8E+03	1.9E+04	9.5E+03	2.2E+03	7.4E+04	4.6E+00	1.0E-15
Cadmium (48)	Cd-109	5.00E-12	2.2E-11 (S)	6.70E-12	4.22E-14	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	6.4E+00	.	2.2E+07	6.3E+00	3.9E-01	2.2E+02	1.5E+03	7.3E+02	1.7E+02	5.7E+03	3.4E-01	1.3E-13
Cadmium (48)	Cd-111m	3.27E-14	4.4E-14 (S)	4.59E-14	2.43E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	9.8E+02	.	3.8E+05	1.6E+03	5.6E+01	3.2E+04	2.1E+05	1.1E+05	2.4E+04	8.3E+05	5.1E+01	1.5E-15
Cadmium (48)	Cd-113	2.27E-11	1.1E-10 (F)	2.88E-11	4.86E-16	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.4E+00	.	1.9E+09	2.2E-01	9.0E-02	5.1E+01	3.4E+02	1.7E+02	3.9E+01	1.3E+03	6.1E-02	1.5E+02
Cadmium (48)	Cd-113m	2.90E-11	1.3E-10 (F)	3.67E-11	2.58E-15	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.1E+00	.	3.5E+08	3.0E-01	7.0E-02	4.0E+01	2.7E+02	1.3E+02	3.0E+01	1.0E+03	5.4E-02	2.4E-13
Cadmium (48)	Cd-115	8.88E-12	5.3E-12 (S)	1.30E-11	1.74E-12	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	3.6E+00	.	5.3E+05	5.5E+00	2.0E-01	1.1E+02	7.5E+02	3.7E+02	8.6E+01	2.9E+03	1.8E-01	3.6E-16
Cadmium (48)	Cd-115m	1.70E-11	2.9E-11 (S)	2.45E-11	3.30E-13	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	1.9E+00	.	2.8E+06	2.7E+00	1.1E-01	6.0E+01	4.0E+02	2.0E+02	4.6E+01	1.6E+03	9.6E-02	3.8E-15
Cadmium (48)	Cd-117	1.37E-12	6.5E-13 (S)	1.98E-12	1.04E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	2.3E+01	.	8.8E+04	3.6E+01	1.3E+00	7.4E+02	4.9E+03	2.5E+03	5.6E+02	1.9E+04	1.2E+00	1.1E-16
Cadmium (48)	Cd-117m	1.22E-12	6.5E-13 (S)	1.76E-12	2.02E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	2.6E+01	.	4.5E+04	4.1E+01	1.5E+00	8.3E+02	5.6E+03	2.8E+03	6.4E+02	2.2E+04	1.3E+00	1.7E-16
Cadmium (48)	Cd-118	4.29E-13	2.1E-13 (S)	6.07E-13	1.58E-15	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	7.4E+01	.	5.8E+08	1.2E+02	4.3E+00	2.4E+03	1.6E+04	8.0E+03	1.8E+03	6.3E+04	3.9E+00	1.2E-16
Cadmium (48)	Cd-119	0.00E+00	0.00E+00	0.00E+00	1.62E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	5.6E+04	.	.	.	.	.	.	.	5.6E+04	9.6E-14
Cadmium (48)	Cd-119m	0.00E+00	0.00E+00	0.00E+00	2.28E-11	7.66E-01	2.00E+02	5.80E-03	1.90E-04	1.50E-02	1.70E+00	1.00E-01	.	.	4.0E+04	.	.	.	.	.	.	.	4.0E+04	5.6E-14
Cerium (58)	Ce-130	1.44E-13	7.1E-14 (S)	2.00E-13	4.33E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	2.2E+02	.	2.1E+05	3.6E+02	1.0E+02	2.1E+06	4.6E+05	3.7E+06	.	6.1E+06	5.9E+01	9.3E-16
Cerium (58)	Ce-131	5.37E-14	2.5E-14 (S)	7.44E-14	1.51E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	5.9E+02	.	6.1E+04	9.6E+02	2.8E+02	5.7E+06	1.2E+06	9.8E+06	.	1.6E+07	1.6E+02	1.1E-15
Cerium (58)	Ce-132	1.80E-12	6.5E-13 (S)	2.62E-12	2.21E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.8E+01	.	4.1E+05	2.7E+01	7.9E+00	1.6E+05	3.5E+04	2.8E+05	.	4.7E+05	4.5E+00	6.7E-16
Cerium (58)	Ce-133	3.18E-13	1.6E-13 (S)	4.55E-13	4.58E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.0E+02	.	2.0E+05	1.6E+02	4.5E+01	9.3E+05	2.0E+05	1.6E+06	.	2.7E+06	2.6E+01	1.8E-15
Cerium (58)	Ce-133m	8.36E-13	3.4E-13 (S)	1.19E-12	1.62E-11	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.8E+01	.	5.6E+04	6.0E+01	1.7E+01	3.6E+05	7.8E+04	6.1E+05	.	1.0E+06	9.9E+00	2.1E-15
Cerium (58)	Ce-134	1.68E-11	7.9E-12 (S)	2.45E-11	7.81E-14	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	1.9E+00	.	1.2E+07	2.9E+00	8.4E-01	1.7E+04	3.8E+03	3.0E+04	.	5.0E+04	4.9E-01	1.6E-15
Cerium (58)	Ce-135	1.02E-12	4.3E-13 (S)	1.46E-12	7.32E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	3.1E+01	.	1.2E+05	4.9E+01	1.4E+01	2.9E+05	6.4E+04	5.0E+05	.	8.4E+05	8.1E+00	6.2E-15
Cerium (58)	Ce-137	1.35E-13	4.4E-14 (S)	1.96E-13	1.65E-13	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	2.4E+02	.	5.6E+06	3.6E+02	1.1E+02	2.2E+06	4.7E+05	3.7E+06	.	6.3E+06	6.1E+01	2.4E-14
Cerium (58)	Ce-137m	3.53E-12	2.1E-12 (S)	5.18E-12	3.70E-13	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	9.0E+00	.	2.5E+06	1.4E+01	4.0E+00	8.2E+04	1.8E+04	1.4E+05	.	2.4E+05	2.3E+00	3.5E-15
Cerium (58)	Ce-139	1.36E-12	6.9E-12 (S)	1.97E-12	1.20E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	2.3E+01	.	7.6E+05	3.4E+01	1.1E+01	2.2E+05	4.7E+04	3.7E+05	.	6.2E+05	6.0E+00	8.8E-13
Cerium (58)	Ce-141	4.66E-12	1.4E-11 (S)	6.81E-12	6.20E-13	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	6.8E+00	.	1.5E+06	1.0E+01	3.0E+00	6.2E+04	1.4E+04	1.1E+05	.	1.8E+05	1.7E+00	6.1E-14
Cerium (58)	Ce-143	7.18E-12	4.1E-12 (S)	1.05E-11	2.37E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	4.4E+00	.	3.9E+05	6.8E+00	2.0E+00	4.1E+04	8.9E+03	7.0E+04	.	1.2E+05	1.1E+00	1.7E-15
Cerium (58)	Ce-144	3.52E-11	1.8E-10 (S)	5.18E-11	1.44E-13	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	9.0E-01	.	6.4E+06	1.2E+00	4.0E-01	8.2E+03	1.8E+03	1.4E+04	.	2.4E+04	2.3E-01	7.1E-14
Cerium (58)	Ce-144+D	3.53E-11	1.8E-10 (S)	5.18E-11	4.92E-13	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	9.0E-01	.	1.9E+06	1.2E+00	4.0E-01	8.2E+03	1.8E+03	1.4E+04	.	2.4E+04	2.3E-01	7.1E-14
Cerium (58)	Ce-145	0.00E+00	0.00E+00	0.00E+00	7.33E-12	2.70E-03	2.50E+01	2.00E-05	2.00E-05	1.00E-04	.	3.10E-03	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	2.9E-13
Californium (98)	Cf-244	1.25E-13	3.2E-11 (S)	1.74E-13	7.40E-16	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.6E+02	.	1.2E+09	4.1E+02	1.2E+02	8.1E+05	5.3E+06	.	.	.	6.8E+01	1.7E-15
Californium (98)	Cf-246	2.11E-11	1.7E-09 (S)	3.09E-11	8.99E-16	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	1.5E+00	.	1.0E+09	2.3E+00	6.7E-01	4.6E+03	3.0E+04	.	.	.	3.9E-01	1.1E-15
Californium (98)	Cf-247	9.32E-14	1.1E-13 (S)	1.35E-13	7.20E-13	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	3.4E+02	.	1.3E+06	5.3E+02	1.5E+02	1.0E+06	6.9E+06	.	.	.	8.8E+01	2.2E-14
Californium (98)	Cf-248	4.44E-11	2.6E-08 (S)	6.25E-11	3.97E-15	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	7.2E-01	.	2.3E+08	1.0E+00	3.3E-01	2.3E+03	1.5E+04	.	.	.	1.9E-01	1.2E-13
Californium (98)	Cf-249	1.27E-10	4.8E-08 (F)	1.63E-10	2.90E-12	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.5E-01	.	3.2E+05	1.3E-01	1.3E-01	8.7E+02	5.7E+03	.	.	.	5.0E-02	1.2E-11
Californium (98)	Cf-250	8.92E-11	3.7E-08 (S)	1.15E-10	9.83E-14	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	3.6E-01	.	9.3E+06	2.6E-01	1.8E-01	1.2E+03	8.0E+03	.	.	.	8.2E-02	7.5E-13
Californium (98)	Cf-251	1.31E-10	4.9E-08 (F)	1.69E-10	9.68E-13	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.4E-01	.	9.4E+05	1.2E-01	1.2E-01	8.4E+02	5.5E+03	.	.	.	4.8E-02	3.1E-11
Californium (98)	Cf-252	1.33E-10	4.4E-08 (S)	1.82E-10	4.54E-12	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.4E-01	.	2.0E+05	2.9E-01	1.1E-01	7.8E+02	5.1E+03	.	.	.	6.1E-02	1.1E-13
Californium (98)	Cf-253	4.59E-12	5.4E-09 (S)	6.59E-12	3.42E-15	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	6.9E+00	.	2.7E+08	1.1E+01	3.1E+00	2.1E+04	1.4E+05	.	.	.	1.8E+00	6.2E-14
Californium (98)	Cf-254	2.13E-09	1.5E-07 (S)	3.06E-09	1.68E-10	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	1.5E-02	.	5.4E+03	2.3E-02	6.8E-03	4.6E+01	3.0E+02	.	.	.	3.9E-03	4.6E-16
Californium (98)	Cf-255	1.35E-13	2.3E-11 (S)	1.95E-13	2.81E-15	1.00E-03	2.50E+01	6.00E-05	2.00E-06	.	.	.	2.4E+02	.	3.2E+08	3.7E+02	1.1E+02	7.3E+05	4.8E+06	.	.	.	6.1E+01	7.0E-15
Chlorine (17)	Cl-34	0.00E+00	0.00E+00	0.00E+00	9.42E-12	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	.	.	9.7E+04	.	.	.	.	.	.	.	9.7E+04	4.5E-16
Chlorine (17)	Cl-34m	1.77E-13	8.7E-14 (S)	2.42E-13	2.11E-11	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	1.8E+02	.	4.3E+04	2.9E+02	4.5E+01	2.1E+03	3.8E+02	.	.	.	2.9E+01	1.7E-16
Chlorine (17)	Cl-36	3.30E-12	1.0E-10 (S)	4.44E-12	5.31E-15	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	9.7E+00	.	1.7E+08	5.2E-02	2.5E+00	1.1E+02	2.1E+01	.	.	.	5.0E-02	1.5E-09
Chlorine (17)	Cl-38	1.94E-13	1.0E-13 (S)	2.66E-13	1.49E-11	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	1.6E+02	.	6.1E+04	2.7E+02	4.1E+01	1.9E+03	3.5E+02	.	.	.	2.7E+01	2.0E-16
Chlorine (17)	Cl-39	1.52E-13	1.0E-13 (S)	2.08E-13	1.41E-11	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	2.1E+02	.	6.5E+04	3.4E+02	5.3E+01	2.4E+03	4.5E+02	.	.	.	3.4E+01	3.9E-16
Chlorine (17)	Cl-40	0.00E+00	0.00E+00	0.00E+00	4.30E-11	3.13E+01	4.70E+01	1.70E-02	2.00E-02	.	.	.	.	.	2.1E+04	.	.	.	.	.	.	.	2.1E+04	6.1E-15
Curium (96)	Cm-238	2.51E-13	6.4E-12 (S)	3.59E-13	6.14E-13	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	1.3E+02	.	1.5E+06	2.0E+02	4.8E+01	1.2E+06	2.6E+06	.	.	.	3.0E+01	5.4E-15
Curium (96)	Cm-239	4.55E-13	2.7E-13 (S)	6.62E-13	2.11E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	7.0E+01	.	4.3E+05	1.1E+02	2.6E+01	6.4E+05	1.4E+06	.	.	.	1.6E+01	3.6E-15
Curium (96)	Cm-240	3.49E-11	1.2E-08 (S)	5.07E-11	8.01E-16	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	9.1E-01	.	1.1E+09	1.4E+00	3.4E-01	8.4E+03	1.8E+04	.	.	.	2.1E-01	1.0E-14
Curium (96)	Cm-241	4.96E-12	1.2E-10 (S)	7.18E-12	4.30E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	6.4E+00	.	2.1E+05	9.8E+00	2.4E+00	5.9E+04	1.3E+05	.	.	.	1.5E+00	9.0E-14
Curium (96)	Cm-242	3.85E-11	2.0E-08 (S)	5.48E-11	6.84E-16	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	8.3E-01	.	1.3E+09	1.2E+00	3.2E-01	7.8E+03	1.7E+04	.	.	.	1.9E-01	5.8E-14
Curium (96)	Cm-243	9.51E-11	3.7E-08 (S)	1.24E-10	1.07E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.4E-01	.	8.5E+05	2.0E-01	1.4E-01	3.4E+03	7.5E+03	.	.	.	6.6E-02	1.3E-12
Curium (96)	Cm-244	8.36E-11	3.6E-08 (S)	1.08E-10	7.23E-16	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.8E-01	.	1.3E+09	2.6E-01	1.6E-01	3.9E+03	8.6E+03	.	.	.	7.8E-02	9.7E-13
Curium (96)	Cm-245	1.05E-10	3.8E-08 (F)	1.35E-10	8.04E-13	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.0E-01	.	1.1E+06	1.5E-01	1.3E-01	3.1E+03	6.8E+03	.	.	.	5.6E-02	3.3E-10
Curium (96)	Cm-246	1.03E-10	3.8E-08 (F)	1.33E-10	3.64E-14	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.1E-01	.	2.5E+07	1.5E-01	1.3E-01	3.2E+03	7.0E+03	.	.	.	5.7E-02	1.9E-10
Curium (96)	Cm-247	9.95E-11	3.5E-08 (F)	1.29E-10	2.81E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.2E-01	.	3.2E+05	1.6E-01	1.3E-01	3.3E+03	7.2E+03	.	.	.	5.9E-02	6.3E-07
Curium (96)	Cm-247+D	9.99E-11	3.5E-08 (F)	1.30E-10	2.99E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.2E-01	.	3.1E+05	1.5E-01	1.3E-01	3.3E+03	7.1E+03	.	.	.	5.8E-02	6.3E-07
Curium (96)	Cm-248	4.55E-10	1.4E-07 (F)	5.96E-10	1.31E-11	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	7.0E-02	.	7.0E+04	3.4E-02	2.9E-02	7.1E+02	1.6E+03	.	.	.	1.3E-02	3.1E-09
Curium (96)	Cm-249	8.44E-14	7.8E-14 (S)	1.20E-13	1.79E-13	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	3.8E+02	.	5.1E+06	5.9E+02	1.4E+02	3.5E+06	7.7E+06	.	.	.	8.8E+01	7.5E-15
Curium (96)	Cm-250	3.29E-09	9.9E-07 (F)	4.33E-09	1.33E-10	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	9.7E-03	.	6.9E+03	4.6E-03	4.0E-03	9.8E+01	2.1E+02	.	.	.	1.8E-03	1.0E-11
Curium (96)	Cm-250+D	3.30E-09	9.9E-07 (F)	4.33E-09	1.35E-10	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	9.7E-03	.	6.7E+03	4.6E-03	4.0E-03	9.8E+01	2.1E+02	.	.	.	1.8E-03	1.0E-11
Curium (96)	Cm-251	6.11E-14	5.1E-14 (S)	8.58E-14	1.01E-12	2.00E-05	3.00E+01	2.00E-05	2.00E-06	.	.	.	5.2E+02	.	9.1E+05	8.3E+02	2.0E+02	4.9E+06	1.1E+07	.	.	.	1.2E+02	2.8E-15
Cobalt (27)	Co-54m	0.00E+00	0.00E+00	0.00E+00	3.75E-11	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/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Cobalt (27)	Co-57	1.04E-12	3.7E-12 (S)	1.49E-12	1.01E-12	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	3.1E+01	.	9.1E+05	4.3E+01	4.6E+00	1.3E+04	1.1E+04	2.4E+04	1.3E+03	7.7E+04	3.6E+00	4.3E-13
Cobalt (27)	Co-58	2.94E-12	7.9E-12 (S)	4.14E-12	9.04E-12	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	1.1E+01	.	1.0E+05	1.7E+01	1.6E+00	4.8E+03	4.1E+03	8.8E+03	4.7E+02	2.8E+04	1.3E+00	4.1E-14
Cobalt (27)	Co-58m	1.25E-13	8.3E-14 (S)	1.81E-13	1.04E-17	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	2.6E+02	.	8.8E+10	3.9E+02	3.8E+01	1.1E+05	9.3E+04	2.0E+05	1.1E+04	6.4E+05	3.0E+01	5.0E-15
Cobalt (27)	Co-60	1.58E-11	1.0E-10 (S)	2.23E-11	2.44E-11	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	2.0E+00	.	3.7E+04	1.9E+00	3.1E-01	8.8E+02	7.6E+02	1.6E+03	8.8E+01	5.2E+03	2.3E-01	2.1E-13
Cobalt (27)	Co-60m	2.60E-15	4.3E-15 (S)	3.58E-15	3.92E-14	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	1.2E+04	.	2.3E+07	2.0E+04	1.9E+03	5.5E+06	4.7E+06	1.0E+07	5.5E+05	3.2E+07	1.5E+03	5.1E-15
Cobalt (27)	Co-61	2.45E-13	1.5E-13 (S)	3.52E-13	7.64E-13	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	1.3E+02	.	1.2E+06	2.0E+02	1.9E+01	5.6E+04	4.8E+04	1.0E+05	5.6E+03	3.3E+05	1.5E+01	5.0E-16
Cobalt (27)	Co-62	0.00E+00	0.00E+00	0.00E+00	1.60E-11	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	.	.	5.7E+04	.	.	.	.	.	.	.	5.7E+04	2.8E-14
Cobalt (27)	Co-62m	8.51E-14	3.4E-14 (S)	1.17E-13	2.65E-11	7.40E-03	7.60E+01	4.30E-04	1.10E-04	2.00E-03	9.70E-01	3.30E-02	3.7E+02	.	3.4E+04	6.1E+02	5.8E+01	1.7E+05	1.4E+05	3.1E+05	1.7E+04	9.9E+05	4.6E+01	2.1E-16
Chromium (24)	Cr-48	7.25E-13	7.2E-13 (S)	1.02E-12	3.81E-12	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	4.4E+01	.	2.4E+05	7.0E+01	1.3E+01	2.8E+02	4.2E+03	.	.	.	8.3E+00	2.8E-15
Chromium (24)	Cr-49	1.36E-13	7.4E-14 (S)	1.90E-13	9.45E-12	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	2.3E+02	.	9.7E+04	3.7E+02	6.8E+01	1.5E+03	2.3E+04	.	.	.	4.5E+01	4.9E-16
Chromium (24)	Cr-51	1.85E-13	1.7E-13 (S)	2.66E-13	2.84E-13	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	1.7E+02	.	3.2E+06	2.7E+02	4.9E+01	1.1E+03	1.6E+04	.	.	.	3.2E+01	3.5E-13
Chromium (24)	Cr-55	0.00E+00	0.00E+00	0.00E+00	5.60E-14	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	.	.	1.6E+07	.	.	.	.	.	.	.	1.6E+07	1.7E-11
Chromium (24)	Cr-56	0.00E+00	0.00E+00	0.00E+00	6.22E-13	1.74E-04	4.00E+01	3.00E-02	4.30E-04	.	.	.	.	.	1.5E+06	.	.	.	.	.	.	.	1.5E+06	2.6E-12
Cesium (55)	Cs-121	0.00E+00	0.00E+00	0.00E+00	1.08E-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	1.4E-13
Cesium (55)	Cs-121m	0.00E+00	0.00E+00	0.00E+00	1.08E-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	1.1E-13
Cesium (55)	Cs-123	0.00E+00	0.00E+00	0.00E+00	9.82E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	9.3E+04	.	.	.	.	.	.	.	9.3E+04	3.6E-13
Cesium (55)	Cs-124	0.00E+00	0.00E+00	0.00E+00	1.08E-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	2.9E-14
Cesium (55)	Cs-125	6.22E-14	4.4E-14 (S)	8.47E-14	6.83E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	5.1E+02	.	1.3E+05	8.4E+02	2.4E+00	4.6E+03	4.8E+03	4.3E+03	8.3E+03	1.1E+05	2.4E+00	7.3E-17
Cesium (55)	Cs-126	0.00E+00	0.00E+00	0.00E+00	1.06E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	8.6E+04	.	.	.	.	.	.	.	8.6E+04	9.5E-14
Cesium (55)	Cs-127	6.66E-14	1.1E-13 (S)	8.95E-14	3.74E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	4.8E+02	.	2.4E+05	8.0E+02	2.3E+00	4.3E+03	4.5E+03	4.1E+03	7.9E+03	1.1E+05	2.3E+00	5.8E-16
Cesium (55)	Cs-128	0.00E+00	0.00E+00	0.00E+00	8.09E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	2.8E-13
Cesium (55)	Cs-129	1.84E-13	2.6E-13 (S)	2.46E-13	2.28E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.7E+02	.	4.0E+05	2.9E+02	8.4E-01	1.6E+03	1.6E+03	1.5E+03	2.9E+03	3.9E+04	8.3E-01	1.1E-15
Cesium (55)	Cs-130	4.51E-14	2.7E-14 (S)	6.14E-14	4.50E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.1E+02	.	2.0E+05	1.2E+03	3.4E+00	6.3E+03	6.6E+03	5.9E+03	1.1E+04	1.5E+05	3.3E+00	6.8E-17
Cesium (55)	Cs-130m	0.00E+00	0.00E+00	0.00E+00	3.96E-13	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	2.3E+06	.	.	.	.	.	.	.	2.3E+06	5.5E-12
Cesium (55)	Cs-131	1.86E-13	1.9E-13 (S)	2.49E-13	4.29E-14	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.7E+02	.	2.1E+07	2.8E+02	8.3E-01	1.5E+03	1.6E+03	1.5E+03	2.8E+03	3.8E+04	8.2E-01	8.0E-15
Cesium (55)	Cs-132	1.48E-12	1.0E-12 (S)	1.94E-12	6.42E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	2.1E+01	.	1.4E+05	3.7E+01	1.1E-01	2.0E+02	2.1E+02	1.9E+02	3.6E+02	4.9E+03	1.1E-01	6.9E-16
Cesium (55)	Cs-134	4.22E-11	7.0E-11 (S)	5.18E-11	1.44E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.6E-01	.	6.4E+04	1.0E+00	4.0E-03	7.4E+00	7.8E+00	7.0E+00	1.4E+01	1.8E+02	4.0E-03	3.1E-15
Cesium (55)	Cs-134m	4.14E-14	1.8E-13 (S)	5.59E-14	1.55E-13	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.7E+02	.	5.9E+06	1.3E+03	3.7E+00	6.9E+03	7.2E+03	6.5E+03	1.3E+04	1.7E+05	3.7E+00	4.6E-16
Cesium (55)	Cs-135	6.29E-12	3.4E-11 (S)	7.81E-12	4.18E-16	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	5.1E+00	.	2.2E+09	2.4E+00	2.7E-02	4.9E+01	5.2E+01	4.7E+01	9.0E+01	1.2E+03	2.6E-02	2.3E-08
Cesium (55)	Cs-135m	4.51E-14	2.5E-14 (S)	6.11E-14	1.49E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	7.1E+02	.	6.1E+04	1.2E+03	3.4E+00	6.3E+03	6.6E+03	6.0E+03	1.2E+04	1.6E+05	3.4E+00	1.3E-16
Cesium (55)	Cs-136	8.62E-12	1.0E-11 (S)	1.12E-11	2.00E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	3.7E+00	.	4.6E+04	6.3E+00	1.8E-02	3.4E+01	3.6E+01	3.3E+01	6.3E+01	8.5E+02	1.8E-02	2.5E-16
Cesium (55)	Cs-137	3.05E-11	1.1E-10 (S)	3.74E-11	2.24E-15	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.0E+00	.	4.1E+08	6.2E-01	5.5E-03	1.0E+01	1.1E+01	9.8E+00	1.9E+01	2.5E+02	5.5E-03	6.3E-14
Cesium (55)	Cs-137+D	3.05E-11	1.1E-10 (S)	3.74E-11	5.16E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.0E+00	.	1.8E+05	6.2E-01	5.5E-03	1.0E+01	1.1E+01	9.8E+00	1.9E+01	2.5E+02	5.5E-03	6.3E-14
Cesium (55)	Cs-138	1.66E-13	9.3E-14 (S)	2.27E-13	2.34E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	1.9E+02	.	3.9E+04	3.1E+02	9.1E-01	1.7E+03	1.8E+03	1.6E+03	3.1E+03	4.2E+04	9.0E-01	2.2E-17
Cesium (55)	Cs-138m	0.00E+00	0.00E+00	0.00E+00	3.88E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	5.0E-13
Cesium (55)	Cs-139	0.00E+00	0.00E+00	0.00E+00	3.16E-12	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	2.9E+05	.	.	.	.	.	.	.	2.9E+05	2.0E-12
Cesium (55)	Cs-140	0.00E+00	0.00E+00	0.00E+00	1.80E-11	2.52E-02	2.50E+03	2.20E-02	4.60E-03	2.00E-01	2.70E+00	4.00E-01	.	.	5.1E+04	.	.	.	.	.	.	.	5.1E+04	4.0E-14
Copper (29)	Cu-57	0.00E+00	0.00E+00	0.00E+00	1.10E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	8.3E-17
Copper (29)	Cu-59	0.00E+00	0.00E+00	0.00E+00	1.34E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	6.8E+04	.	.	.	.	.	.	.	6.8E+04	2.9E-14
Copper (29)	Cu-60	1.40E-13	6.0E-14 (S)	1.93E-13	3.83E-11	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	2.3E+02	.	2.4E+04	3.7E+02	1.2E+01	4.4E+03	4.8E+03	1.7E+04	2.0E+04	3.9E+04	1.1E+01	8.1E-17
Copper (29)	Cu-61	4.48E-13	2.3E-13 (S)	6.48E-13	7.50E-12	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	7.1E+01	.	1.2E+05	1.1E+02	3.5E+00	1.3E+03	1.4E+03	5.1E+03	5.9E+03	1.2E+04	3.2E+00	2.1E-16
Copper (29)	Cu-62	0.00E+00	0.00E+00	0.00E+00	9.18E-12	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	3.2E-13
Copper (29)	Cu-64	6.48E-13	4.4E-13 (S)	9.44E-13	1.68E-12	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	4.9E+01	.	5.4E+05	7.6E+01	2.4E+00	9.0E+02	9.8E+02	3.5E+03	4.0E+03	8.1E+03	2.2E+00	5.7E-16
Copper (29)	Cu-66	0.00E+00	0.00E+00	0.00E+00	9.78E-13	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	9.3E+05	.	.	.	.	.	.	.	9.3E+05	1.7E-12
Copper (29)	Cu-67	1.88E-12	2.3E-12 (S)	2.75E-12	9.82E-13	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	1.7E+01	.	9.3E+05	2.6E+01	8.2E-01	3.1E+02	3.4E+02	1.2E+03	1.4E+03	2.8E+03	7.5E-01	1.0E-15
Copper (29)	Cu-69	0.00E+00	0.00E+00	0.00E+00	5.04E-12	5.00E-02	2.30E+02	1.00E-02	2.00E-03	2.20E-02	5.00E-01	5.00E-01	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	1.9E-13
Dysprosium (66)	Dy-148	0.00E+00	0.00E+00	0.00E+00	6.41E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	3.7E-13
Dysprosium (66)	Dy-149	0.00E+00	0.00E+00	0.00E+00	1.54E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	5.9E+04	.	.	.	.	.	.	.	5.9E+04	2.0E-13
Dysprosium (66)	Dy-150	0.00E+00	0.00E+00	0.00E+00	2.38E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.8E+05	.	.	.	.	.	.	.	3.8E+05	2.2E-12
Dysprosium (66)	Dy-151	5.40E-14	4.7E-13 (S)	7.55E-14	1.28E-11	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	5.9E+02	.	7.1E+04	9.4E+02	1.1E+01	5.6E+04	4.1E+05	.	.	.	1.0E+01	1.5E-16
Dysprosium (66)	Dy-152	5.37E-13	2.5E-13 (S)	7.73E-13	2.38E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	5.9E+01	.	3.8E+05	9.2E+01	1.0E+00	5.5E+03	4.0E+04	.	.	.	1.0E+00	1.2E-16
Dysprosium (66)	Dy-153	7.70E-13	4.3E-13 (S)	1.10E-12	7.79E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	4.1E+01	.	1.2E+05	6.5E+01	7.2E-01	3.8E+03	2.8E+04	.	.	.	7.0E-01	2.2E-16
Dysprosium (66)	Dy-154	3.20E-11	1.3E-08 (S)	4.22E-11	0.00E+00	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	1.0E+00	.	.	4.7E-01	1.9E-02	1.0E+02	7.3E+02	.	.	.	1.8E-02	2.3E-08
Dysprosium (66)	Dy-155	5.74E-13	2.9E-13 (S)	8.14E-13	6.02E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	5.6E+01	.	1.5E+05	8.8E+01	9.8E-01	5.2E+03	3.8E+04	.	.	.	9.5E-01	4.7E-16
Dysprosium (66)	Dy-157	2.26E-13	8.8E-14 (S)	3.21E-13	2.92E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	1.4E+02	.	3.1E+05	2.2E+02	2.5E+00	1.3E+04	9.6E+04	.	.	.	2.4E+00	9.9E-16
Dysprosium (66)	Dy-159	5.44E-13	1.7E-12 (S)	7.92E-13	1.94E-13	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	5.9E+01	.	4.7E+06	8.5E+01	1.0E+00	5.4E+03	3.9E+04	.	.	.	9.8E-01	1.7E-13
Dysprosium (66)	Dy-165	4.14E-13	2.2E-13 (S)	5.99E-13	2.29E-13	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	7.7E+01	.	4.0E+06	1.2E+02	1.3E+00	7.1E+03	5.2E+04	.	.	.	1.3E+00	1.6E-16
Dysprosium (66)	Dy-165m	0.00E+00	0.00E+00	0.00E+00	1.40E-13	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	6.5E+06	.	.	.	.	.	.	.	6.5E+06	7.2E-12
Dysprosium (66)	Dy-166	1.13E-11	9.3E-12 (S)	1.66E-11	2.51E-13	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	2.8E+00	.	3.6E+06	4.3E+00	4.8E-02	2.6E+02	1.9E+03	.	.	.	4.7E-02	2.0E-16
Dysprosium (66)	Dy-167	0.00E+00	0.00E+00	0.00E+00	4.79E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.1E-12
Dysprosium (66)	Dy-168	0.00E+00	0.00E+00	0.00E+00	3.47E-12	2.00E-03	6.50E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.6E+05	.	.	.	.	.	.	.	2.6E+05	2.1E-12
Erbium (68)	Er-154	0.00E+00	0.00E+00	0.00E+00	4.45E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	2.1E+06	.	.	.	.	.	.	.	2.1E+06	6.3E-12
Erbium (68)	Er-156	9.77E-14	5.4E-14 (S)	1.38E-13	3.37E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.3E+02	.	2.7E+06	5.2E+02	.	3.1E+04	2.2E+05	.	.	.	2.0E+02	3.2E-15
Erbium (68)	Er-159	5.81E-14	3.4E-14 (S)	8.03E-14	8.89E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.5E+02	.	1.0E+05	8.9E+02	.	5.3E+04	3.8E+05	.	.	.	3.4E+02	1.0E-14
Erbium (68)	Er-161	3.26E-13	1.5E-13 (S)	4.63E-13	9.11E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	9.8E+01	.	1.0E+05	1.5E+02	.	9.2E+03	6.7E+04	.	.	.	5.9E+01	9.8E-15
Erbium (68)	Er-163	7.40E-15	3.0E-15 (S)	1.04E-14	1.91E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.3E+03	.	4.8E+06	6.8E+03	.	4.1E+05	3.0E+06	.	.	.	2.6E+03	1.7E-13
Erbium (68)	Er-165	9.07E-14	3.3E-14 (S)	1.31E-13	1.75E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.5E+02	.	5.2E+06	5.5E+02	.	3.2E+04	2.4E+05	.	.	.	2.1E+02	1.2E-13
Erbium (68)	Er-167m	0.00E+00	0.00E+00	0.00E+00	8.07E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+06	.	.	.	.	.	.	.	1.1E+06	3.8E-14
Erbium (68)	Er-169	2.53E-12	4.4E-12 (S)	3.70E-12	6.01E-16	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.3E+01	.	1.5E+09	1.9E+01	.	1.1E+03	8.4E+03	.	.	.	7.6E+00	9.2E-14
Erbium (68)	Er-171	2.01E-12	1.0E-12 (S)	2.94E-12	3.22E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	2.8E+05	2.4E+01	.	1.4E+03	1.1E+04	.	.	.	9.5E+00	3.9E-15
Erbium (68)	Er-172	6.18E-12	5.3E-12 (S)	9.03E-12	4.54E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.2E+00	.	2.0E+05	7.9E+00	.	4.7E+02	3.4E+03	.	.	.	3.1E+00	8.4E-15
Erbium (68)	Er-173	0.00E+00	0.00E+00	0.00E+00	7.51E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	1.6E-13
Einsteinium (99)	Es-249	6.62E-14	6.9E-13 (S)	9.36E-14	3.58E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	4.8E+02	.	2.6E+05	7.6E+02	.	4.5E+06	9.9E+06	.	.	.	2.9E+02	4.0E-14
Einsteinium (99)	Es-250	2.30E-12	4.0E-12 (S)	3.33E-12	1.07E-11	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.4E+01	.	8.6E+04	2.1E+01	.	1.3E+05	2.8E+05	.	.	.	8.4E+00	5.8E-15
Einsteinium (99)	Es-250m	9.14E-14	7.6E-13 (S)	1.28E-13	5.08E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	3.5E+02	.	1.8E+05	5.6E+02	.	3.3E+06	7.2E+06	.	.	.	2.1E+02	3.8E-14
Einsteinium (99)	Es-251	1.06E-12	7.1E-12 (S)	1.55E-12	7.22E-13	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	3.0E+01	.	1.3E+06	4.6E+01	.	2.7E+05	6.0E+05	.	.	.	1.8E+01	4.8E-14
Einsteinium (99)	Es-253	3.48E-11	1.1E-08 (S)	5.11E-11	2.99E-15	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	9.2E-01	.	3.1E+08	1.4E+00	.	8.3E+03	1.8E+04	.	.	.	5.5E-01	2.2E-14
Einsteinium (99)	Es-254	5.55E-11	2.6E-08 (S)	7.84E-11	2.85E-14	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	5.7E-01	.	3.2E+07	8.2E-01	.	5.4E+03	1.2E+04	.	.	.	3.4E-01	1.8E-13
Einsteinium (99)	Es-254+D	5.62E-11	2.6E-08 (S)	7.92E-11	8.52E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	5.7E-01	.	1.1E+05	8.1E-01	.	5.4E+03	1.2E+04	.	.	.	3.3E-01	1.8E-13
Einsteinium (99)	Es-254m	2.82E-11	1.7E-09 (S)	4.14E-11	4.32E-12	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.1E+00	.	2.1E+05	1.7E+00	.	1.0E+04	2.2E+04	.	.	.	6.8E-01	2.2E-15
Einsteinium (99)	Es-255	2.85E-11	1.5E-08 (S)	4.14E-11	7.09E-15	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	1.1E+00	.	1.3E+08	1.7E+00	.	1.0E+04	2.2E+04	.	.	.	6.7E-01	5.2E-14
Einsteinium (99)	Es-256	1.62E-11	1.4E-10 (S)	2.32E-11	1.74E-14	1.00E-03	.	2.00E-05	2.00E-06	.	.	.	2.0E+00	.	5.3E+07	3.1E+00	.	1.8E+04	4.0E+04	.	.	.	1.2E+00	4.1E-17
Europium (63)	Eu-142	0.00E+00	0.00E+00	0.00E+00	1.13E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	8.1E+04	.	.	.	.	.	.	.	8.1E+04	2.4E-15
Europium (63)	Eu-142m	0.00E+00	0.00E+00	0.00E+00	3.20E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.9E+04	.	.	.	.	.	.	.	2.9E+04	2.6E-14

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Europium (63)	Eu-143	0.00E+00	0.00E+00	0.00E+00	1.05E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	8.7E+04	.	.	.	.	.	.	.	8.7E+04	1.7E-13
Europium (63)	Eu-144	0.00E+00	0.00E+00	0.00E+00	1.03E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	.	.	8.9E+04	.	.	.	.	.	.	.	8.9E+04	1.2E-14
Europium (63)	Eu-145	2.41E-12	1.7E-12 (S)	3.41E-12	1.21E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.3E+01	.	7.5E+04	2.1E+01	1.2E+00	1.2E+03	9.1E+03	.	.	.	1.0E+00	6.7E-15
Europium (63)	Eu-146	4.33E-12	2.5E-12 (S)	6.11E-12	2.25E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	7.4E+00	.	4.1E+04	1.2E+01	6.5E-01	7.0E+02	5.1E+03	.	.	.	5.7E-01	2.9E-15
Europium (63)	Eu-147	2.01E-12	4.4E-12 (S)	2.89E-12	4.12E-12	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	2.2E+05	2.4E+01	1.4E+00	1.5E+03	1.1E+04	.	.	.	1.2E+00	3.3E-14
Europium (63)	Eu-148	4.40E-12	1.3E-11 (F)	6.14E-12	2.06E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	7.2E+00	.	4.4E+04	1.1E+01	6.5E-01	6.9E+02	5.0E+03	.	.	.	5.6E-01	3.5E-14
Europium (63)	Eu-149	8.81E-13	1.7E-12 (S)	1.28E-12	4.05E-13	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	3.6E+01	.	2.3E+06	5.4E+01	3.1E+00	3.3E+03	2.4E+04	.	.	.	2.7E+00	2.9E-13
Europium (63)	Eu-150	4.03E-12	2.7E-10 (F)	5.62E-12	1.41E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	7.9E+00	.	6.5E+04	4.2E+00	7.1E-01	7.5E+02	5.5E+03	.	.	.	5.6E-01	8.7E-12
Europium (63)	Eu-150m	2.42E-12	1.1E-12 (S)	3.54E-12	4.40E-13	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.3E+01	.	2.1E+06	2.0E+01	1.1E+00	1.2E+03	8.7E+03	.	.	.	9.8E-01	6.0E-16
Europium (63)	Eu-152	5.85E-12	1.9E-10 (F)	8.33E-12	1.10E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	5.4E+00	.	8.3E+04	3.6E+00	4.8E-01	5.1E+02	3.7E+03	.	.	.	3.9E-01	2.3E-12
Europium (63)	Eu-152m	2.97E-12	1.2E-12 (S)	4.33E-12	2.73E-12	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.1E+01	.	3.3E+05	1.6E+01	9.2E-01	9.8E+02	7.1E+03	.	.	.	8.0E-01	3.6E-16
Europium (63)	Eu-152n	4.29E-14	3.0E-14 (S)	6.18E-14	5.27E-13	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	7.4E+02	.	1.7E+06	1.2E+03	6.4E+01	6.9E+04	5.0E+05	.	.	.	5.6E+01	4.4E-15
Europium (63)	Eu-154	9.84E-12	2.1E-10 (F)	1.42E-11	1.18E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	3.2E+00	.	7.8E+04	2.5E+00	2.8E-01	3.0E+02	2.2E+03	.	.	.	2.3E-01	8.7E-13
Europium (63)	Eu-154m	1.82E-14	1.1E-14 (S)	2.56E-14	4.27E-13	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.8E+03	.	2.1E+06	2.8E+03	1.6E+02	1.7E+05	1.2E+06	.	.	.	1.4E+02	5.1E-15
Europium (63)	Eu-155	1.94E-12	1.9E-11 (S)	2.83E-12	4.33E-13	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	2.1E+06	1.5E+01	1.4E+00	1.5E+03	1.1E+04	.	.	.	1.2E+00	2.5E-12
Europium (63)	Eu-156	1.34E-11	1.6E-11 (S)	1.95E-11	1.21E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.4E+00	.	7.5E+04	3.6E+00	2.0E-01	2.2E+02	1.6E+03	.	.	.	1.8E-01	3.2E-15
Europium (63)	Eu-157	3.74E-12	1.7E-12 (S)	5.48E-12	2.45E-12	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	8.5E+00	.	3.7E+05	1.3E+01	7.3E-01	7.8E+02	5.6E+03	.	.	.	6.4E-01	4.8E-16
Europium (63)	Eu-158	2.08E-13	1.1E-13 (S)	2.92E-13	1.25E-11	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	1.5E+02	.	7.3E+04	2.4E+02	1.4E+01	1.5E+04	1.1E+05	.	.	.	1.2E+01	4.6E-16
Europium (63)	Eu-159	1.20E-13	6.1E-14 (S)	1.71E-13	2.57E-12	2.00E-03	1.30E+02	2.00E-03	6.00E-05	.	.	.	2.6E+02	.	3.6E+05	4.2E+02	2.3E+01	2.5E+04	1.8E+05	.	.	.	2.0E+01	3.1E-16
Fluorine (9)	F-17	0.00E+00	0.00E+00	0.00E+00	9.26E-12	2.00E-02	1.00E+01	2.00E-02	7.00E-03	.	.	.	.	.	9.9E+04	.	.	.	.	.	.	.	9.9E+04	9.6E-15
Fluorine (9)	F-18	9.40E-14	1.2E-13 (S)	1.25E-13	8.96E-12	2.00E-02	1.00E+01	2.00E-02	7.00E-03	.	.	.	3.4E+02	.	1.0E+05	5.7E+02	4.1E+02	3.4E+03	2.1E+03	.	.	.	1.3E+02	1.3E-15
Iron (26)	Fe-52	7.07E-12	3.0E-12 (S)	1.03E-11	6.64E-12	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	4.5E+00	.	1.4E+05	6.9E+00	3.0E-01	5.9E+01	5.2E+03	2.4E+03	1.8E+02	2.1E+02	2.7E-01	3.6E-17
Iron (26)	Fe-53	0.00E+00	0.00E+00	0.00E+00	1.07E-11	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	8.5E+04	.	.	.	.	.	.	.	8.5E+04	2.0E-13
Iron (26)	Fe-53m	0.00E+00	0.00E+00	0.00E+00	2.94E-11	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	3.1E+04	.	.	.	.	.	.	.	3.1E+04	2.2E-14
Iron (26)	Fe-55	8.58E-13	1.5E-12 (F)	1.16E-12	1.35E-21	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	3.7E+01	.	6.7E+14	4.5E+01	2.6E+00	5.2E+02	4.6E+04	2.1E+04	1.6E+03	1.8E+03	2.3E+00	9.7E-13
Iron (26)	Fe-59	7.88E-12	1.5E-11 (S)	1.11E-11	1.15E-11	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	4.0E+00	.	8.0E+04	6.3E+00	2.7E-01	5.4E+01	4.8E+03	2.2E+03	1.7E+02	1.9E+02	2.4E-01	4.9E-15
Iron (26)	Fe-60	1.87E-10	3.8E-10 (F)	2.49E-10	1.39E-16	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	1.7E-01	.	6.6E+09	8.0E-02	1.2E-02	2.4E+00	2.1E+02	9.7E+01	7.6E+00	8.5E+00	9.9E-03	2.5E-09
Iron (26)	Fe-60+D	2.03E-10	4.8E-10 (F)	2.72E-10	2.44E-11	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	1.6E-01	.	3.7E+04	7.4E-02	1.1E-02	2.2E+00	2.0E+02	9.0E+01	7.0E+00	7.8E+00	9.1E-03	2.3E-09
Iron (26)	Fe-61	0.00E+00	0.00E+00	0.00E+00	1.35E-11	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	6.7E+04	.	.	.	.	.	.	.	6.7E+04	1.3E-13
Iron (26)	Fe-62	0.00E+00	0.00E+00	0.00E+00	4.61E-12	1.74E-04	1.70E+02	1.40E-02	3.50E-05	3.00E-03	1.00E+00	1.80E+00	.	.	2.0E+05	.	.	.	.	.	.	.	2.0E+05	7.4E-14
Fermium (100)	Fm-251	3.89E-13	6.6E-12 (S)	5.66E-13	1.28E-12	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	8.2E+01	.	7.1E+05	1.3E+02	.	7.5E+04	4.1E+05	.	.	.	5.0E+01	2.1E-14
Fermium (100)	Fm-252	1.82E-11	1.3E-09 (S)	2.67E-11	3.35E-15	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	1.8E+00	.	2.7E+08	2.7E+00	.	1.6E+03	8.7E+03	.	.	.	1.1E+00	2.2E-15
Fermium (100)	Fm-253	6.92E-12	1.5E-09 (S)	1.01E-11	4.66E-13	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	4.6E+00	.	2.0E+06	7.0E+00	.	4.2E+03	2.3E+04	.	.	.	2.8E+00	1.6E-14
Fermium (100)	Fm-254	2.23E-12	2.2E-10 (S)	3.24E-12	7.05E-14	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	1.4E+01	.	1.3E+07	2.2E+01	.	1.3E+04	7.1E+04	.	.	.	8.7E+00	2.3E-15
Fermium (100)	Fm-255	1.65E-11	9.8E-10 (S)	2.42E-11	1.80E-14	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	1.9E+00	.	5.1E+07	2.9E+00	.	1.8E+03	9.6E+03	.	.	.	1.2E+00	1.9E-15
Fermium (100)	Fm-256	9.55E-11	9.0E-10 (S)	1.36E-10	1.24E-10	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	3.3E-01	.	7.4E+03	5.2E-01	.	3.1E+02	1.7E+03	.	.	.	2.0E-01	4.4E-17
Fermium (100)	Fm-257	4.85E-11	2.8E-08 (S)	6.96E-11	1.21E-12	2.00E-03	.	2.00E-04	8.00E-06	.	.	.	6.6E-01	.	7.5E+05	9.9E-01	.	6.1E+02	3.3E+03	.	.	.	3.9E-01	7.8E-14
Francium (87)	Fr-212	1.78E-12	2.1E-11 (S)	2.42E-12	1.07E-11	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	1.8E+01	.	8.5E+04	3.0E+01	.	1.2E+02	9.6E+01	.	.	.	9.2E+00	2.1E-16
Francium (87)	Fr-219	0.00E+00	0.00E+00	0.00E+00	3.18E-14	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	2.9E+07	.	.	.	.	.	.	.	2.9E+07	1.1E-14
Francium (87)	Fr-220	0.00E+00	0.00E+00	0.00E+00	7.05E-14	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.3E+07	.	.	.	.	.	.	.	1.3E+07	6.9E-12
Francium (87)	Fr-220+D	0.00E+00	0.00E+00	0.00E+00	8.96E-14	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.0E+07	.	.	.	.	.	.	.	1.0E+07	5.5E-12
Francium (87)	Fr-221	0.00E+00	0.00E+00	0.00E+00	2.53E-13	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	3.6E+06	.	.	.	.	.	.	.	3.6E+06	2.1E-11
Francium (87)	Fr-221+D	0.00E+00	0.00E+00	0.00E+00	2.56E-13	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	3.6E+06	.	.	.	.	.	.	.	3.6E+06	2.1E-11
Francium (87)	Fr-222	1.45E-12	5.8E-11 (S)	1.99E-12	1.58E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	2.2E+01	.	5.8E+05	3.6E+01	.	1.4E+02	1.2E+02	.	.	.	1.1E+01	1.9E-16
Francium (87)	Fr-223	7.36E-12	4.1E-11 (S)	1.01E-11	3.92E-13	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	4.3E+00	.	2.3E+06	7.1E+00	.	2.8E+01	2.3E+01	.	.	.	2.2E+00	5.8E-17
Francium (87)	Fr-224	0.00E+00	0.00E+00	0.00E+00	5.24E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	6.9E-13
Francium (87)	Fr-227	0.00E+00	0.00E+00	0.00E+00	3.97E-12	3.00E-02	.	3.00E-02	8.00E-03	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	6.9E-13
Gallium (31)	Ga-64	0.00E+00	0.00E+00	0.00E+00	3.35E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	.	.	2.7E+04	.	.	.	.	.	.	.	2.7E+04	2.4E-14
Gallium (31)	Ga-65	6.22E-14	3.0E-14 (S)	8.58E-14	1.06E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	5.1E+02	.	8.7E+04	8.3E+02	.	3.3E+05	2.2E+06	.	.	.	3.2E+02	1.7E-15
Gallium (31)	Ga-66	6.44E-12	2.3E-12 (S)	9.36E-12	2.55E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	4.9E+00	.	3.6E+04	7.6E+00	.	3.0E+03	2.0E+04	.	.	.	3.0E+00	6.0E-16
Gallium (31)	Ga-67	1.06E-12	1.1E-12 (S)	1.54E-12	1.33E-12	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	3.0E+01	.	6.9E+05	4.6E+01	.	1.8E+04	1.2E+05	.	.	.	1.8E+01	3.1E-14
Gallium (31)	Ga-68	2.80E-13	1.3E-13 (S)	4.00E-13	8.64E-12	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	1.1E+02	.	1.1E+05	1.8E+02	.	7.1E+04	4.6E+05	.	.	.	6.9E+01	1.7E-15
Gallium (31)	Ga-70	5.18E-14	3.1E-14 (S)	7.22E-14	8.75E-14	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	6.2E+02	.	1.0E+07	9.9E+02	.	3.9E+05	2.6E+06	.	.	.	3.8E+02	3.0E-15
Gallium (31)	Ga-72	5.66E-12	2.3E-12 (S)	8.18E-12	2.69E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	5.6E+00	.	3.4E+04	8.7E+00	.	3.5E+03	2.3E+04	.	.	.	3.4E+00	1.1E-15
Gallium (31)	Ga-73	1.39E-12	6.5E-13 (S)	2.04E-12	3.11E-12	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	2.3E+01	.	2.9E+05	3.5E+01	.	1.4E+04	9.1E+04	.	.	.	1.4E+01	1.6E-15
Gallium (31)	Ga-74	0.00E+00	0.00E+00	0.00E+00	3.16E-11	3.00E-03	.	3.00E-04	1.00E-05	.	.	.	.	.	2.9E+04	.	.	.	.	.	.	.	2.9E+04	9.2E-14
Gadolinium (64)	Gd-142	0.00E+00	0.00E+00	0.00E+00	9.64E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	9.5E+04	.	.	.	.	.	.	.	9.5E+04	8.4E-14
Gadolinium (64)	Gd-143m	0.00E+00	0.00E+00	0.00E+00	1.97E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	4.6E+04	.	.	.	.	.	.	.	4.6E+04	6.5E-14
Gadolinium (64)	Gd-144	0.00E+00	0.00E+00	0.00E+00	8.61E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	3.6E-13
Gadolinium (64)	Gd-145	7.25E-14	3.0E-14 (S)	9.99E-14	2.42E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.4E+02	.	3.8E+04	7.1E+02	2.1E+02	4.2E+04	3.1E+05	.	.	.	1.2E+02	2.1E-15
Gadolinium (64)	Gd-145m	0.00E+00	0.00E+00	0.00E+00	6.25E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.5E+05	.	.	.	.	.	.	.	1.5E+05	1.6E-13
Gadolinium (64)	Gd-146	4.96E-12	2.6E-11 (S)	7.18E-12	1.75E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.4E+00	.	5.2E+05	9.7E+00	2.9E+00	5.9E+02	4.3E+03	.	.	.	1.6E+00	8.9E-14
Gadolinium (64)	Gd-147	2.56E-12	1.5E-12 (S)	3.64E-12	1.28E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.2E+01	.	7.1E+04	2.0E+01	5.7E+00	1.2E+03	8.5E+03	.	.	.	3.2E+00	5.8E-15
Gadolinium (64)	Gd-148	4.18E-11	1.5E-08 (S)	5.44E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.6E-01	.	.	4.0E-01	3.8E-01	7.8E+01	5.7E+02	.	.	.	1.6E-01	4.8E-12
Gadolinium (64)	Gd-149	2.63E-12	3.6E-12 (S)	3.81E-12	4.53E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.2E+01	.	2.0E+05	1.9E+01	5.4E+00	1.1E+03	8.1E+03	.	.	.	3.1E+00	3.3E-14
Gadolinium (64)	Gd-150	3.77E-11	1.2E-08 (S)	4.88E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	8.4E-01	.	.	4.1E-01	4.2E-01	8.7E+01	6.3E+02	.	.	.	1.7E-01	1.3E-07
Gadolinium (64)	Gd-151	1.31E-12	4.4E-12 (S)	1.91E-12	4.27E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.4E+01	.	2.1E+06	3.6E+01	1.1E+01	2.2E+03	1.6E+04	.	.	.	6.2E+00	8.9E-13
Gadolinium (64)	Gd-152	2.97E-11	9.1E-09 (F)	3.85E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.1E+00	.	.	5.2E-01	5.4E-01	1.1E+02	8.0E+02	.	.	.	2.1E-01	9.7E+00
Gadolinium (64)	Gd-153	1.53E-12	8.6E-12 (S)	2.22E-12	6.15E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.1E+01	.	1.5E+06	2.9E+01	9.3E+00	1.9E+03	1.4E+04	.	.	.	5.3E+00	1.5E-12
Gadolinium (64)	Gd-159	3.24E-12	1.6E-12 (S)	4.77E-12	4.41E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	9.8E+00	.	2.1E+06	1.5E+01	4.3E+00	8.9E+02	6.5E+03	.	.	.	2.5E+00	2.3E-15
Gadolinium (64)	Gd-162	0.00E+00	0.00E+00	0.00E+00	3.74E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	1.8E-12
Germanium (32)	Ge-66	3.65E-13	2.6E-13 (S)	4.85E-13	6.02E-12	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	8.7E+01	.	1.5E+05	1.5E+02	2.7E-01	8.8E+01	3.8E+02	.	.	.	2.6E-01	1.3E-17
Germanium (32)	Ge-67	9.81E-14	4.6E-14 (S)	1.34E-13	1.32E-11	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	3.2E+02	.	6.9E+04	5.3E+02	9.6E-01	3.2E+02	1.4E+03	.	.	.	9.6E-01	6.4E-18
Germanium (32)	Ge-68	6.96E-12	1.0E-10 (S)	9.84E-12	1.15E-17	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	4.6E+00	.	7.9E+10	5.7E+00	1.3E-02	4.3E+00	1.9E+01	.	.	.	1.3E-02	1.8E-15
Germanium (32)	Ge-68+D	7.25E-12	1.0E-10 (S)	1.02E-11	8.64E-12	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	4.4E+00	.	1.1E+05	5.5E+00	1.3E-02	4.1E+00	1.8E+01	.	.	.	1.3E-02	1.8E-15
Germanium (32)	Ge-69	7.99E-13	7.3E-13 (S)	1.09E-12	8.93E-12	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	4.0E+01	.	1.0E+05	6.5E+01	1.2E-01	3.9E+01	1.7E+02	.	.	.	1.2E-01	1.0E-16
Germanium (32)	Ge-71	6.51E-14	5.5E-14 (S)	9.25E-14	1.17E-17	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	4.9E+02	.	7.8E+10	7.6E+02	1.4E+00	4.6E+02	2.0E+03	.	.	.	1.4E+00	8.6E-15
Germanium (32)	Ge-75	8.70E-14	9.0E-14 (S)	1.17E-13	3.22E-13	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	3.7E+02	.	2.8E+06	6.1E+02	1.1E+00	3.6E+02	1.6E+03	.	.	.	1.1E+00	3.6E-17
Germanium (32)	Ge-77	1.22E-12	1.2E-12 (S)	1.65E-12	1.00E-11	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	2.6E+01	.	9.1E+04	4.3E+01	7.9E-02	2.6E+01	1.1E+02	.	.	.	7.8E-02	2.2E-17
Germanium (32)	Ge-78	2.93E-13	2.6E-13 (S)	3.81E-13	2.48E-12	4.00E-01	4.00E+03	2.00E-01	1.00E-02	.	.	.	1.1E+02	.	3.7E+05	1.9E+02	3.4E-01	1.1E+02	4.9E+02	.	.	.	3.4E-01	1.2E-17
Hydrogen (1)	H-3	5.07E-14	8.5E-13 (S)	6.51E-14	0.00E+00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hafnium (72)	Hf-167	0.00E+00	0.00E+00	0.00E+00	5.48E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	3.0E-13
Hafnium (72)	Hf-169	0.00E+00	0.00E+00	0.00E+00	5.63E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	.	.	1.6E+05	.	.	.	.	.	.	.	1.6E+05	4.7E-13
Hafnium (72)	Hf-170	1.77E-12	1.1E-12 (S)	2.53E-12	3.70E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.8E+01	.	2.5E+05	2.8E+01	1.9E-01	8.4E+03	3.7E+04	.	.	.	1.8E-01	1.6E-16

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Hafnium (72)	Hf-172	5.14E-12	8.5E-11 (S)	7.36E-12	6.13E-13	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	6.2E+00	.	1.5E+06	7.7E+00	6.4E-02	2.9E+03	1.3E+04	.	.	.	6.3E-02	5.6E-14
Hafnium (72)	Hf-172+D	5.14E-12	8.5E-11 (S)	7.36E-12	6.13E-13	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	6.2E+00	.	1.5E+06	7.7E+00	6.4E-02	2.9E+03	1.3E+04	.	.	.	6.3E-02	5.6E-14
Hafnium (72)	Hf-173	1.04E-12	6.4E-13 (S)	1.50E-12	3.27E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	3.1E+01	.	2.8E+05	4.7E+01	3.1E-01	1.4E+04	6.2E+04	.	.	.	3.1E-01	4.0E-16
Hafnium (72)	Hf-174	6.36E-11	1.0E-08 (S)	7.99E-11	0.00E+00	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	5.0E-01	.	.	2.5E-01	5.9E-03	2.7E+02	1.2E+03	.	.	.	5.7E-03	5.5E+00
Hafnium (72)	Hf-175	1.92E-12	5.3E-12 (S)	2.77E-12	2.97E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.7E+01	.	3.1E+05	2.5E+01	1.7E-01	7.7E+03	3.3E+04	.	.	.	1.7E-01	1.6E-14
Hafnium (72)	Hf-177m	2.04E-13	2.0E-13 (S)	2.86E-13	1.98E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.6E+02	.	4.6E+04	2.5E+02	1.6E+00	7.4E+04	3.2E+05	.	.	.	1.6E+00	7.8E-17
Hafnium (72)	Hf-178m	1.22E-11	3.2E-10 (F)	1.72E-11	1.98E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.6E+00	.	4.6E+04	1.4E+00	2.7E-02	1.2E+03	5.4E+03	.	.	.	2.7E-02	4.1E-13
Hafnium (72)	Hf-179m	6.66E-12	1.6E-11 (S)	9.66E-12	7.95E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	4.8E+00	.	1.1E+05	7.3E+00	4.9E-02	2.2E+03	9.6E+03	.	.	.	4.8E-02	1.6E-15
Hafnium (72)	Hf-180m	7.25E-13	4.5E-13 (S)	1.04E-12	8.65E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	4.4E+01	.	1.1E+05	6.8E+01	4.5E-01	2.0E+04	8.9E+04	.	.	.	4.4E-01	1.4E-16
Hafnium (72)	Hf-181	6.40E-12	2.1E-11 (S)	9.32E-12	4.69E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	5.0E+00	.	1.9E+05	7.5E+00	5.0E-02	2.3E+03	9.9E+03	.	.	.	5.0E-02	2.9E-15
Hafnium (72)	Hf-182	4.74E-12	3.3E-10 (F)	6.36E-12	2.10E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	6.7E+00	.	4.3E+05	3.1E+00	7.4E-02	3.3E+03	1.5E+04	.	.	.	7.1E-02	3.3E-07
Hafnium (72)	Hf-182+D	1.25E-11	3.7E-10 (F)	1.76E-11	1.42E-11	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.5E+00	.	6.4E+04	1.1E+00	2.7E-02	1.2E+03	5.3E+03	.	.	.	2.6E-02	1.2E-07
Hafnium (72)	Hf-182m	1.22E-13	1.2E-13 (S)	1.72E-13	8.08E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	2.6E+02	.	1.1E+05	4.2E+02	2.7E+00	1.2E+05	5.4E+05	.	.	.	2.7E+00	1.6E-16
Hafnium (72)	Hf-183	2.42E-13	1.8E-13 (S)	3.46E-13	7.08E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.3E+02	.	1.3E+05	2.1E+02	1.4E+00	6.1E+04	2.7E+05	.	.	.	1.3E+00	8.3E-17
Hafnium (72)	Hf-184	2.89E-12	1.5E-12 (S)	4.22E-12	1.96E-12	3.00E-03	1.10E+03	4.00E-04	2.00E-05	.	.	.	1.1E+01	.	4.7E+05	1.7E+01	1.1E-01	5.0E+03	2.2E+04	.	.	.	1.1E-01	2.7E-17
Mercury (80)	Hg-190	5.62E-14	2.6E-13 (V)	7.84E-14	1.55E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	5.7E+02	.	5.9E+05	9.1E+02	1.1E+00	1.1E+04	4.7E+04	.	8.1E+05	.	1.1E+00	2.2E-17
Mercury (80)	Hg-191m	1.75E-13	1.1E-12 (V)	2.48E-13	1.38E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.8E+02	.	6.6E+04	2.9E+02	3.4E-01	3.4E+03	1.5E+04	.	2.6E+05	.	3.4E-01	1.8E-17
Mercury (80)	Hg-192	9.62E-13	3.4E-12 (V)	1.37E-12	2.23E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	3.3E+01	.	4.1E+05	5.2E+01	6.2E-02	6.2E+02	2.7E+03	.	4.6E+04	.	6.2E-02	1.8E-17
Mercury (80)	Hg-193	4.59E-13	2.9E-12 (V)	6.59E-13	7.78E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	6.9E+01	.	1.2E+05	1.1E+02	1.3E-01	1.3E+03	5.6E+03	.	9.6E+04	.	1.3E-01	3.0E-17
Mercury (80)	Hg-193+D	4.59E-13	2.9E-12 (V)	6.59E-13	7.83E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	6.9E+01	.	1.2E+05	1.1E+02	1.3E-01	1.3E+03	5.6E+03	.	9.6E+04	.	1.3E-01	3.0E-17
Mercury (80)	Hg-193m	2.03E-12	1.0E-11 (V)	2.92E-12	9.52E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.6E+01	.	9.6E+04	2.4E+01	2.9E-02	2.9E+02	1.3E+03	.	2.2E+04	.	2.9E-02	2.1E-17
Mercury (80)	Hg-194	2.91E-12	7.4E-11 (S)	4.00E-12	7.32E-17	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.1E+01	.	1.2E+10	2.8E+00	2.1E-02	2.1E+02	9.3E+02	.	1.6E+04	.	2.1E-02	5.0E-12
Mercury (80)	Hg-194+D	4.51E-12	7.5E-11 (S)	6.29E-12	9.83E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	7.1E+00	.	9.3E+04	1.8E+00	1.3E-02	1.3E+02	5.9E+02	.	1.0E+04	.	1.3E-02	3.2E-12
Mercury (80)	Hg-195	5.37E-13	5.0E-12 (V)	7.81E-13	1.67E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	5.9E+01	.	5.5E+05	9.1E+01	1.1E-01	1.1E+03	4.8E+03	.	8.1E+04	.	1.1E-01	7.1E-17
Mercury (80)	Hg-195m	3.32E-12	2.7E-11 (V)	4.85E-12	1.69E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	9.6E+00	.	5.4E+05	1.5E+01	1.8E-02	1.8E+02	7.7E+02	.	1.3E+04	.	1.7E-02	4.5E-17
Mercury (80)	Hg-197	1.53E-12	1.6E-11 (V)	2.23E-12	4.78E-13	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	2.1E+01	.	1.9E+06	3.2E+01	3.8E-02	3.8E+02	1.7E+03	.	2.8E+04	.	3.8E-02	1.5E-16
Mercury (80)	Hg-197m	3.05E-12	2.0E-11 (V)	4.48E-12	7.45E-13	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.0E+01	.	1.2E+06	1.6E+01	1.9E-02	1.9E+02	8.3E+02	.	1.4E+04	.	1.9E-02	2.8E-17
Mercury (80)	Hg-199m	6.62E-14	5.9E-13 (V)	9.36E-14	1.49E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	4.8E+02	.	6.1E+05	7.6E+02	9.1E-01	9.1E+03	4.0E+04	.	6.8E+05	.	9.0E-01	4.1E-17
Mercury (80)	Hg-203	3.09E-12	2.4E-11 (V)	4.48E-12	2.10E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	1.0E+01	.	4.3E+05	1.5E+01	1.9E-02	1.9E+02	8.3E+02	.	1.4E+04	.	1.9E-02	1.4E-15
Mercury (80)	Hg-205	0.00E+00	0.00E+00	0.00E+00	5.98E-14	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	1.5E+07	.	.	.	.	.	.	.	1.5E+07	8.7E-11
Mercury (80)	Hg-206	0.00E+00	0.00E+00	0.00E+00	1.08E-12	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	8.5E+05	.	.	.	.	.	.	.	8.5E+05	7.6E-12
Mercury (80)	Hg-207	0.00E+00	0.00E+00	0.00E+00	2.62E-11	3.00E-01	6.10E+03	1.00E-02	5.00E-04	.	3.00E-02	.	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	1.1E-13
Holmium (67)	Ho-150	0.00E+00	0.00E+00	0.00E+00	1.75E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	5.2E+04	.	.	.	.	.	.	.	5.2E+04	5.3E-14
Holmium (67)	Ho-153	0.00E+00	0.00E+00	0.00E+00	9.32E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	9.8E+04	.	.	.	.	.	.	.	9.8E+04	1.6E-13
Holmium (67)	Ho-153m	0.00E+00	0.00E+00	0.00E+00	9.50E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	9.6E+04	.	.	.	.	.	.	.	9.6E+04	7.3E-13
Holmium (67)	Ho-154	6.81E-14	2.5E-14 (S)	9.36E-14	1.74E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.7E+02	.	5.3E+04	7.6E+02	2.2E+02	4.5E+04	3.3E+05	.	.	.	1.2E+02	1.2E-15
Holmium (67)	Ho-154m	0.00E+00	0.00E+00	0.00E+00	2.22E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	4.1E+04	.	.	.	.	.	.	.	4.1E+04	1.0E-13
Holmium (67)	Ho-155	1.13E-13	6.1E-14 (S)	1.60E-13	5.49E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.8E+02	.	1.7E+05	4.5E+02	1.3E+02	2.7E+04	1.9E+05	.	.	.	7.4E+01	2.9E-15
Holmium (67)	Ho-156	2.45E-13	1.2E-13 (S)	3.45E-13	1.98E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.3E+02	.	4.6E+04	2.1E+02	6.0E+01	1.2E+04	9.0E+04	.	.	.	3.4E+01	1.6E-15
Holmium (67)	Ho-157	1.68E-14	8.5E-15 (S)	2.33E-14	4.99E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.9E+03	.	1.8E+05	3.1E+03	8.9E+02	1.8E+05	1.3E+06	.	.	.	5.0E+02	5.3E-15
Holmium (67)	Ho-159	1.91E-14	1.3E-14 (S)	2.63E-14	3.08E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.7E+03	.	3.0E+05	2.7E+03	7.9E+02	1.6E+05	1.2E+06	.	.	.	4.4E+02	1.2E-14
Holmium (67)	Ho-160	3.92E-14	2.3E-14 (S)	5.37E-14	1.55E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	8.1E+02	.	5.9E+04	1.3E+03	3.9E+02	7.9E+04	5.8E+05	.	.	.	2.2E+02	4.7E-15
Holmium (67)	Ho-161	4.92E-14	2.4E-14 (S)	7.10E-14	2.60E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.5E+02	.	3.5E+06	1.0E+03	2.9E+02	6.0E+04	4.4E+05	.	.	.	1.7E+02	2.1E-14
Holmium (67)	Ho-162	5.81E-15	5.7E-15 (S)	7.99E-15	1.32E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	5.5E+03	.	6.9E+05	8.9E+03	2.6E+03	5.3E+05	3.9E+06	.	.	.	1.5E+03	1.9E-14
Holmium (67)	Ho-162m	7.14E-14	5.2E-14 (S)	1.00E-13	5.04E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.5E+02	.	1.8E+05	7.1E+02	2.1E+02	4.2E+04	3.1E+05	.	.	.	1.2E+02	6.8E-15
Holmium (67)	Ho-163	1.81E-14	1.2E-12 (F)	2.63E-14	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.8E+03	.	.	7.6E+02	7.9E+02	1.6E+05	1.2E+06	.	.	.	3.2E+02	6.6E-07
Holmium (67)	Ho-164	1.75E-14	1.8E-14 (S)	2.43E-14	1.44E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.8E+03	.	6.4E+06	2.9E+03	8.5E+02	1.7E+05	1.3E+06	.	.	.	4.8E+02	1.2E-14
Holmium (67)	Ho-164m	4.18E-14	3.8E-14 (S)	5.96E-14	2.06E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.6E+02	.	4.4E+06	1.2E+03	3.5E+02	7.1E+04	5.2E+05	.	.	.	2.0E+02	6.6E-15
Holmium (67)	Ho-166	9.21E-12	4.0E-12 (S)	1.35E-11	2.72E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.5E+00	.	3.4E+06	5.3E+00	1.5E+00	3.1E+02	2.3E+03	.	.	.	8.8E-01	1.3E-15
Holmium (67)	Ho-166m	8.29E-12	7.7E-10 (F)	1.18E-11	1.48E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	3.8E+00	.	6.2E+04	1.7E+00	1.8E+00	3.6E+02	2.6E+03	.	.	.	7.0E-01	3.9E-10
Holmium (67)	Ho-167	3.85E-13	2.5E-13 (S)	5.55E-13	3.22E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	8.3E+01	.	2.8E+05	1.3E+02	3.7E+01	7.6E+03	5.6E+04	.	.	.	2.1E+01	3.5E-15
Holmium (67)	Ho-168	0.00E+00	0.00E+00	0.00E+00	8.17E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	3.0E-13
Holmium (67)	Ho-168m	0.00E+00	0.00E+00	0.00E+00	2.92E-14	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	3.1E+07	.	.	.	.	.	.	.	3.1E+07	6.2E-11
Holmium (67)	Ho-170	0.00E+00	0.00E+00	0.00E+00	1.59E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	5.8E+04	.	.	.	.	.	.	.	5.8E+04	1.4E-13
Iodine (53)	I-118	5.03E-13	5.8E-13 (V)	7.10E-13	1.88E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	6.3E+01	.	4.9E+04	1.0E+02	2.4E+01	1.8E+03	4.8E+02	2.5E+03	3.1E+05	2.2E+03	1.4E+01	1.2E-16
Iodine (53)	I-118m	0.00E+00	0.00E+00	0.00E+00	3.48E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	2.6E+04	.	.	.	.	.	.	.	2.6E+04	1.4E-13
Iodine (53)	I-119	9.18E-14	1.6E-13 (V)	1.27E-13	8.17E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	3.5E+02	.	1.1E+05	5.6E+02	1.4E+02	1.0E+04	2.7E+03	1.4E+04	1.7E+06	1.2E+04	7.9E+01	9.6E-16
Iodine (53)	I-120	7.66E-13	9.4E-13 (V)	1.06E-12	2.60E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	4.2E+01	.	3.5E+04	6.7E+01	1.6E+01	1.2E+03	3.2E+02	1.7E+03	2.1E+05	1.5E+03	9.5E+00	4.9E-16
Iodine (53)	I-120m	3.61E-13	4.7E-13 (V)	4.96E-13	3.32E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	8.8E+01	.	2.8E+04	1.4E+02	3.5E+01	2.6E+03	6.9E+02	3.6E+03	4.4E+05	3.2E+03	2.0E+01	6.8E-16
Iodine (53)	I-121	2.05E-13	2.7E-13 (V)	2.81E-13	3.43E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.6E+02	.	2.7E+05	2.5E+02	6.1E+01	4.5E+03	1.2E+03	6.3E+03	7.8E+05	5.6E+03	3.6E+01	2.9E-15
Iodine (53)	I-122	0.00E+00	0.00E+00	0.00E+00	8.79E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	2.5E-13
Iodine (53)	I-123	7.07E-13	8.3E-13 (V)	1.00E-12	1.32E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	4.5E+01	.	6.9E+05	7.1E+01	1.7E+01	1.3E+03	3.4E+02	1.8E+03	2.2E+05	1.6E+03	1.0E+01	5.3E-15
Iodine (53)	I-124	4.14E-11	4.6E-11 (V)	5.88E-11	1.04E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	7.7E-01	.	8.8E+04	1.2E+00	2.9E-01	2.2E+01	5.8E+00	3.0E+01	3.7E+03	2.7E+01	1.7E-01	6.8E-16
Iodine (53)	I-125	2.56E-11	2.8E-11 (V)	3.46E-11	6.66E-14	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.2E+00	.	1.4E+07	2.0E+00	5.0E-01	3.7E+01	9.9E+00	5.1E+01	6.3E+03	4.6E+01	2.9E-01	1.6E-14
Iodine (53)	I-126	8.81E-11	9.7E-11 (V)	1.24E-10	3.89E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	3.6E-01	.	2.4E+05	5.7E-01	1.4E-01	1.0E+01	2.8E+00	1.4E+01	1.8E+03	1.3E+01	8.1E-02	1.0E-15
Iodine (53)	I-128	8.10E-14	2.1E-13 (V)	1.11E-13	6.26E-13	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	3.9E+02	.	1.5E+06	6.4E+02	1.5E+02	1.1E+04	3.1E+03	1.6E+04	2.0E+06	1.4E+04	9.0E+01	1.5E-15
Iodine (53)	I-129	1.51E-10	1.6E-10 (V)	1.97E-10	5.13E-14	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.1E-01	.	1.8E+07	1.0E-01	8.8E-02	6.4E+00	1.7E+00	9.0E+00	1.1E+03	8.1E+00	3.7E-02	2.1E-07
Iodine (53)	I-130	6.03E-12	6.9E-12 (V)	8.55E-12	1.97E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	5.3E+00	.	4.6E+04	8.3E+00	2.0E+00	1.5E+02	4.0E+01	2.1E+02	2.6E+04	1.9E+02	1.2E+00	6.1E-16
Iodine (53)	I-130m	0.00E+00	0.00E+00	0.00E+00	9.74E-13	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	9.4E+05	.	.	.	.	.	.	.	9.4E+05	5.7E-12
Iodine (53)	I-131	4.55E-11	5.0E-11 (V)	6.48E-11	3.43E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	7.0E-01	.	2.7E+05	1.1E+00	2.7E-01	2.0E+01	5.3E+00	2.7E+01	3.4E+03	2.4E+01	1.6E-01	1.3E-15
Iodine (53)	I-132	8.36E-13	1.1E-12 (V)	1.16E-12	2.13E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	3.8E+01	.	4.3E+04	6.1E+01	1.5E+01	1.1E+03	3.0E+02	1.5E+03	1.9E+05	1.4E+03	8.6E+00	8.4E-16
Iodine (53)	I-132m	1.91E-13	4.0E-13 (V)	2.61E-13	3.05E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.7E+02	.	3.0E+05	2.7E+02	6.6E+01	4.9E+03	1.3E+03	6.8E+03	8.4E+05	6.1E+03	3.8E+01	2.2E-15
Iodine (53)	I-133	1.45E-11	1.6E-11 (V)	2.08E-11	5.62E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	2.2E+00	.	1.6E+05	3.4E+00	8.3E-01	6.1E+01	1.7E+01	8.6E+01	1.0E+04	7.6E+01	4.9E-01	4.3E-16
Iodine (53)	I-134	2.36E-13	4.3E-13 (V)	3.24E-13	2.45E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.3E+02	.	3.7E+04	2.2E+02	5.3E+01	3.9E+03	1.1E+03	5.5E+03	6.7E+05	4.9E+03	3.1E+01	1.2E-15
Iodine (53)	I-134m	0.00E+00	0.00E+00	0.00E+00	2.39E-12	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	.	.	3.8E+05	.	.	.	.	.	.	.	3.8E+05	9.8E-13
Iodine (53)	I-135	2.87E-12	3.4E-12 (V)	4.07E-12	1.54E-11	5.48E-04	3.00E+01	6.70E-03	5.40E-03	4.10E-02	8.70E-03	2.40E+00	1.1E+01	.	5.9E+04	1.8E+01	4.2E+00	3.1E+02	8.4E+01	4.4E+02	5.4E+04	3.9E+02	2.5E+00	7.0E-16
Indium (49)	In-103	0.00E+00	0.00E+00	0.00E+00	2.65E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	1.9E-14
Indium (49)	In-105	0.00E+00	0.00E+00	0.00E+00	1.82E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	5.0E+04	.	.	.	.	.	.	.	5.0E+04	1.4E-13
Indium (49)	In-106	0.00E+00	0.00E+00	0.00E+00	3.30E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	2.8E+04	.	.	.	.	.	.	.	2.8E+04	9.7E-14
Indium (49)	In-106m	0.00E+00	0.00E+00	0.00E+00	2.74E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	3.3E+04	.	.	.	.	.	.	.	3.3E+04	9.8E-14
Indium (49)	In-107	1.07E-13	6.0E-14 (S)	1.50E-13	1.47E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	3.0E+02	.	6.2E+04	4.8E+02	3.5E-01	1.4E+04	6.2E+04	.	.	.	3.4E-01	6.4E-18
Indium (49)	In-108	2.04E-13	8.1E-14 (S)	2.82E-13	3.70E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.6E+02	.	2.5E+04	2.5E+02	1.8E-01	7.5E+03	3.3E+04	.	.	.	1.8E-01	6.1E-18
Indium (49)	In-108m	1.80E-13	7.5E-14 (S)	2.51E-13	2.77E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.8E+02	.	3.3E+04	2.8E+02	2.1E-01	8.5E+03	3.7E+04	.	.	.	2.1E-01	4.7E-18
Indium (49)	In-109	2.12E-13	9.8E-14 (S)	3.00E-13	5.84E-12	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/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Indium (49)	In-109m	0.00E+00	0.00E+00	0.00E+00	5.58E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.6E+05	.	.	.	.	.	.	.	1.6E+05	1.3E-13
Indium (49)	In-110	7.70E-13	2.8E-13 (S)	1.07E-12	2.88E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.1E+01	.	3.2E+04	6.7E+01	4.8E-02	2.0E+03	8.7E+03	.	.	.	4.8E-02	8.3E-18
Indium (49)	In-110m	2.83E-13	1.2E-13 (S)	4.00E-13	1.47E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.1E+02	.	6.2E+04	1.8E+02	1.3E-01	5.3E+03	2.3E+04	.	.	.	1.3E-01	5.2E-18
Indium (49)	In-111	1.30E-12	8.6E-13 (S)	1.86E-12	3.41E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	2.5E+01	.	2.7E+05	3.8E+01	2.8E-02	1.1E+03	5.0E+03	.	.	.	2.8E-02	6.6E-17
Indium (49)	In-111m	0.00E+00	0.00E+00	0.00E+00	4.26E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	2.1E+05	.	.	.	.	.	.	.	2.1E+05	9.8E-13
Indium (49)	In-112	1.76E-14	1.2E-14 (S)	2.42E-14	2.38E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.8E+03	.	3.8E+05	2.9E+03	2.1E+00	8.8E+04	3.8E+05	.	.	.	2.1E+00	1.9E-17
Indium (49)	In-112m	3.27E-14	3.8E-14 (S)	4.55E-14	1.90E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	9.7E+02	.	4.8E+06	1.6E+03	1.1E+00	4.7E+04	2.0E+05	.	.	.	1.1E+00	1.4E-17
Indium (49)	In-113m	9.58E-14	5.6E-14 (S)	1.37E-13	2.29E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	3.3E+02	.	4.0E+05	5.2E+02	3.8E-01	1.5E+04	6.8E+04	.	.	.	3.8E-01	2.3E-17
Indium (49)	In-114	0.00E+00	0.00E+00	0.00E+00	4.79E-14	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.9E+07	.	.	.	.	.	.	.	1.9E+07	1.4E-11
Indium (49)	In-114m	2.51E-11	5.0E-11 (S)	3.64E-11	6.50E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.3E+00	.	1.4E+06	1.9E+00	1.4E-03	5.8E+01	2.5E+02	.	.	.	1.4E-03	6.1E-17
Indium (49)	In-114m+D	2.51E-11	5.0E-11 (S)	3.64E-11	6.97E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	1.3E+00	.	1.3E+06	1.9E+00	1.4E-03	5.8E+01	2.5E+02	.	.	.	1.4E-03	6.1E-17
Indium (49)	In-115	3.39E-11	4.1E-10 (F)	4.33E-11	1.41E-15	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	9.4E-01	.	6.5E+08	4.6E-01	1.2E-03	4.9E+01	2.1E+02	.	.	.	1.2E-03	1.7E-01
Indium (49)	In-115m	4.48E-13	2.3E-13 (S)	6.51E-13	1.39E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	7.1E+01	.	6.6E+05	1.1E+02	7.9E-02	3.3E+03	1.4E+04	.	.	.	7.9E-02	1.3E-17
Indium (49)	In-116m	1.63E-13	9.3E-14 (S)	2.27E-13	2.41E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	2.0E+02	.	3.8E+04	3.1E+02	2.3E-01	9.3E+03	4.1E+04	.	.	.	2.3E-01	7.6E-18
Indium (49)	In-117	6.92E-14	5.9E-14 (S)	9.69E-14	6.22E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.6E+02	.	1.5E+05	7.4E+02	5.3E-01	2.2E+04	9.6E+04	.	.	.	5.3E-01	1.4E-17
Indium (49)	In-117m	4.44E-13	2.5E-13 (S)	6.40E-13	7.74E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	7.2E+01	.	1.2E+06	1.1E+02	8.1E-02	3.3E+03	1.4E+04	.	.	.	8.1E-02	5.8E-18
Indium (49)	In-118	0.00E+00	0.00E+00	0.00E+00	8.98E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.0E+06	.	.	.	.	.	.	.	1.0E+06	5.3E-14
Indium (49)	In-118m	0.00E+00	0.00E+00	0.00E+00	2.66E-11	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	9.4E-14
Indium (49)	In-119	0.00E+00	0.00E+00	0.00E+00	7.13E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	1.9E-13
Indium (49)	In-119m	7.47E-14	3.5E-14 (S)	1.03E-13	6.57E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	4.3E+02	.	1.4E+06	6.9E+02	5.0E-01	2.1E+04	9.0E+04	.	.	.	5.0E-01	5.7E-18
Indium (49)	In-121	0.00E+00	0.00E+00	0.00E+00	8.76E-12	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	2.6E-14
Indium (49)	In-121m	0.00E+00	0.00E+00	0.00E+00	5.85E-13	3.00E-03	1.00E+04	4.00E-03	2.00E-04	.	.	.	.	.	1.6E+06	.	.	.	.	.	.	.	1.6E+06	3.9E-12
Iridium (77)	Ir-180	0.00E+00	0.00E+00	0.00E+00	1.46E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	6.3E+04	.	.	.	.	.	.	.	6.3E+04	9.0E-14
Iridium (77)	Ir-182	1.08E-13	5.3E-14 (S)	1.51E-13	1.30E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.9E+02	.	7.1E+04	4.7E+02	3.4E+02	2.8E+04	6.2E+06	.	.	.	1.2E+02	1.7E-15
Iridium (77)	Ir-183	1.69E-13	1.0E-13 (S)	2.39E-13	1.12E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.9E+02	.	8.2E+04	3.0E+02	2.2E+02	1.8E+04	3.9E+06	.	.	.	7.5E+01	4.2E-15
Iridium (77)	Ir-184	7.29E-13	3.6E-13 (S)	1.04E-12	1.83E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.4E+01	.	5.0E+04	6.8E+01	5.0E+01	4.1E+03	8.9E+05	.	.	.	1.7E+01	3.1E-15
Iridium (77)	Ir-185	1.58E-12	8.7E-13 (S)	2.27E-12	8.08E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.0E+01	.	1.1E+05	3.1E+01	2.3E+01	1.9E+03	4.1E+05	.	.	.	7.9E+00	6.8E-15
Iridium (77)	Ir-186	2.49E-12	1.2E-12 (S)	3.57E-12	1.55E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.3E+01	.	5.9E+04	2.0E+01	1.5E+01	1.2E+03	2.6E+05	.	.	.	5.1E+00	5.0E-15
Iridium (77)	Ir-186m	2.56E-13	1.3E-13 (S)	3.63E-13	1.18E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.2E+02	.	7.8E+04	2.0E+02	1.4E+02	1.2E+04	2.6E+06	.	.	.	4.9E+01	5.6E-15
Iridium (77)	Ir-187	5.51E-13	2.8E-13 (S)	7.92E-13	2.85E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	5.8E+01	.	3.2E+05	9.0E+01	6.5E+01	5.4E+03	1.2E+06	.	.	.	2.3E+01	1.4E-14
Iridium (77)	Ir-188	2.86E-12	1.5E-12 (S)	4.03E-12	2.08E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.1E+01	.	4.4E+04	1.8E+01	1.3E+01	1.1E+03	2.3E+05	.	.	.	4.4E+00	1.1E-14
Iridium (77)	Ir-189	1.43E-12	2.2E-12 (S)	2.09E-12	5.32E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	2.2E+01	.	1.7E+06	3.4E+01	2.5E+01	2.0E+03	4.4E+05	.	.	.	8.7E+00	1.7E-13
Iridium (77)	Ir-190	4.33E-12	5.2E-12 (S)	6.18E-12	1.32E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	7.4E+00	.	6.9E+04	1.1E+01	8.4E+00	6.9E+02	1.5E+05	.	.	.	2.9E+00	5.0E-14
Iridium (77)	Ir-190m	2.49E-14	2.3E-14 (S)	3.55E-14	1.70E-17	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.3E+03	.	5.4E+10	2.0E+03	1.5E+03	1.2E+05	2.6E+07	.	.	.	5.1E+02	3.4E-14
Iridium (77)	Ir-190n	4.37E-13	2.3E-13 (S)	6.18E-13	3.62E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	7.3E+01	.	2.5E+06	1.2E+02	8.4E+01	6.9E+03	1.5E+06	.	.	.	2.9E+01	5.4E-15
Iridium (77)	Ir-191m	0.00E+00	0.00E+00	0.00E+00	5.32E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	1.7E+06	.	.	.	.	.	.	.	1.7E+06	1.4E-13
Iridium (77)	Ir-192	7.36E-12	2.4E-11 (S)	1.07E-11	7.31E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.3E+00	.	1.3E+05	6.5E+00	4.8E+00	4.0E+02	8.7E+04	.	.	.	1.7E+00	1.8E-13
Iridium (77)	Ir-192m	0.00E+00	0.00E+00	0.00E+00	5.11E-16	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	1.8E+09	.	.	.	.	.	.	.	1.8E+09	2.7E-09
Iridium (77)	Ir-192n	5.25E-12	1.6E-10 (S)	7.62E-12	4.85E-15	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	6.1E+00	.	1.9E+08	2.5E+00	6.8E+00	5.6E+02	1.2E+05	.	.	.	1.4E+00	1.8E-10
Iridium (77)	Ir-193m	1.95E-12	4.5E-12 (S)	2.87E-12	2.00E-15	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	1.6E+01	.	4.6E+08	2.5E+01	1.8E+01	1.5E+03	3.2E+05	.	.	.	6.3E+00	9.9E-14
Iridium (77)	Ir-194	8.62E-12	3.4E-12 (S)	1.27E-11	8.65E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	3.7E+00	.	1.1E+06	5.6E+00	4.1E+00	3.4E+02	7.3E+04	.	.	.	1.4E+00	1.7E-15
Iridium (77)	Ir-194m	8.47E-12	4.4E-11 (S)	1.20E-11	2.11E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	3.8E+00	.	4.3E+04	5.5E+00	4.3E+00	3.5E+02	7.7E+04	.	.	.	1.5E+00	3.7E-13
Iridium (77)	Ir-195	3.96E-13	2.4E-13 (S)	5.77E-13	4.03E-13	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	8.0E+01	.	2.3E+06	1.2E+02	9.0E+01	7.4E+03	1.6E+06	.	.	.	3.1E+01	4.9E-15
Iridium (77)	Ir-195m	6.77E-13	4.5E-13 (S)	9.81E-13	3.29E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	4.7E+01	.	2.8E+05	7.3E+01	5.3E+01	4.3E+03	9.5E+05	.	.	.	1.8E+01	4.4E-15
Iridium (77)	Ir-196	0.00E+00	0.00E+00	0.00E+00	2.20E-12	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	.	.	4.2E+05	.	.	.	.	.	.	.	4.2E+05	3.8E-13
Iridium (77)	Ir-196m	3.26E-13	2.1E-13 (S)	4.59E-13	2.23E-11	3.00E-02	1.00E+01	2.00E-03	2.00E-06	.	.	.	9.8E+01	.	4.1E+04	1.6E+02	1.1E+02	9.3E+03	2.0E+06	.	.	.	3.9E+01	3.4E-15
Potassium (19)	K-38	0.00E+00	0.00E+00	0.00E+00	3.18E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	.	.	2.9E+04	.	.	.	.	.	.	.	2.9E+04	4.4E-14
Potassium (19)	K-40	2.47E-11	2.2E-10 (S)	3.42E-11	1.56E-12	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	1.3E+00	.	5.8E+05	2.1E-01	4.7E-03	1.2E+01	7.7E+00	.	.	1.1E+02	4.6E-03	6.5E-07
Potassium (19)	K-42	1.26E-12	1.2E-12 (S)	1.74E-12	2.86E-12	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	2.5E+01	.	3.2E+05	4.1E+01	9.3E-02	2.4E+02	1.5E+02	.	.	2.2E+03	9.2E-02	1.5E-17
Potassium (19)	K-43	7.77E-13	1.1E-12 (S)	1.05E-12	8.77E-12	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	4.1E+01	.	1.0E+05	6.8E+01	1.5E-01	4.0E+02	2.5E+02	.	.	3.6E+03	1.5E-01	4.7E-17
Potassium (19)	K-44	1.38E-13	6.1E-14 (S)	1.89E-13	2.43E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	2.3E+02	.	3.8E+04	3.8E+02	8.6E-01	2.2E+03	1.4E+03	.	.	2.0E+04	8.5E-01	4.4E-18
Potassium (19)	K-45	8.07E-14	3.8E-14 (S)	1.10E-13	1.84E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	3.9E+02	.	5.0E+04	6.5E+02	1.5E+00	3.8E+03	2.4E+03	.	.	3.4E+04	1.5E+00	6.0E-18
Potassium (19)	K-46	0.00E+00	0.00E+00	0.00E+00	3.00E-11	6.44E-01	3.20E+03	2.00E-02	7.00E-03	.	.	1.00E+00	.	.	3.0E+04	.	.	.	.	.	.	.	3.0E+04	1.3E-14
Krypton (36)	Kr-74	0.00E+00	0.00E+00	0.00E+00	9.47E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	9.7E+04	.	.	.	.	.	.	.	9.7E+04	4.4E-13
Krypton (36)	Kr-75	0.00E+00	0.00E+00	0.00E+00	1.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	7.8E+04	.	.	.	.	.	.	.	7.8E+04	1.3E-13
Krypton (36)	Kr-76	0.00E+00	0.00E+00	0.00E+00	3.72E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.5E+05	.	.	.	.	.	.	.	2.5E+05	8.8E-11
Krypton (36)	Kr-76+D	0.00E+00	0.00E+00	0.00E+00	3.72E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.5E+05	.	.	.	.	.	.	.	2.5E+05	8.8E-11
Krypton (36)	Kr-77	0.00E+00	0.00E+00	0.00E+00	9.33E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	9.8E+04	.	.	.	.	.	.	.	9.8E+04	3.0E-12
Krypton (36)	Kr-79	0.00E+00	0.00E+00	0.00E+00	2.25E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.1E+05	.	.	.	.	.	.	.	4.1E+05	3.6E-10
Krypton (36)	Kr-81	0.00E+00	0.00E+00	0.00E+00	7.66E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.2E+08	.	.	.	.	.	.	.	1.2E+08	6.2E+00
Krypton (36)	Kr-81m	0.00E+00	0.00E+00	0.00E+00	1.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	8.1E+05	.	.	.	.	.	.	.	8.1E+05	7.7E-14
Krypton (36)	Kr-83m	0.00E+00	0.00E+00	0.00E+00	1.89E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.8E+09	.	.	.	.	.	.	.	4.8E+09	2.3E-07
Krypton (36)	Kr-85	0.00E+00	0.00E+00	0.00E+00	2.37E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.9E+07	.	.	.	.	.	.	.	3.9E+07	9.9E-05
Krypton (36)	Kr-85m	0.00E+00	0.00E+00	0.00E+00	1.37E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.7E+05	.	.	.	.	.	.	.	6.7E+05	8.1E-11
Krypton (36)	Kr-87	0.00E+00	0.00E+00	0.00E+00	7.97E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	4.1E-12
Krypton (36)	Kr-88	0.00E+00	0.00E+00	0.00E+00	2.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.6E+04	.	.	.	.	.	.	.	4.6E+04	3.7E-12
Krypton (36)	Kr-89	0.00E+00	0.00E+00	0.00E+00	1.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.7E+04	.	.	.	.	.	.	.	4.7E+04	7.0E-14
Lanthanum (57)	La-128	0.00E+00	0.00E+00	0.00E+00	2.64E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	3.5E+04	.	.	.	.	.	.	.	3.5E+04	1.2E-13
Lanthanum (57)	La-129	5.44E-14	2.4E-14 (S)	7.59E-14	8.27E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	5.9E+02	.	1.1E+05	9.4E+02	1.8E+02	8.6E+05	4.1E+05	.	2.5E+05	5.6E+06	1.2E+02	9.7E-16
Lanthanum (57)	La-130	0.00E+00	0.00E+00	0.00E+00	2.09E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	4.4E+04	.	.	.	.	.	.	.	4.4E+04	2.6E-13
Lanthanum (57)	La-131	8.99E-14	5.8E-14 (S)	1.27E-13	5.83E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	3.5E+02	.	1.6E+05	5.6E+02	1.1E+02	5.1E+05	2.4E+05	.	1.5E+05	3.3E+06	7.3E+01	3.0E-15
Lanthanum (57)	La-132	1.90E-12	7.0E-13 (S)	2.75E-12	1.90E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	1.7E+01	.	4.8E+04	2.6E+01	5.1E+00	2.4E+04	1.1E+04	.	6.9E+03	1.5E+05	3.4E+00	6.9E-16
Lanthanum (57)	La-132m	1.50E-13	6.4E-14 (S)	2.16E-13	5.99E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.1E+02	.	1.5E+05	3.3E+02	6.5E+01	3.0E+05	1.4E+05	.	8.8E+04	2.0E+06	4.3E+01	7.4E-16
Lanthanum (57)	La-133	1.39E-13	5.7E-14 (S)	2.02E-13	1.28E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.3E+02	.	7.1E+05	3.5E+02	6.9E+01	3.2E+05	1.5E+05	.	9.4E+04	2.1E+06	4.6E+01	7.7E-15
Lanthanum (57)	La-134	0.00E+00	0.00E+00	0.00E+00	6.53E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	6.4E-13
Lanthanum (57)	La-135	1.46E-13	5.3E-14 (S)	2.11E-13	1.51E-13	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.2E+02	.	6.1E+06	3.4E+02	6.6E+01	3.1E+05	1.5E+05	.	9.0E+04	2.0E+06	4.4E+01	3.7E-14
Lanthanum (57)	La-136	0.00E+00	0.00E+00	0.00E+00	3.60E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	.	.	2.5E+05	.	.	.	.	.	.	.	2.5E+05	1.8E-12
Lanthanum (57)	La-137	3.52E-13	1.4E-11 (F)	5.07E-13	5.58E-14	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	9.0E+01	.	1.6E+07	4.0E+01	2.8E+01	1.3E+05	6.1E+04	.	3.7E+04	8.3E+05	1.4E+01	3.2E-07
Lanthanum (57)	La-138	3.54E-12	3.0E-10 (F)	4.96E-12	1.19E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	9.0E+00	.	7.7E+04	4.0E+00	2.8E+00	1.3E+04	6.2E+03	.	3.8E+03	8.5E+04	1.4E+00	5.5E-02
Lanthanum (57)	La-140	1.09E-11	5.0E-12 (S)	1.59E-11	2.27E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.9E+00	.	4.0E+04	4.5E+00	8.8E-01	4.1E+03	1.9E+03	.	1.2E+03	2.7E+04	5.9E-01	1.1E-15
Lanthanum (57)	La-141	1.95E-12	8.2E-13 (S)	2.84E-12	3.06E-13	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	1.6E+01	.	3.0E+06	2.5E+01	4.9E+00	2.3E+04	1.1E+04	.	6.7E+03	1.5E+05	3.3E+00	5.8E-16
Lanthanum (57)	La-142	5.55E-13	2.5E-13 (S)	7.92E-13	2.43E-11	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	5.7E+01	.	3.8E+04	9.0E+01	1.8E+01	8.2E+04	3.9E+04	.	2.4E+04	5.3E+05	1.2E+01	8.1E-16
Lanthanum (57)	La-143	1.27E-13	6.0E-14 (S)	1.79E-13	2.67E-12	1.74E-05	3.70E+01	1.30E-04	6.00E-05	.	1.00E-01	9.00E-03	2.5E+02	.	3.4E+05	4.0E+02	7.8E+01	3.6E+05	1.7E+05	.	1.1E+05	2.4E+06	5.2E+01	5.6E-16
Lutetium (71)	Lu-165	4.44E-14	2.8E-14 (S)	6.18E-14	1.02E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.2E+02	.	9.0E+04	1.2E+03	.	6.9E+04	5.0E+05	.	.	.	4.4E+02	4.1E-15

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Lutetium (71)	Lu-167	1.34E-13	9.4E-14 (S)	1.88E-13	1.62E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.4E+02	.	5.6E+04	3.8E+02	.	2.3E+04	1.6E+05	.	.	.	1.4E+02	6.6E-15
Lutetium (71)	Lu-169	2.12E-12	1.5E-12 (S)	3.01E-12	1.24E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.5E+01	.	7.4E+04	2.4E+01	.	1.4E+03	1.0E+04	.	.	.	9.1E+00	1.7E-14
Lutetium (71)	Lu-169m	0.00E+00	0.00E+00	0.00E+00	3.36E-18	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	2.7E+11	.	.	.	.	.	.	.	2.7E+11	6.5E-07
Lutetium (71)	Lu-170	3.60E-12	2.0E-12 (S)	5.11E-12	2.57E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	8.9E+00	.	3.6E+04	1.4E+01	.	8.3E+02	6.1E+03	.	.	.	5.4E+00	1.4E-14
Lutetium (71)	Lu-171	3.42E-12	3.9E-12 (S)	4.96E-12	5.69E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	9.3E+00	.	1.6E+05	1.4E+01	.	8.6E+02	6.2E+03	.	.	.	5.6E+00	6.1E-14
Lutetium (71)	Lu-171m	0.00E+00	0.00E+00	0.00E+00	1.95E-15	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.7E+08	.	.	.	.	.	.	.	4.7E+08	5.6E-10
Lutetium (71)	Lu-172	5.62E-12	6.0E-12 (S)	8.03E-12	1.83E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.7E+00	.	5.0E+04	8.9E+00	.	5.3E+02	3.8E+03	.	.	.	3.4E+00	3.0E-14
Lutetium (71)	Lu-172m	0.00E+00	0.00E+00	0.00E+00	6.97E-18	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.3E+11	.	.	.	.	.	.	.	1.3E+11	4.4E-07
Lutetium (71)	Lu-173	1.93E-12	1.3E-11 (S)	2.80E-12	1.30E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.6E+01	.	7.1E+05	2.1E+01	.	1.5E+03	1.1E+04	.	.	.	9.2E+00	6.1E-12
Lutetium (71)	Lu-174	1.57E-12	1.5E-11 (S)	2.27E-12	9.01E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.0E+01	.	1.0E+06	2.2E+01	.	1.9E+03	1.4E+04	.	.	.	1.0E+01	1.7E-11
Lutetium (71)	Lu-174m	3.47E-12	1.6E-11 (S)	5.11E-12	3.53E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	9.2E+00	.	2.6E+06	1.3E+01	.	8.3E+02	6.1E+03	.	.	.	5.4E+00	1.0E-12
Lutetium (71)	Lu-176	9.44E-12	1.8E-10 (F)	1.37E-11	4.17E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.4E+00	.	2.2E+05	1.5E+00	.	3.1E+02	2.3E+03	.	.	.	1.0E+00	1.9E-02
Lutetium (71)	Lu-176m	8.40E-13	4.5E-13 (S)	1.23E-12	1.03E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.8E+01	.	8.8E+06	5.8E+01	.	3.5E+03	2.5E+04	.	.	.	2.3E+01	4.7E-15
Lutetium (71)	Lu-177	3.53E-12	4.6E-12 (S)	5.18E-12	2.93E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	9.0E+00	.	3.1E+06	1.4E+01	.	8.2E+02	6.0E+03	.	.	.	5.4E+00	4.9E-14
Lutetium (71)	Lu-177m	9.29E-12	5.7E-11 (S)	1.35E-11	8.56E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.4E+00	.	1.1E+05	5.0E+00	.	3.1E+02	2.3E+03	.	.	.	2.0E+00	4.4E-13
Lutetium (71)	Lu-178	8.40E-14	5.2E-14 (S)	1.17E-13	1.23E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.8E+02	.	7.5E+05	6.1E+02	.	3.6E+04	2.6E+05	.	.	.	2.3E+02	6.2E-15
Lutetium (71)	Lu-178m	6.25E-14	5.6E-14 (S)	8.66E-14	9.15E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	5.1E+02	.	1.0E+05	8.2E+02	.	4.9E+04	3.6E+05	.	.	.	3.1E+02	6.8E-15
Lutetium (71)	Lu-179	1.18E-12	5.3E-13 (S)	1.72E-12	2.72E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.7E+01	.	3.4E+06	4.1E+01	.	2.5E+03	1.8E+04	.	.	.	1.6E+01	4.3E-15
Lutetium (71)	Lu-180	0.00E+00	0.00E+00	0.00E+00	1.45E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	6.3E+04	.	.	.	.	.	.	.	6.3E+04	3.5E-13
Lutetium (71)	Lu-181	0.00E+00	0.00E+00	0.00E+00	5.16E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	6.0E-13
Magnesium (12)	Mg-27	0.00E+00	0.00E+00	0.00E+00	8.41E-12	3.00E-02	3.70E+01	3.00E-03	8.00E-03	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	1.5E-13
Magnesium (12)	Mg-28	1.13E-11	5.4E-12 (S)	1.65E-11	1.31E-11	3.00E-02	3.70E+01	3.00E-03	8.00E-03	.	.	.	2.8E+00	.	7.0E+04	4.3E+00	8.5E-01	1.7E+02	1.4E+01	.	.	.	5.4E-01	1.0E-16
Manganese (25)	Mn-50m	0.00E+00	0.00E+00	0.00E+00	4.43E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	2.1E+04	.	.	.	.	.	.	.	2.1E+04	9.6E-15
Manganese (25)	Mn-51	2.09E-13	1.0E-13 (S)	2.95E-13	9.07E-12	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	1.5E+02	.	1.0E+05	2.4E+02	7.3E+00	4.8E+04	1.5E+05	4.7E+04	3.4E+06	3.1E+05	6.8E+00	8.5E-17
Manganese (25)	Mn-52	6.48E-12	4.7E-12 (S)	9.07E-12	3.30E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	4.9E+00	.	2.8E+04	7.8E+00	2.4E-01	1.6E+03	5.0E+03	1.5E+03	1.1E+05	1.0E+04	2.2E-01	4.9E-16
Manganese (25)	Mn-52m	1.27E-13	5.3E-14 (S)	1.75E-13	2.30E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	2.5E+02	.	4.0E+04	4.1E+02	1.2E+01	8.1E+04	2.6E+05	7.9E+04	5.7E+06	5.2E+05	1.1E+01	6.7E-17
Manganese (25)	Mn-53	1.54E-13	9.6E-13 (S)	2.22E-13	0.00E+00	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	2.1E+02	.	.	5.4E+01	9.7E+00	6.4E+04	2.0E+05	6.2E+04	4.5E+06	4.1E+05	7.9E+00	4.3E-06
Manganese (25)	Mn-54	2.28E-12	1.2E-11 (S)	3.10E-12	7.81E-12	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	1.4E+01	.	1.2E+05	1.9E+01	6.9E-01	4.6E+03	1.5E+04	4.4E+03	3.2E+05	2.9E+04	6.4E-01	8.3E-14
Manganese (25)	Mn-56	1.03E-12	4.4E-13 (S)	1.48E-12	1.67E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	3.1E+01	.	5.5E+04	4.8E+01	1.5E+00	9.5E+03	3.0E+04	9.3E+03	6.7E+05	6.1E+04	1.3E+00	6.2E-17
Manganese (25)	Mn-57	0.00E+00	0.00E+00	0.00E+00	9.33E-13	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	9.8E+05	.	.	.	.	.	.	.	9.8E+05	4.2E-13
Manganese (25)	Mn-58m	0.00E+00	0.00E+00	0.00E+00	2.32E-11	2.44E-01	2.40E+02	6.00E-04	4.10E-05	5.30E-03	1.90E-03	4.20E-02	.	.	3.9E+04	.	.	.	.	.	.	.	3.9E+04	1.3E-14
Molybdenum (42)	Mo-101	6.73E-14	4.5E-14 (S)	9.25E-14	1.42E-11	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	4.7E+02	.	6.4E+04	7.7E+02	2.9E+03	9.2E+04	1.8E+04	.	1.1E+05	6.4E+04	2.6E+02	2.0E-15
Molybdenum (42)	Mo-102	1.04E-13	4.5E-14 (S)	1.43E-13	1.67E-13	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	3.1E+02	.	5.5E+06	5.0E+02	1.9E+03	5.9E+04	1.2E+04	.	7.4E+04	4.2E+04	1.7E+02	1.0E-15
Molybdenum (42)	Mo-89	0.00E+00	0.00E+00	0.00E+00	1.13E-11	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	.	.	8.1E+04	.	.	.	.	.	.	.	8.1E+04	8.1E-14
Molybdenum (42)	Mo-90	6.48E-13	1.4E-12 (S)	8.62E-13	7.44E-12	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	4.9E+01	.	1.2E+05	8.3E+01	3.2E+02	9.8E+03	2.0E+03	.	1.2E+04	6.9E+03	2.7E+01	4.4E-15
Molybdenum (42)	Mo-91	9.44E-14	3.9E-14 (S)	1.30E-13	8.96E-12	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	3.4E+02	.	1.0E+05	5.5E+02	2.1E+03	6.6E+04	1.3E+04	.	8.1E+04	4.6E+04	1.9E+02	1.4E-15
Molybdenum (42)	Mo-91m	0.00E+00	0.00E+00	0.00E+00	1.31E-11	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	.	.	7.0E+04	.	.	.	.	.	.	.	7.0E+04	3.6E-14
Molybdenum (42)	Mo-93	3.12E-12	5.6E-12 (S)	3.89E-12	2.93E-15	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	1.0E+01	.	3.1E+08	1.8E+00	7.0E+01	2.2E+03	4.3E+02	.	2.7E+03	1.5E+03	1.5E+00	1.5E-09
Molybdenum (42)	Mo-93m	3.33E-13	5.0E-13 (S)	4.44E-13	2.23E-11	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	9.6E+01	.	4.1E+04	1.6E+02	6.1E+02	1.9E+04	3.8E+03	.	2.4E+04	1.3E+04	5.3E+01	1.1E-14
Molybdenum (42)	Mo-99	1.60E-12	4.8E-12 (S)	2.11E-12	1.37E-12	6.96E-01	1.90E+00	1.00E-03	1.10E-03	.	1.80E-01	6.40E-01	2.0E+01	.	6.7E+05	3.4E+01	1.3E+02	4.0E+03	8.0E+02	.	5.0E+03	2.8E+03	1.1E+01	2.3E-14
Nitrogen (7)	N-13	0.00E+00	0.00E+00	0.00E+00	9.25E-12	7.50E+00	1.50E+05	1.00E-02	1.00E-02	.	.	.	.	.	9.9E+04	.	.	.	.	.	.	.	9.9E+04	6.8E-14
Nitrogen (7)	N-16	0.00E+00	0.00E+00	0.00E+00	5.35E-11	7.50E+00	1.50E+05	1.00E-02	1.00E-02	.	.	.	.	.	1.7E+04	.	.	.	.	.	.	.	1.7E+04	1.7E-16
Sodium (11)	Na-22	9.62E-12	9.7E-11 (S)	1.26E-11	2.08E-11	8.70E-03	7.60E+01	1.50E-02	1.30E-02	.	7.00E+00	4.00E+00	3.3E+00	.	4.4E+04	4.1E+00	5.4E-01	4.5E+01	1.1E+01	.	2.1E+01	7.5E+01	3.9E-01	6.2E-14
Sodium (11)	Na-24	1.23E-12	1.2E-12 (S)	1.64E-12	4.29E-11	8.70E-03	7.60E+01	1.50E-02	1.30E-02	.	7.00E+00	4.00E+00	2.6E+01	.	2.1E+04	4.3E+01	4.1E+00	3.4E+02	8.7E+01	.	1.7E+02	5.8E+02	3.1E+00	3.5E-16
Niobium (41)	Nb-87	0.00E+00	0.00E+00	0.00E+00	1.10E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	1.4E-13
Niobium (41)	Nb-88	1.28E-13	5.2E-14 (S)	1.76E-13	3.95E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	2.5E+02	.	2.3E+04	4.1E+02	9.8E+00	1.9E+08	2.6E+07	2.1E+06	3.6E+07	2.2E+07	9.2E+00	6.3E-17
Niobium (41)	Nb-88m	0.00E+00	0.00E+00	0.00E+00	3.88E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	2.4E+04	.	.	.	.	.	.	.	2.4E+04	8.6E-14
Niobium (41)	Nb-89	1.02E-12	4.2E-13 (S)	1.47E-12	1.32E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	3.1E+01	.	6.9E+04	4.9E+01	1.2E+00	2.2E+07	3.1E+06	2.5E+05	4.3E+06	2.6E+06	1.1E+00	6.4E-17
Niobium (41)	Nb-89m	3.92E-13	1.8E-13 (S)	5.55E-13	1.19E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	8.1E+01	.	7.7E+04	1.3E+02	3.1E+00	5.9E+07	8.2E+06	6.6E+05	1.1E+07	6.9E+06	2.9E+00	9.2E-17
Niobium (41)	Nb-90	5.70E-12	2.4E-12 (S)	8.18E-12	4.20E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	5.6E+00	.	2.2E+04	8.7E+00	2.1E-01	4.0E+06	5.5E+05	4.5E+04	7.7E+05	4.7E+05	2.0E-01	8.3E-17
Niobium (41)	Nb-91	2.68E-13	5.0E-12 (S)	3.92E-13	1.68E-14	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.2E+02	.	5.4E+07	5.0E+01	4.4E+00	8.3E+07	1.2E+07	9.3E+05	1.6E+07	9.7E+06	3.9E+00	6.8E-10
Niobium (41)	Nb-91m	2.69E-12	1.5E-11 (S)	3.92E-12	2.43E-13	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.2E+01	.	3.8E+06	1.8E+01	4.4E-01	8.3E+06	1.2E+06	9.3E+04	1.6E+06	9.7E+05	4.1E-01	1.8E-14
Niobium (41)	Nb-92	3.32E-12	7.4E-11 (S)	4.59E-12	1.39E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	9.6E+00	.	6.6E+04	4.2E+00	3.8E-01	7.1E+06	9.9E+05	7.9E+04	1.4E+06	8.3E+05	3.3E-01	3.0E-06
Niobium (41)	Nb-92m	1.69E-12	1.4E-12 (S)	2.37E-12	9.06E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.9E+01	.	1.0E+05	3.0E+01	7.3E-01	1.4E+07	1.9E+06	1.5E+05	2.7E+06	1.6E+06	6.8E-01	4.9E-15
Niobium (41)	Nb-93m	8.33E-13	6.0E-12 (S)	1.22E-12	5.25E-16	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	3.8E+01	.	1.7E+09	2.3E+01	1.4E+00	2.7E+07	3.7E+06	3.0E+05	5.2E+06	3.1E+06	1.3E+00	5.4E-12
Niobium (41)	Nb-94	7.77E-12	1.3E-10 (S)	1.11E-11	1.45E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	4.1E+00	.	6.3E+04	1.7E+00	1.6E-01	2.9E+06	4.1E+05	3.3E+04	5.7E+05	3.4E+05	1.4E-01	7.4E-10
Niobium (41)	Nb-94m	0.00E+00	0.00E+00	0.00E+00	4.32E-14	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	2.1E+07	.	.	.	.	.	.	.	2.1E+07	6.6E-11
Niobium (41)	Nb-95	2.45E-12	6.4E-12 (S)	3.50E-12	7.11E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.3E+01	.	1.3E+05	2.0E+01	4.9E-01	9.3E+06	1.3E+06	1.0E+05	1.8E+06	1.1E+06	4.6E-01	1.2E-14
Niobium (41)	Nb-95m	3.92E-12	3.7E-12 (S)	5.77E-12	5.57E-13	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	8.1E+00	.	1.6E+06	1.2E+01	3.0E-01	5.7E+06	7.8E+05	6.3E+04	1.1E+06	6.6E+05	2.8E-01	7.4E-16
Niobium (41)	Nb-96	5.03E-12	2.4E-12 (S)	7.25E-12	2.31E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	6.3E+00	.	4.0E+04	9.8E+00	2.4E-01	4.5E+06	6.2E+05	5.0E+04	8.7E+05	5.2E+05	2.2E-01	1.6E-16
Niobium (41)	Nb-97	1.96E-13	1.1E-13 (S)	2.79E-13	6.13E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.6E+02	.	1.5E+05	2.6E+02	6.2E+00	1.2E+08	1.6E+07	1.3E+06	2.3E+07	1.4E+07	5.8E+00	2.2E-16
Niobium (41)	Nb-98m	2.65E-13	1.3E-13 (S)	3.74E-13	2.69E-11	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	1.2E+02	.	3.4E+04	1.9E+02	4.6E+00	8.7E+07	1.2E+07	9.8E+05	1.7E+07	1.0E+07	4.3E+00	1.2E-16
Niobium (41)	Nb-99	0.00E+00	0.00E+00	0.00E+00	1.48E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	6.2E+05	.	.	.	.	.	.	.	6.2E+05	8.1E-14
Niobium (41)	Nb-99m	0.00E+00	0.00E+00	0.00E+00	7.74E-12	1.22E-02	3.00E+02	2.60E-07	4.10E-07	2.00E-04	3.00E-04	1.00E-03	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	1.6E-13
Neodymium (60)	Nd-134	0.00E+00	0.00E+00	0.00E+00	4.69E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.2E-12
Neodymium (60)	Nd-135	1.11E-13	5.3E-14 (S)	1.54E-13	1.13E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	2.9E+02	.	8.1E+04	4.6E+02	3.4E+01	2.8E+04	2.0E+05	.	1.4E+05	8.2E+07	2.8E+01	2.5E-16
Neodymium (60)	Nd-136	2.71E-13	1.3E-13 (S)	3.81E-13	2.23E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.2E+02	.	4.1E+05	1.9E+02	1.4E+01	1.1E+04	8.1E+04	.	5.5E+04	3.3E+07	1.1E+01	4.2E-16
Neodymium (60)	Nd-137	1.50E-13	6.8E-14 (S)	2.12E-13	1.08E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	2.1E+02	.	8.4E+04	3.4E+02	2.4E+01	2.0E+04	1.5E+05	.	9.9E+04	6.0E+07	2.1E+01	5.8E-16
Neodymium (60)	Nd-138	3.43E-12	1.2E-12 (S)	5.00E-12	2.13E-13	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	9.3E+00	.	4.3E+06	1.4E+01	1.0E+00	8.5E+02	6.2E+03	.	4.2E+03	2.5E+06	8.7E-01	1.9E-16
Neodymium (60)	Nd-139	5.18E-14	2.5E-14 (S)	7.33E-14	3.93E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	6.2E+02	.	2.3E+05	9.7E+02	7.1E+01	5.8E+04	4.2E+05	.	2.9E+05	1.7E+08	5.9E+01	1.3E-15
Neodymium (60)	Nd-139m	1.01E-12	4.7E-13 (S)	1.44E-12	1.46E-11	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	3.2E+01	.	6.3E+04	5.0E+01	3.6E+00	2.9E+03	2.1E+04	.	1.5E+04	8.8E+06	3.0E+00	7.4E-16
Neodymium (60)	Nd-140	1.24E-11	6.0E-12 (S)	1.82E-11	8.24E-14	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	2.6E+00	.	1.1E+07	3.9E+00	2.8E-01	2.3E+02	1.7E+03	.	1.2E+03	7.0E+05	2.4E-01	8.7E-16
Neodymium (60)	Nd-141	3.14E-14	1.4E-14 (S)	4.51E-14	5.29E-13	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.0E+03	.	1.7E+06	1.6E+03	1.1E+02	9.4E+04	6.8E+05	.	4.7E+05	2.8E+08	9.7E+01	1.1E-14
Neodymium (60)	Nd-141m	0.00E+00	0.0E+00 (0)	0.00E+00	6.43E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	1.1E-13
Neodymium (60)	Nd-144	3.07E-11	1.0E-08 (F)	3.92E-11	0.00E+00	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	1.0E+00	.	.	5.1E-01	1.3E-01	1.1E+02	7.9E+02	.	5.4E+02	3.2E+05	9.5E-02	8.8E+01
Neodymium (60)	Nd-147	6.99E-12	9.4E-12 (S)	1.02E-11	1.14E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	4.6E+00	.	8.0E+05	6.9E+00	5.1E-01	4.2E+02	3.0E+03	.	2.1E+03	1.2E+06	4.3E-01	5.3E-15
Neodymium (60)	Nd-149	5.44E-13	3.2E-13 (S)	7.88E-13	3.25E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	5.9E+01	.	2.8E+05	9.0E+01	6.6E+00	5.4E+03	3.9E+04	.	2.7E+04	1.6E+07	5.5E+00	4.6E-16
Neodymium (60)	Nd-151	7.14E-14	3.8E-14 (S)	1.01E-13	7.93E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	4.5E+02	.	1.2E+05	7.1E+02	5.1E+01	4.2E+04	3.1E+05	.	2.1E+05	1.3E+08	4.3E+01	4.3E-16
Neodymium (60)	Nd-152	7.66E-14	4.1E-14 (S)	1.05E-13	1.45E-12	2.00E-03	1.00E+02	2.00E-03	6.00E-05	.	9.00E-02	3.00E-04	4.2E+02	.	6.3E+05	6.8E+02	4.9E+01	4.0E+04	2.9E+05	.	2.0E+05	1.2E+08	4.1E+01	3.8E-16
Neon (10)	Ne-19	0.00E+00	0.00E+00	0.00E+00	9.29E-12	0.00E+00	.	0.00E+00	0.00E+00	.	.	.	.	.	9.8E+04	.	.	.	.	.	.	.	9.8E+04	2.9E-15
Neon (10)	Ne-24	0.00E+00	0.00E+00	0.00E+00	4.94E-12	0.00E+00	.	0.00E+00	0.00E+00	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	8.0E-14
Nickel (28)	Ni-56	2.83E-12	4.2E-12 (V)	3.96E-12	1.60E-11	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/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Nickel (28)	Ni-63	6.81E-13	5.9E-12 (V)	9.69E-13	0.00E+00	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	4.7E+01	.	.	2.1E+01	2.5E+01	1.8E+03	2.0E+03	.	.	.	9.1E+00	1.6E-10
Nickel (28)	Ni-65	6.92E-13	7.1E-13 (V)	1.00E-12	5.49E-12	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	4.6E+01	.	1.7E+05	7.1E+01	2.5E+01	1.7E+03	1.9E+03	.	.	.	1.3E+01	6.7E-16
Nickel (28)	Ni-66	2.01E-11	1.0E-11 (S)	2.95E-11	2.63E-16	2.35E-02	2.10E+01	5.00E-03	9.50E-04	.	.	.	1.6E+00	.	3.5E+09	2.4E+00	8.3E-01	5.8E+01	6.6E+01	.	.	.	4.4E-01	5.1E-16
Neptunium (93)	Np-232	1.98E-14	5.1E-14 (S)	2.71E-14	1.09E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.6E+03	.	8.4E+04	2.6E+03	6.4E+02	3.1E+05	6.8E+06	.	.	.	3.9E+02	7.0E-15
Neptunium (93)	Np-233	5.18E-15	3.1E-15 (S)	7.22E-15	6.81E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	6.2E+03	.	1.3E+06	9.9E+03	2.4E+03	1.2E+06	2.6E+07	.	.	.	1.5E+03	6.6E-14
Neptunium (93)	Np-234	2.76E-12	1.6E-12 (S)	3.92E-12	1.07E-11	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.2E+01	.	8.5E+04	1.8E+01	4.4E+00	2.2E+03	4.7E+04	.	.	.	2.7E+00	2.1E-14
Neptunium (93)	Np-235	3.74E-13	2.0E-12 (S)	5.48E-13	5.50E-15	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	8.5E+01	.	1.7E+08	1.1E+02	3.2E+01	1.6E+04	3.4E+05	.	.	.	1.9E+01	1.4E-11
Neptunium (93)	Np-235+D	3.74E-13	2.0E-12 (S)	5.48E-13	5.50E-15	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	8.5E+01	.	1.7E+08	1.1E+02	3.2E+01	1.6E+04	3.4E+05	.	.	.	1.9E+01	1.4E-11
Neptunium (93)	Np-236	1.33E-11	3.4E-09 (F)	1.82E-11	1.12E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	2.4E+00	.	8.2E+05	1.1E+00	9.5E-01	4.7E+02	1.0E+04	.	.	.	4.2E-01	4.3E-08
Neptunium (93)	Np-236m	1.13E-12	1.3E-11 (S)	1.65E-12	3.77E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	2.8E+01	.	2.4E+06	4.3E+01	1.0E+01	5.1E+03	1.1E+05	.	.	.	6.5E+00	1.1E-14
Neptunium (93)	Np-237	6.22E-11	2.9E-08 (S)	8.29E-11	1.72E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	5.1E-01	.	5.3E+06	2.4E-01	2.1E-01	1.0E+02	2.2E+03	.	.	.	9.2E-02	1.3E-07
Neptunium (93)	Np-237+D	6.85E-11	2.9E-08 (S)	9.18E-11	2.04E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	4.7E-01	.	4.5E+05	2.2E-01	1.9E-01	9.3E+01	2.0E+03	.	.	.	8.3E-02	1.2E-07
Neptunium (93)	Np-238	5.22E-12	5.2E-12 (S)	7.62E-12	5.52E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	6.1E+00	.	1.7E+05	9.3E+00	2.3E+00	1.1E+03	2.4E+04	.	.	.	1.4E+00	5.4E-15
Neptunium (93)	Np-239	5.22E-12	4.5E-12 (S)	7.62E-12	1.47E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	6.1E+00	.	6.2E+05	9.3E+00	2.3E+00	1.1E+03	2.4E+04	.	.	.	1.4E+00	6.1E-15
Neptunium (93)	Np-240	1.93E-13	1.7E-13 (S)	2.72E-13	9.61E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.7E+02	.	9.5E+04	2.6E+02	6.3E+01	3.1E+04	6.8E+05	.	.	.	3.9E+01	3.1E-15
Neptunium (93)	Np-240m	0.00E+00	0.00E+00	0.00E+00	2.97E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	3.1E+05	.	.	.	.	.	.	.	3.1E+05	2.8E-12
Neptunium (93)	Np-241	2.45E-14	1.9E-14 (S)	3.39E-14	3.13E-13	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	1.3E+03	.	2.9E+06	2.1E+03	5.1E+02	2.5E+05	5.5E+06	.	.	.	3.1E+02	5.6E-15
Neptunium (93)	Np-242	0.00E+00	0.00E+00	0.00E+00	2.62E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	3.5E+05	.	.	.	.	.	.	.	3.5E+05	9.9E-13
Neptunium (93)	Np-242m	0.00E+00	0.00E+00	0.00E+00	8.41E-12	2.52E-03	3.00E+01	1.00E-03	1.00E-05	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	7.7E-13
Oxygen (8)	O-14	0.00E+00	0.00E+00	0.00E+00	3.33E-11	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	2.7E+04	.	.	.	.	.	.	.	2.7E+04	2.4E-15
Oxygen (8)	O-15	0.00E+00	0.00E+00	0.00E+00	9.26E-12	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	9.9E+04	.	.	.	.	.	.	.	9.9E+04	1.6E-14
Oxygen (8)	O-19	0.00E+00	0.00E+00	0.00E+00	9.15E-12	6.00E-01	.	2.00E-01	2.00E-02	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	4.5E-15
Osmium (76)	Os-180	3.81E-14	2.7E-14 (S)	5.25E-14	9.42E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	8.4E+02	.	9.7E+05	1.4E+03	.	8.1E+04	3.5E+05	.	.	.	5.1E+02	1.1E-14
Osmium (76)	Os-181	3.59E-13	1.9E-13 (S)	5.11E-13	1.28E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	8.9E+01	.	7.1E+04	1.4E+02	.	8.3E+03	3.6E+04	.	.	.	5.4E+01	5.4E-15
Osmium (76)	Os-182	2.68E-12	1.5E-12 (S)	3.85E-12	3.69E-12	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.2E+01	.	2.5E+05	1.9E+01	.	1.1E+03	4.8E+03	.	.	.	7.2E+00	9.2E-15
Osmium (76)	Os-183	1.04E-12	6.6E-13 (S)	1.49E-12	5.39E-12	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.1E+01	.	1.7E+05	4.8E+01	.	2.8E+03	1.2E+04	.	.	.	1.9E+01	1.4E-14
Osmium (76)	Os-183m	8.25E-13	4.6E-13 (S)	1.17E-12	9.45E-12	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.9E+01	.	9.7E+04	6.1E+01	.	3.6E+03	1.6E+04	.	.	.	2.3E+01	1.4E-14
Osmium (76)	Os-185	1.86E-12	5.9E-12 (S)	2.62E-12	6.22E-12	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.7E+01	.	1.5E+05	2.6E+01	.	1.6E+03	7.1E+03	.	.	.	1.0E+01	1.4E-12
Osmium (76)	Os-186	7.84E-11	1.2E-08 (S)	1.05E-10	0.00E+00	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	4.1E-01	.	.	1.8E-01	.	4.1E+01	1.8E+02	.	.	.	1.2E-01	1.3E+02
Osmium (76)	Os-189m	9.88E-14	3.3E-14 (S)	1.45E-13	1.47E-17	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	3.2E+02	.	6.2E+10	4.9E+02	.	2.9E+04	1.3E+05	.	.	.	1.9E+02	6.8E-14
Osmium (76)	Os-190m	0.00E+00	0.00E+00	0.00E+00	1.44E-11	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	.	.	6.4E+04	.	.	.	.	.	.	.	6.4E+04	6.4E-13
Osmium (76)	Os-191	3.70E-12	7.4E-12 (S)	5.44E-12	5.92E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	8.6E+00	.	1.5E+06	1.3E+01	.	7.8E+02	3.4E+03	.	.	.	5.1E+00	1.2E-13
Osmium (76)	Os-191m	6.29E-13	6.6E-13 (S)	9.21E-13	3.62E-14	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	5.1E+01	.	2.5E+07	7.7E+01	.	4.6E+03	2.0E+04	.	.	.	3.0E+01	2.4E-14
Osmium (76)	Os-193	5.40E-12	2.8E-12 (S)	7.92E-12	5.74E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	5.9E+00	.	1.6E+06	9.0E+00	.	5.4E+02	2.3E+03	.	.	.	3.5E+00	6.6E-15
Osmium (76)	Os-194	1.56E-11	2.6E-10 (S)	2.28E-11	9.74E-15	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	2.0E+00	.	9.4E+07	1.7E+00	.	1.9E+02	8.2E+02	.	.	.	9.2E-01	3.0E-12
Osmium (76)	Os-194+D	2.42E-11	2.6E-10 (S)	3.54E-11	8.75E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.3E+00	.	1.0E+06	1.1E+00	.	1.2E+02	5.2E+02	.	.	.	5.9E-01	1.9E-12
Osmium (76)	Os-196	2.17E-13	1.3E-13 (S)	3.04E-13	6.96E-13	3.00E-02	.	2.00E-03	1.00E-04	.	.	.	1.5E+02	.	1.3E+06	2.3E+02	.	1.4E+04	6.1E+04	.	.	.	9.0E+01	3.3E-15
Phosphorus (15)	P-30	0.00E+00	0.00E+00	0.00E+00	9.34E-12	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	.	.	9.8E+04	.	.	.	.	.	.	.	9.8E+04	3.9E-14
Phosphorus (15)	P-32	8.95E-12	1.4E-11 (S)	1.23E-11	2.09E-14	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	3.6E+00	.	4.4E+07	5.7E+00	3.0E-04	1.3E+01	7.5E+00	2.2E+02	.	4.8E+02	3.0E-04	1.1E-18
Phosphorus (15)	P-33	9.77E-13	6.1E-12 (S)	1.36E-12	2.79E-16	1.74E-01	1.40E+05	5.50E-02	2.00E-02	2.70E-02	.	6.40E-01	3.3E+01	.	3.3E+09	5.2E+01	2.7E-03	1.1E+02	6.8E+01	2.0E+03	.	4.4E+03	2.7E-03	1.7E-17
Protactinium (91)	Pa-227	9.69E-13	2.1E-10 (S)	1.37E-12	1.44E-13	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	3.3E+01	.	6.4E+06	5.2E+01	3.8E+01	1.2E+06	2.7E+05	.	.	.	1.3E+01	6.1E-16
Protactinium (91)	Pa-228	3.54E-12	2.4E-10 (S)	5.11E-12	1.27E-11	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	9.0E+00	.	7.2E+04	1.4E+01	1.0E+01	3.3E+05	7.3E+04	.	.	.	3.6E+00	5.7E-15
Protactinium (91)	Pa-229	4.59E-13	2.4E-11 (S)	6.66E-13	4.69E-13	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	6.9E+01	.	1.9E+06	1.1E+02	7.8E+01	2.5E+06	5.6E+05	.	.	.	2.7E+01	7.2E-14
Protactinium (91)	Pa-230	3.70E-12	2.3E-09 (S)	5.33E-12	6.10E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	8.6E+00	.	1.5E+05	1.3E+01	9.7E+00	3.2E+05	7.0E+04	.	.	.	3.4E+00	1.0E-13
Protactinium (91)	Pa-231	1.72E-10	7.6E-08 (F)	2.26E-10	2.93E-13	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	1.8E-01	.	3.1E+06	8.7E-02	2.3E-01	7.5E+03	1.6E+03	.	.	.	4.7E-02	9.9E-10
Protactinium (91)	Pa-232	3.47E-12	7.0E-12 (S)	5.03E-12	8.68E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	9.2E+00	.	1.1E+05	1.4E+01	1.0E+01	3.4E+05	7.4E+04	.	.	.	3.6E+00	8.4E-15
Protactinium (91)	Pa-233	6.14E-12	1.5E-11 (S)	8.95E-12	1.87E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	5.2E+00	.	4.9E+05	7.9E+00	5.8E+00	1.9E+05	4.1E+04	.	.	.	2.0E+00	9.8E-14
Protactinium (91)	Pa-234	2.07E-12	1.2E-12 (S)	3.00E-12	1.35E-11	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	1.5E+01	.	6.7E+04	2.4E+01	1.7E+01	5.7E+05	1.2E+05	.	.	.	6.1E+00	3.0E-15
Protactinium (91)	Pa-234m	0.00E+00	0.00E+00	0.00E+00	1.82E-13	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	5.0E+06	.	.	.	.	.	.	.	5.0E+06	7.3E-12
Protactinium (91)	Pa-235	4.59E-14	3.2E-14 (S)	6.40E-14	1.12E-14	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	6.9E+02	.	8.2E+07	1.1E+03	8.1E+02	2.7E+07	5.8E+06	.	.	.	2.8E+02	8.6E-15
Protactinium (91)	Pa-236	0.00E+00	0.00E+00	0.00E+00	8.83E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	1.2E-12
Protactinium (91)	Pa-237	0.00E+00	0.00E+00	0.00E+00	5.67E-12	1.00E-02	1.00E+01	5.00E-06	5.00E-06	.	.	.	.	.	1.6E+05	.	.	.	.	.	.	.	1.6E+05	1.8E-12
Lead (82)	Pb-194	3.96E-14	2.2E-14 (S)	5.44E-14	1.01E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	8.0E+02	.	9.1E+04	1.3E+03	3.8E+02	2.2E+05	1.8E+05	.	.	.	2.1E+02	2.7E-15
Lead (82)	Pb-195m	5.29E-14	4.0E-14 (S)	7.25E-14	1.51E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	6.0E+02	.	6.1E+04	9.8E+02	2.9E+02	1.7E+05	1.3E+05	.	.	.	1.6E+02	2.5E-15
Lead (82)	Pb-196	7.03E-14	4.7E-14 (S)	9.73E-14	4.26E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	4.5E+02	.	2.1E+05	7.3E+02	2.1E+02	1.2E+05	1.0E+05	.	.	.	1.2E+02	4.7E-15
Lead (82)	Pb-197	0.00E+00	0.00E+00	0.00E+00	1.46E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	.	.	6.3E+04	.	.	.	.	.	.	.	6.3E+04	5.3E-13
Lead (82)	Pb-197m	1.11E-13	9.8E-14 (S)	1.54E-13	1.06E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.9E+02	.	8.6E+04	4.6E+02	1.3E+02	7.9E+04	6.4E+04	.	.	.	7.6E+01	3.4E-15
Lead (82)	Pb-198	2.60E-13	1.5E-13 (S)	3.63E-13	3.76E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.2E+02	.	2.4E+05	2.0E+02	5.7E+01	3.3E+04	2.7E+04	.	.	.	3.2E+01	4.9E-15
Lead (82)	Pb-199	1.19E-13	7.1E-14 (S)	1.67E-13	9.77E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.7E+02	.	9.4E+04	4.3E+02	1.2E+02	7.3E+04	5.9E+04	.	.	.	7.1E+01	6.7E-15
Lead (82)	Pb-200	1.59E-12	1.3E-12 (S)	2.26E-12	1.65E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.0E+01	.	5.6E+05	3.2E+01	9.2E+00	5.4E+03	4.3E+03	.	.	.	5.2E+00	7.2E-15
Lead (82)	Pb-201	5.99E-13	3.9E-13 (S)	8.47E-13	6.80E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	5.3E+01	.	1.3E+05	8.4E+01	2.4E+01	1.4E+04	1.2E+04	.	.	.	1.4E+01	8.3E-15
Lead (82)	Pb-201m	0.00E+00	0.00E+00	0.00E+00	3.29E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	.	.	2.8E+05	.	.	.	.	.	.	.	2.8E+05	3.0E-13
Lead (82)	Pb-202	3.37E-11	1.4E-10 (S)	4.51E-11	7.05E-17	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	9.4E-01	.	1.3E+10	4.3E-01	4.6E-01	2.7E+02	2.2E+02	.	.	.	1.8E-01	5.3E-09
Lead (82)	Pb-202+D	3.52E-11	1.4E-10 (S)	4.70E-11	4.02E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	9.0E-01	.	2.3E+05	4.2E-01	4.4E-01	2.6E+02	2.1E+02	.	.	.	1.7E-01	5.1E-09
Lead (82)	Pb-202m	4.77E-13	2.7E-13 (S)	6.70E-13	1.84E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	6.7E+01	.	5.0E+04	1.1E+02	3.1E+01	1.8E+04	1.5E+04	.	.	.	1.8E+01	4.0E-15
Lead (82)	Pb-203	1.04E-12	8.5E-13 (S)	1.48E-12	2.64E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.1E+01	.	3.5E+05	4.8E+01	1.4E+01	8.2E+03	6.6E+03	.	.	.	8.0E+00	2.7E-14
Lead (82)	Pb-204m	1.27E-13	5.4E-14 (S)	1.76E-13	1.93E-11	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	2.5E+02	.	4.7E+04	4.0E+02	1.2E+02	6.9E+04	5.5E+04	.	.	.	6.7E+01	4.9E-15
Lead (82)	Pb-205	6.18E-13	2.3E-12 (S)	8.03E-13	7.16E-17	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	5.2E+01	.	1.3E+10	2.4E+01	2.6E+01	1.5E+04	1.2E+04	.	.	.	1.0E+01	8.8E-05
Lead (82)	Pb-209	2.41E-13	2.1E-13 (S)	3.49E-13	2.32E-15	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.3E+02	.	3.9E+08	2.0E+02	5.9E+01	3.5E+04	2.8E+04	.	.	.	3.4E+01	7.4E-15
Lead (82)	Pb-210	8.84E-10	1.6E-08 (S)	1.18E-09	9.08E-15	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	3.6E-02	.	1.0E+08	2.2E-02	1.8E-02	1.0E+01	8.3E+00	.	.	.	7.7E-03	1.0E-13
Lead (82)	Pb-211	4.11E-13	4.0E-11 (S)	5.81E-13	6.01E-13	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	7.8E+01	.	1.5E+06	1.2E+02	3.6E+01	2.1E+04	1.7E+04	.	.	.	2.0E+01	8.2E-16
Lead (82)	Pb-212	2.52E-11	6.4E-10 (S)	3.57E-11	1.23E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	1.3E+00	.	7.5E+05	2.0E+00	5.8E-01	3.4E+02	2.7E+02	.	.	.	3.3E-01	2.4E-16
Lead (82)	Pb-214	3.44E-13	4.0E-11 (S)	4.85E-13	2.23E-12	9.57E-03	2.50E+01	7.00E-04	1.90E-04	.	.	.	9.2E+01	.	4.1E+05	1.5E+02	4.3E+01	2.5E+04	2.0E+04	.	.	.	2.4E+01	7.4E-16
Palladium (46)	Pd-100	3.81E-12	2.9E-12 (S)	5.44E-12	7.25E-13	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	8.4E+00	.	1.3E+06	1.3E+01	9.5E+00	7.8E+03	3.4E+03	.	.	.	3.3E+00	9.2E-15
Palladium (46)	Pd-101	4.11E-13	1.9E-13 (S)	5.88E-13	3.01E-12	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	7.8E+01	.	3.0E+05	1.2E+02	8.8E+01	7.2E+04	3.2E+04	.	.	.	3.1E+01	8.4E-15
Palladium (46)	Pd-103	1.25E-12	1.8E-12 (S)	1.83E-12	9.17E-15	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	2.6E+01	.	1.0E+08	3.9E+01	2.8E+01	2.3E+04	1.0E+04	.	.	.	1.0E+01	1.3E-13
Palladium (46)	Pd-107	2.59E-13	1.8E-12 (S)	3.81E-13	0.00E+00	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	1.2E+02	.	.	4.1E+01	1.4E+02	1.1E+05	4.9E+04	.	.	.	2.5E+01	4.9E-05
Palladium (46)	Pd-109	3.57E-12	1.9E-12 (S)	5.22E-12	4.30E-14	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	8.9E+00	.	2.1E+07	1.4E+01	9.9E+00	8.1E+03	3.6E+03	.	.	.	3.5E+00	1.7E-15
Palladium (46)	Pd-109m	0.00E+00	0.00E+00	0.00E+00	9.25E-13	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	9.9E+05	.	.	.	.	.	.	.	9.9E+05	2.7E-12
Palladium (46)	Pd-111	9.92E-14	6.5E-14 (S)	1.39E-13	4.80E-13	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	3.2E+02	.	1.9E+06	5.1E+02	3.7E+02	3.1E+05	1.3E+05	.	.	.	1.3E+02	1.8E-15
Palladium (46)	Pd-112	1.72E-11	6.8E-12 (S)	2.52E-11	2.22E-15	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	1.9E+00	.	4.1E+08	2.8E+00	2.1E+00	1.7E+03	7.3E+02	.	.	.	7.2E-01	5.4E-16
Palladium (46)	Pd-114	0.00E+00	0.00E+00	0.00E+00	2.38E-13	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	3.8E+06	.	.	.	.	.	.	.	3.8E+06	5.6E-12
Palladium (46)	Pd-96	0.00E+00	0.00E+00	0.00E+00	1.32E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	6.9E+04	.	.	.	.	.	.	.	6.9E+04	7.2E-14
Palladium (46)	Pd-97	0.00E+00	0.00E+00	0.00E+00	2.29E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	.	.	4.0E+04	.	.	.	.	.	.	.	4.0E+04	6.4E-14

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Palladium (46)	Pd-98	1.17E-13	5.6E-14 (S)	1.62E-13	3.58E-12	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	2.7E+02	.	2.6E+05	4.4E+02	3.2E+02	2.6E+05	1.1E+05	.	.	.	1.1E+02	1.0E-15
Palladium (46)	Pd-99	7.55E-14	3.5E-14 (S)	1.05E-13	1.19E-11	1.00E-01	1.00E+01	2.00E-04	1.00E-04	.	.	.	4.2E+02	.	7.7E+04	6.8E+02	4.9E+02	4.0E+05	1.8E+05	.	.	.	1.7E+02	1.9E-15
Promethium (61)	Pm-136	0.00E+00	0.00E+00	0.00E+00	2.51E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	3.6E+04	.	.	.	.	.	.	.	3.6E+04	4.7E-14
Promethium (61)	Pm-137m	0.00E+00	0.00E+00	0.00E+00	1.61E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	5.7E+04	.	.	.	.	.	.	.	5.7E+04	9.9E-14
Promethium (61)	Pm-139	0.00E+00	0.00E+00	0.00E+00	8.59E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	3.3E-13
Promethium (61)	Pm-140	0.00E+00	0.00E+00	0.00E+00	9.74E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	9.4E+04	.	.	.	.	.	.	.	9.4E+04	1.1E-14
Promethium (61)	Pm-140m	0.00E+00	0.00E+00	0.00E+00	2.81E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	3.2E+04	.	.	.	.	.	.	.	3.2E+04	1.4E-13
Promethium (61)	Pm-141	6.44E-14	2.8E-14 (S)	8.95E-14	6.75E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	4.9E+02	.	1.4E+05	8.0E+02	1.9E+02	4.7E+04	3.5E+05	.	1.1E+07	2.1E+06	1.2E+02	1.8E-15
Promethium (61)	Pm-142	0.00E+00	0.00E+00	0.00E+00	7.86E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	5.9E-14
Promethium (61)	Pm-143	8.77E-13	9.1E-12 (F)	1.24E-12	2.74E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	3.6E+01	.	3.3E+05	5.2E+01	1.4E+01	3.4E+03	2.5E+04	.	7.7E+05	1.5E+05	8.4E+00	2.4E-12
Promethium (61)	Pm-144	3.34E-12	5.5E-11 (F)	4.70E-12	1.41E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	9.5E+00	.	6.5E+04	1.3E+01	3.7E+00	9.0E+02	6.6E+03	.	2.0E+05	4.0E+04	2.2E+00	8.8E-13
Promethium (61)	Pm-145	5.25E-13	1.2E-11 (F)	7.59E-13	1.04E-13	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	6.1E+01	.	8.8E+06	3.6E+01	2.3E+01	5.6E+03	4.1E+04	.	1.3E+06	2.5E+05	1.1E+01	8.1E-11
Promethium (61)	Pm-146	4.11E-12	1.0E-10 (F)	5.88E-12	6.76E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	7.8E+00	.	1.4E+05	6.9E+00	2.9E+00	7.2E+02	5.3E+03	.	1.6E+05	3.2E+04	1.6E+00	3.7E-12
Promethium (61)	Pm-147	1.69E-12	1.6E-11 (S)	2.48E-12	1.98E-16	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.9E+01	.	4.6E+09	2.1E+01	7.0E+00	1.7E+03	1.2E+04	.	3.8E+05	7.7E+04	4.1E+00	4.4E-12
Promethium (61)	Pm-148	1.73E-11	1.1E-11 (S)	2.53E-11	5.56E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	1.8E+00	.	1.6E+05	2.8E+00	6.8E-01	1.7E+02	1.2E+03	.	3.8E+04	7.5E+03	4.2E-01	2.6E-15
Promethium (61)	Pm-148m	7.99E-12	2.1E-11 (S)	1.15E-11	1.83E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	4.0E+00	.	5.0E+04	6.1E+00	1.5E+00	3.7E+02	2.7E+03	.	8.3E+04	1.7E+04	9.2E-01	4.3E-14
Promethium (61)	Pm-149	6.62E-12	3.7E-12 (S)	9.73E-12	1.13E-13	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	4.8E+00	.	8.1E+06	7.3E+00	1.8E+00	4.4E+02	3.2E+03	.	9.8E+04	2.0E+04	1.1E+00	2.8E-15
Promethium (61)	Pm-150	1.09E-12	4.6E-13 (S)	1.57E-12	1.41E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	2.9E+01	.	6.5E+04	4.5E+01	1.1E+01	2.7E+03	2.0E+04	.	6.0E+05	1.2E+05	6.8E+00	8.7E-16
Promethium (61)	Pm-151	4.48E-12	2.4E-12 (S)	6.55E-12	2.88E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	7.1E+00	.	3.2E+05	1.1E+01	2.6E+00	6.5E+02	4.7E+03	.	1.4E+05	2.9E+04	1.6E+00	2.2E-15
Promethium (61)	Pm-152	0.00E+00	0.00E+00	0.00E+00	2.78E-12	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	3.3E+05	.	.	.	.	.	.	.	3.3E+05	1.1E-12
Promethium (61)	Pm-152m	0.00E+00	0.00E+00	0.00E+00	1.44E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	6.4E+04	.	.	.	.	.	.	.	6.4E+04	3.9E-13
Promethium (61)	Pm-153	0.00E+00	0.00E+00	0.00E+00	6.00E-13	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	1.5E+06	.	.	.	.	.	.	.	1.5E+06	6.5E-12
Promethium (61)	Pm-154	0.00E+00	0.00E+00	0.00E+00	1.77E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	5.2E+04	.	.	.	.	.	.	.	5.2E+04	7.3E-14
Promethium (61)	Pm-154m	0.00E+00	0.00E+00	0.00E+00	1.73E-11	1.22E-02	3.00E+01	2.00E-03	6.00E-05	.	2.00E-03	2.00E-02	.	.	5.3E+04	.	.	.	.	.	.	.	5.3E+04	1.2E-13
Polonium (84)	Po-203	1.36E-13	1.1E-13 (S)	1.89E-13	1.54E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	2.3E+02	.	5.9E+04	3.8E+02	7.6E+01	9.0E+03	4.7E+04	.	4.2E+03	6.5E+03	4.9E+01	1.9E-15
Polonium (84)	Po-204	8.77E-13	1.5E-12 (S)	1.24E-12	1.05E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	3.6E+01	.	8.7E+04	5.8E+01	1.2E+01	1.4E+03	7.1E+03	.	6.4E+02	9.9E+02	7.4E+00	1.7E-15
Polonium (84)	Po-205	1.62E-13	1.1E-13 (S)	2.24E-13	1.49E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	2.0E+02	.	6.1E+04	3.2E+02	6.4E+01	7.6E+03	3.9E+04	.	3.5E+03	5.5E+03	4.1E+01	4.4E-15
Polonium (84)	Po-206	3.22E-11	2.2E-10 (S)	4.22E-11	1.09E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	9.9E-01	.	8.4E+04	1.7E+00	3.4E-01	4.0E+01	2.1E+02	.	1.9E+01	2.9E+01	2.1E-01	3.0E-15
Polonium (84)	Po-207	3.81E-13	2.5E-13 (S)	5.33E-13	1.19E-11	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	8.4E+01	.	7.7E+04	1.3E+02	2.7E+01	3.2E+03	1.7E+04	.	1.5E+03	2.3E+03	1.7E+01	6.6E-15
Polonium (84)	Po-208	2.22E-09	2.3E-08 (S)	2.81E-09	1.90E-16	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	1.4E-02	.	4.8E+09	1.8E-02	5.1E-03	6.0E-01	3.1E+00	.	2.8E-01	4.4E-01	3.0E-03	5.1E-15
Polonium (84)	Po-209	2.20E-09	2.8E-08 (S)	2.79E-09	5.60E-14	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	1.4E-02	.	1.6E+07	7.7E-03	5.2E-03	6.1E-01	3.2E+00	.	2.8E-01	4.4E-01	2.5E-03	1.5E-13
Polonium (84)	Po-210	1.78E-09	1.5E-08 (S)	2.25E-09	9.07E-17	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	1.8E-02	.	1.0E+10	3.0E-02	6.4E-03	7.5E-01	3.9E+00	.	3.5E-01	5.4E-01	4.0E-03	8.8E-16
Polonium (84)	Po-211	0.00E+00	0.00E+00	0.00E+00	7.59E-14	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	1.2E+07	.	.	.	.	.	.	.	1.2E+07	1.2E-13
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	8.23E-13	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	1.1E+06	.	.	.	.	.	.	.	1.1E+06	9.4E-13
Polonium (84)	Po-213	0.00E+00	0.00E+00	0.00E+00	3.49E-16	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	2.6E+09	.	.	.	.	.	.	.	2.6E+09	2.1E-16
Polonium (84)	Po-214	0.00E+00	0.00E+00	0.00E+00	7.74E-16	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	1.2E+09	.	.	.	.	.	.	.	1.2E+09	3.7E-15
Polonium (84)	Po-215	0.00E+00	0.00E+00	0.00E+00	1.59E-15	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	5.8E+08	.	.	.	.	.	.	.	5.8E+08	2.0E-14
Polonium (84)	Po-216	0.00E+00	0.00E+00	0.00E+00	1.42E-16	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	6.4E+09	.	.	.	.	.	.	.	6.4E+09	1.8E-11
Polonium (84)	Po-218	0.00E+00	0.00E+00	0.00E+00	5.06E-20	2.09E-04	3.60E+01	5.00E-03	2.10E-04	.	2.40E+00	3.10E+00	.	.	1.8E+13	.	.	.	.	.	.	.	1.8E+13	6.5E-05
Praseodymium (59)	Pr-134	1.15E-13	4.5E-14 (S)	1.61E-13	2.92E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.8E+02	.	3.1E+04	4.4E+02	3.2E+01	2.6E+04	1.9E+05	.	3.9E+05	4.7E+06	2.7E+01	2.1E-16
Praseodymium (59)	Pr-134m	1.91E-13	7.8E-14 (S)	2.69E-13	2.20E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.7E+02	.	4.2E+04	2.6E+02	1.9E+01	1.6E+04	1.1E+05	.	2.4E+05	2.8E+06	1.6E+01	2.0E-16
Praseodymium (59)	Pr-135	9.25E-14	4.3E-14 (S)	1.29E-13	7.85E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	3.4E+02	.	1.2E+05	5.5E+02	4.0E+01	3.3E+04	2.4E+05	.	4.9E+05	5.9E+06	3.4E+01	5.8E-16
Praseodymium (59)	Pr-136	5.96E-14	2.2E-14 (S)	8.21E-14	2.02E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	5.3E+02	.	4.5E+04	8.7E+02	6.3E+01	5.2E+04	3.8E+05	.	7.7E+05	9.3E+06	5.3E+01	5.0E-16
Praseodymium (59)	Pr-137	1.17E-13	5.2E-14 (S)	1.67E-13	3.27E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.7E+02	.	2.8E+05	4.3E+02	3.1E+01	2.5E+04	1.8E+05	.	3.8E+05	4.5E+06	2.6E+01	1.5E-15
Praseodymium (59)	Pr-138	0.00E+00	0.00E+00	0.00E+00	7.43E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	1.3E-13
Praseodymium (59)	Pr-138m	4.22E-13	1.8E-13 (S)	5.96E-13	2.30E-11	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	7.6E+01	.	4.0E+04	1.2E+02	8.7E+00	7.1E+03	5.2E+04	.	1.1E+05	1.3E+06	7.3E+00	6.8E-16
Praseodymium (59)	Pr-139	1.50E-13	7.1E-14 (S)	2.17E-13	1.03E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.1E+02	.	8.9E+05	3.3E+02	2.4E+01	2.0E+04	1.4E+05	.	2.9E+05	3.5E+06	2.0E+01	3.9E-15
Praseodymium (59)	Pr-140	0.00E+00	0.00E+00	0.00E+00	4.89E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	4.7E-13
Praseodymium (59)	Pr-142	8.62E-12	3.4E-12 (S)	1.26E-11	6.11E-13	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	3.7E+00	.	1.5E+06	5.6E+00	4.1E-01	3.4E+02	2.4E+03	.	5.0E+03	6.0E+04	3.5E-01	3.0E-16
Praseodymium (59)	Pr-142m	1.11E-13	4.3E-14 (S)	1.62E-13	0.00E+00	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.9E+02	.	.	4.4E+02	3.2E+01	2.6E+04	1.9E+05	.	3.9E+05	4.7E+06	2.7E+01	3.0E-16
Praseodymium (59)	Pr-143	7.92E-12	9.8E-12 (S)	1.17E-11	5.32E-15	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	4.0E+00	.	1.7E+08	6.1E+00	4.4E-01	3.6E+02	2.7E+03	.	5.4E+03	6.5E+04	3.7E-01	5.6E-15
Praseodymium (59)	Pr-144	8.10E-14	3.6E-14 (S)	1.12E-13	3.48E-13	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	3.9E+02	.	2.6E+06	6.4E+02	4.6E+01	3.8E+04	2.8E+05	.	5.6E+05	6.8E+06	3.9E+01	5.1E-16
Praseodymium (59)	Pr-144m	0.00E+00	0.00E+00	0.00E+00	4.83E-14	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	1.9E+07	.	.	.	.	.	.	.	1.9E+07	1.0E-10
Praseodymium (59)	Pr-145	2.29E-12	9.3E-13 (S)	3.36E-12	1.93E-13	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	1.4E+01	.	4.7E+06	2.1E+01	1.5E+00	1.3E+03	9.2E+03	.	1.9E+04	2.3E+05	1.3E+00	3.6E-16
Praseodymium (59)	Pr-146	1.38E-13	6.1E-14 (S)	1.92E-13	9.89E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	2.3E+02	.	9.2E+04	3.7E+02	2.7E+01	2.2E+04	1.6E+05	.	3.3E+05	4.0E+06	2.3E+01	4.3E-16
Praseodymium (59)	Pr-147	5.85E-14	3.6E-14 (S)	8.10E-14	4.33E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	5.4E+02	.	2.1E+05	8.8E+02	6.4E+01	5.2E+04	3.8E+05	.	7.8E+05	9.4E+06	5.4E+01	5.6E-16
Praseodymium (59)	Pr-148	0.00E+00	0.00E+00	0.00E+00	9.63E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	9.5E+04	.	.	.	.	.	.	.	9.5E+04	1.7E-13
Praseodymium (59)	Pr-148m	0.00E+00	0.00E+00	0.00E+00	8.65E-12	1.74E-02	1.00E+02	2.00E-03	6.00E-05	.	3.00E-02	5.00E-03	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	1.7E-13
Platinum (78)	Pt-184	9.44E-14	6.2E-14 (S)	1.34E-13	6.12E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.4E+02	.	1.5E+05	5.3E+02	.	3.2E+05	1.4E+05	.	.	.	2.1E+02	3.5E-15
Platinum (78)	Pt-186	4.33E-13	2.1E-13 (S)	6.18E-13	6.07E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	7.4E+01	.	1.5E+05	1.2E+02	.	6.9E+04	3.0E+04	.	.	.	4.5E+01	5.5E-15
Platinum (78)	Pt-187	3.51E-13	2.2E-13 (S)	5.03E-13	5.39E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	9.1E+01	.	1.7E+05	1.4E+02	.	8.4E+04	3.7E+04	.	.	.	5.5E+01	7.8E-15
Platinum (78)	Pt-188	4.03E-12	7.7E-12 (S)	5.81E-12	1.62E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	7.9E+00	.	5.6E+05	1.2E+01	.	7.3E+03	3.2E+03	.	.	.	4.8E+00	7.0E-14
Platinum (78)	Pt-189	9.73E-13	6.4E-13 (S)	1.41E-12	4.18E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.3E+01	.	2.2E+05	5.1E+01	.	3.0E+04	1.3E+04	.	.	.	2.0E+01	1.3E-14
Platinum (78)	Pt-190	3.01E-11	1.5E-08 (S)	4.22E-11	0.00E+00	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.1E+00	.	.	3.7E-01	.	1.0E+03	4.4E+02	.	.	.	2.8E-01	9.5E-02
Platinum (78)	Pt-191	1.96E-12	1.5E-12 (S)	2.85E-12	2.38E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.6E+01	.	3.8E+05	2.5E+01	.	1.5E+04	6.5E+03	.	.	.	9.8E+00	4.0E-14
Platinum (78)	Pt-193	2.42E-13	2.0E-12 (S)	3.55E-13	4.31E-17	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.3E+02	.	2.1E+10	5.1E+01	.	1.2E+05	5.2E+04	.	.	.	3.7E+01	1.0E-09
Platinum (78)	Pt-193m	3.06E-12	3.8E-12 (S)	4.48E-12	6.85E-14	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.0E+01	.	1.3E+07	1.6E+01	.	9.5E+03	4.1E+03	.	.	.	6.3E+00	4.0E-14
Platinum (78)	Pt-195m	4.18E-12	4.6E-12 (S)	6.14E-12	4.86E-13	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	7.6E+00	.	1.9E+06	1.2E+01	.	6.9E+03	3.0E+03	.	.	.	4.6E+00	2.8E-14
Platinum (78)	Pt-197	2.80E-12	1.8E-12 (S)	4.11E-12	1.81E-13	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.1E+01	.	5.1E+06	1.7E+01	.	1.0E+04	4.5E+03	.	.	.	6.9E+00	8.6E-15
Platinum (78)	Pt-197m	4.00E-13	2.8E-13 (S)	5.81E-13	6.29E-13	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	8.0E+01	.	1.5E+06	1.2E+02	.	7.3E+04	3.2E+04	.	.	.	4.8E+01	4.8E-15
Platinum (78)	Pt-199	8.99E-14	6.9E-14 (S)	1.27E-13	1.81E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	3.5E+02	.	5.1E+05	5.6E+02	.	3.3E+05	1.5E+05	.	.	.	2.2E+02	7.1E-15
Platinum (78)	Pt-200	7.55E-12	3.3E-12 (S)	1.11E-11	4.54E-13	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	4.2E+00	.	2.0E+06	6.4E+00	.	3.8E+03	1.7E+03	.	.	.	2.5E+00	2.0E-15
Platinum (78)	Pt-202	2.92E-11	1.3E-11 (S)	4.29E-11	1.96E-14	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.1E+00	.	4.7E+07	1.7E+00	.	9.9E+02	4.3E+02	.	.	.	6.6E-01	1.9E-15
Platinum (78)	Pt-202+D	2.92E-11	1.3E-11 (S)	4.29E-11	1.69E-12	1.00E-01	.	2.00E-04	1.00E-04	.	.	.	1.1E+00	.	5.4E+05	1.7E+00	.	9.9E+02	4.3E+02	.	.	.	6.6E-01	1.9E-15
Plutonium (94)	Pu-232	2.96E-13	6.3E-11 (S)	4.18E-13	4.65E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	1.1E+02	.	2.0E+06	1.7E+02	5.9E-02	1.8E+07	4.4E+05	2.2E+06	1.5E+06	7.6E+06	5.9E-02	2.5E-18
Plutonium (94)	Pu-234	8.25E-13	8.0E-11 (S)	1.20E-12	5.03E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	3.9E+01	.	1.8E+06	5.9E+01	2.0E-02	6.4E+06	1.5E+05	7.6E+05	5.3E+05	2.6E+06	2.0E-02	1.3E-17
Plutonium (94)	Pu-235	4.63E-15	2.7E-15 (S)	6.40E-15	6.97E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	6.9E+03	.	1.3E+06	1.1E+04	3.8E+00	1.2E+09	2.9E+07	1.4E+08	9.9E+07	5.0E+08	3.8E+00	1.2E-16
Plutonium (94)	Pu-236	7.55E-11	3.0E-08 (S)	1.00E-10	7.82E-16	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	4.2E-01	.	1.2E+09	5.1E-01	2.5E-04	7.7E+04	1.8E+03	9.1E+03	6.3E+03	3.2E+04	2.5E-04	4.6E-16
Plutonium (94)	Pu-237	6.44E-13	1.5E-12 (S)	9.36E-13	3.60E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	4.9E+01	.	2.5E+06	7.5E+01	2.6E-02	8.2E+06	2.0E+05	9.7E+05	6.8E+05	3.4E+06	2.6E-02	2.2E-15
Plutonium (94)	Pu-238	1.31E-10	5.2E-08 (F)	1.69E-10	5.95E-16	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.4E-01	.	1.5E+09	1.3E-01	1.5E-04	4.6E+04	1.1E+03	5.4E+03	3.7E+03	1.9E+04	1.5E-04	8.5E-15
Plutonium (94)	Pu-239	1.35E-10	5.6E-08 (F)	1.74E-10	7.25E-16	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.4E-01	.	1.3E+09	1.2E-01	1.4E-04	4.4E+04	1.1E+03	5.2E+03	3.6E+03	1.8E+04	1.4E-04	2.3E-12
Plutonium (94)	Pu-239+D	1.35E-10	5.6E-08 (F)	1.74E-10	7.25E-16	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.4E-01	.	1.3E+09

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Plutonium (94)	Pu-241	1.76E-12	8.7E-10 (F)	2.28E-12	1.24E-17	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	1.8E+01	.	7.4E+10	1.3E+01	1.1E-02	3.4E+06	8.1E+04	4.0E+05	2.8E+05	1.4E+06	1.1E-02	1.0E-13
Plutonium (94)	Pu-242	1.28E-10	5.3E-08 (F)	1.66E-10	1.24E-15	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.5E-01	.	7.4E+08	1.2E-01	1.5E-04	4.7E+04	1.1E+03	5.5E+03	3.8E+03	1.9E+04	1.5E-04	3.8E-11
Plutonium (94)	Pu-243	4.74E-13	3.2E-13 (S)	6.92E-13	1.81E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	6.7E+01	.	5.1E+06	1.0E+02	3.6E-02	1.1E+07	2.7E+05	1.3E+06	9.1E+05	4.6E+06	3.6E-02	1.4E-17
Plutonium (94)	Pu-244	1.44E-10	5.2E-08 (F)	1.88E-10	1.97E-13	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.2E-01	.	4.6E+06	1.1E-01	1.3E-04	4.1E+04	9.9E+02	4.9E+03	3.4E+03	1.7E+04	1.3E-04	7.2E-09
Plutonium (94)	Pu-244+D	1.51E-10	5.2E-08 (F)	1.98E-10	3.21E-12	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	2.1E-01	.	2.8E+05	1.0E-01	1.2E-04	3.9E+04	9.4E+02	4.6E+03	3.2E+03	1.6E+04	1.2E-04	6.8E-09
Plutonium (94)	Pu-245	4.26E-12	2.1E-12 (S)	6.25E-12	3.64E-12	8.27E-06	2.10E+04	1.10E-06	1.00E-05	8.00E-05	3.00E-03	1.20E-03	7.5E+00	.	2.5E+05	1.1E+01	3.9E-03	1.2E+06	3.0E+04	1.5E+05	1.0E+05	5.1E+05	3.9E-03	3.2E-18
Plutonium (94)	Pu-246	1.72E-11	1.9E-11 (S)	2.52E-11	1.09E-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	.	8.4E+05	2.8E+00	9.8E-04	3.1E+05	7.4E+03	3.6E+04	2.5E+04	1.3E+05	9.8E-04	2.0E-17
Radium (88)	Ra-219	0.00E+00	0.00E+00	0.00E+00	1.49E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	6.1E+05	.	.	.	.	.	.	.	6.1E+05	1.2E-16
Radium (88)	Ra-219+D	0.00E+00	0.00E+00	0.00E+00	1.49E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	6.1E+05	.	.	.	.	.	.	.	6.1E+05	1.2E-16
Radium (88)	Ra-220	0.00E+00	0.00E+00	0.00E+00	4.22E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	2.2E+07	.	.	.	.	.	.	.	2.2E+07	7.6E-15
Radium (88)	Ra-221	0.00E+00	0.00E+00	0.00E+00	2.94E-13	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	3.1E+06	.	.	.	.	.	.	.	3.1E+06	1.7E-12
Radium (88)	Ra-221+D	0.00E+00	0.00E+00	0.00E+00	2.94E-13	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	3.1E+06	.	.	.	.	.	.	.	3.1E+06	1.7E-12
Radium (88)	Ra-222	0.00E+00	0.00E+00	0.00E+00	8.19E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	.	.	1.1E+07	.	.	.	.	.	.	.	1.1E+07	8.4E-12
Radium (88)	Ra-223	2.38E-10	2.9E-08 (S)	3.39E-10	1.16E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.3E-01	.	7.9E+05	2.1E-01	3.8E-01	1.5E+01	1.4E+01	.	.	.	6.7E-02	1.3E-15
Radium (88)	Ra-223+D	2.38E-10	2.9E-08 (S)	3.39E-10	1.68E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.3E-01	.	5.4E+05	2.1E-01	3.8E-01	1.5E+01	1.4E+01	.	.	.	6.7E-02	1.3E-15
Radium (88)	Ra-224	1.67E-10	1.1E-08 (S)	2.38E-10	9.12E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.9E-01	6.8E-04	1.0E+07	3.0E-01	5.4E-01	2.1E+01	2.0E+01	.	.	.	6.8E-04	4.3E-18
Radium (88)	Ra-224+D	1.67E-10	1.1E-08 (S)	2.38E-10	9.70E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	1.9E-01	.	9.4E+06	3.0E-01	5.4E-01	2.1E+01	2.0E+01	.	.	.	9.5E-02	6.0E-16
Radium (88)	Ra-225	1.14E-10	2.6E-08 (S)	1.54E-10	4.24E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	2.8E-01	.	2.2E+07	4.6E-01	8.4E-01	3.3E+01	3.2E+01	.	.	.	1.4E-01	3.7E-15
Radium (88)	Ra-226	3.85E-10	2.8E-08 (S)	5.14E-10	6.27E-14	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	8.3E-02	2.7E-04	1.5E+07	3.8E-02	2.5E-01	9.7E+00	9.5E+00	.	.	.	2.7E-04	2.7E-13
Radium (88)	Ra-226+D	3.85E-10	2.8E-08 (S)	5.14E-10	1.68E-11	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	8.3E-02	2.7E-04	5.4E+04	3.8E-02	2.5E-01	9.7E+00	9.5E+00	.	.	.	2.7E-04	2.7E-13
Radium (88)	Ra-227	1.07E-13	6.1E-13 (S)	1.48E-13	1.25E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	3.0E+02	.	7.3E+05	4.8E+02	8.7E+02	3.4E+04	3.3E+04	.	.	.	1.5E+02	7.7E-15
Radium (88)	Ra-228	1.04E-09	4.4E-08 (S)	1.42E-09	5.02E-16	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	3.1E-02	.	1.8E+09	2.8E-02	9.1E-02	3.5E+00	3.4E+00	.	.	.	1.3E-02	4.6E-14
Radium (88)	Ra-228+D	1.04E-09	4.4E-08 (S)	1.43E-09	8.15E-12	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	3.1E-02	.	1.1E+05	2.8E-02	9.1E-02	3.5E+00	3.4E+00	.	.	.	1.3E-02	4.6E-14
Radium (88)	Ra-230	5.96E-13	3.5E-13 (S)	8.55E-13	6.57E-13	1.48E-02	4.00E+00	1.70E-03	3.80E-04	.	.	.	5.3E+01	.	1.4E+06	8.3E+01	1.5E+02	5.8E+03	5.7E+03	.	.	.	2.7E+01	3.0E-15
Rubidium (37)	Rb-77	0.00E+00	0.00E+00	0.00E+00	1.42E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	6.4E+04	.	.	.	.	.	.	.	6.4E+04	9.9E-14
Rubidium (37)	Rb-78	1.21E-13	4.8E-14 (S)	1.65E-13	4.18E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.6E+02	.	2.2E+04	4.3E+02	6.4E-01	1.7E+03	1.1E+03	.	.	.	6.4E-01	4.7E-18
Rubidium (37)	Rb-78m	0.00E+00	0.00E+00	0.00E+00	3.08E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	3.0E+04	.	.	.	.	.	.	.	3.0E+04	7.1E-14
Rubidium (37)	Rb-79	8.36E-14	4.8E-14 (S)	1.15E-13	1.32E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	3.8E+02	.	6.9E+04	6.2E+02	9.2E-01	2.5E+03	1.6E+03	.	.	.	9.2E-01	8.8E-18
Rubidium (37)	Rb-80	0.00E+00	0.00E+00	0.00E+00	1.10E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	2.0E-14
Rubidium (37)	Rb-81	1.17E-13	1.6E-13 (S)	1.58E-13	4.58E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.7E+02	.	2.0E+05	4.5E+02	6.7E-01	1.8E+03	1.2E+03	.	.	.	6.6E-01	7.9E-17
Rubidium (37)	Rb-81m	1.95E-14	3.9E-14 (S)	2.65E-14	2.16E-13	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	1.6E+03	.	4.2E+06	2.7E+03	4.0E+00	1.1E+04	7.0E+03	.	.	.	4.0E+00	5.2E-17
Rubidium (37)	Rb-82	0.00E+00	0.00E+00	0.00E+00	1.02E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	9.0E+04	.	.	.	.	.	.	.	9.0E+04	5.0E-14
Rubidium (37)	Rb-82m	3.64E-13	2.5E-13 (S)	4.85E-13	2.74E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	8.8E+01	.	3.3E+04	1.5E+02	2.2E-01	5.8E+02	3.8E+02	.	.	.	2.2E-01	3.7E-17
Rubidium (37)	Rb-83	5.37E-12	5.2E-12 (S)	7.07E-12	4.39E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	5.9E+00	.	2.1E+05	8.9E+00	1.5E-02	4.0E+01	2.6E+01	.	.	.	1.5E-02	8.2E-16
Rubidium (37)	Rb-84	8.92E-12	1.0E-11 (S)	1.19E-11	8.41E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	3.6E+00	.	1.1E+05	5.7E+00	8.9E-03	2.4E+01	1.6E+01	.	.	.	8.8E-03	1.9E-16
Rubidium (37)	Rb-84m	1.46E-14	1.5E-14 (S)	1.98E-14	3.40E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.2E+03	.	2.7E+05	3.6E+03	5.3E+00	1.4E+04	9.4E+03	.	.	.	5.3E+00	4.8E-17
Rubidium (37)	Rb-86	9.88E-12	1.7E-11 (S)	1.34E-11	9.11E-13	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	3.2E+00	.	1.0E+06	5.2E+00	7.9E-03	2.1E+01	1.4E+01	.	.	.	7.8E-03	9.6E-17
Rubidium (37)	Rb-86m	0.00E+00	0.00E+00	0.00E+00	4.97E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	1.8E+05	.	.	.	.	.	.	.	1.8E+05	8.6E-14
Rubidium (37)	Rb-87	5.37E-12	4.5E-11 (S)	7.33E-12	6.92E-16	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	5.9E+00	.	1.3E+09	8.7E-01	1.4E-02	3.9E+01	2.5E+01	.	.	.	1.4E-02	1.7E-04
Rubidium (37)	Rb-88	1.40E-13	5.6E-14 (S)	1.92E-13	6.62E-12	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	2.3E+02	.	1.4E+05	3.7E+02	5.5E-01	1.5E+03	9.6E+02	.	.	.	5.5E-01	4.6E-18
Rubidium (37)	Rb-89	7.70E-14	3.9E-14 (S)	1.05E-13	2.23E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	4.1E+02	.	4.1E+04	6.8E+02	1.0E+00	2.7E+03	1.8E+03	.	.	.	1.0E+00	7.2E-18
Rubidium (37)	Rb-90	0.00E+00	0.00E+00	0.00E+00	2.20E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	4.2E+04	.	.	.	.	.	.	.	4.2E+04	5.3E-14
Rubidium (37)	Rb-90m	0.00E+00	0.00E+00	0.00E+00	3.33E-11	7.83E-01	4.90E+03	3.00E-02	1.00E-02	.	.	.	.	.	2.7E+04	.	.	.	.	.	.	.	2.7E+04	5.7E-14
Rhenium (75)	Re-178	4.88E-14	2.6E-14 (S)	6.70E-14	1.67E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	6.5E+02	.	5.5E+04	1.1E+03	.	1.3E+04	1.4E+04	.	.	.	3.8E+02	4.7E-15
Rhenium (75)	Re-179	2.78E-14	1.9E-14 (S)	3.81E-14	9.98E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.1E+03	.	9.2E+04	1.9E+03	.	2.2E+04	2.4E+04	.	.	.	6.6E+02	1.2E-14
Rhenium (75)	Re-180	0.00E+00	0.00E+00	0.00E+00	1.11E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	1.9E-13
Rhenium (75)	Re-181	1.42E-12	8.3E-13 (S)	2.01E-12	7.13E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.2E+01	.	1.3E+05	3.5E+01	.	4.2E+02	4.6E+02	.	.	.	1.3E+01	1.5E-14
Rhenium (75)	Re-182	4.77E-12	4.6E-12 (S)	6.73E-12	1.65E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	6.7E+00	.	5.6E+04	1.1E+01	.	1.3E+02	1.4E+02	.	.	.	3.9E+00	1.4E-14
Rhenium (75)	Re-182m	9.10E-13	6.1E-13 (S)	1.28E-12	1.14E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	3.5E+01	.	8.0E+04	5.6E+01	.	6.7E+02	7.3E+02	.	.	.	2.0E+01	1.5E-14
Rhenium (75)	Re-183	3.33E-12	1.2E-11 (S)	4.74E-12	1.11E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	9.6E+00	.	8.2E+05	1.4E+01	.	1.8E+02	2.0E+02	.	.	.	5.4E+00	5.3E-13
Rhenium (75)	Re-184	3.17E-12	8.3E-12 (S)	4.40E-12	8.13E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.0E+01	.	1.1E+05	1.6E+01	.	1.9E+02	2.1E+02	.	.	.	5.8E+00	3.1E-13
Rhenium (75)	Re-184m	4.92E-12	3.6E-11 (S)	6.99E-12	3.32E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	6.5E+00	.	2.8E+05	9.1E+00	.	1.2E+02	1.3E+02	.	.	.	3.6E+00	8.5E-13
Rhenium (75)	Re-186	5.40E-12	4.4E-12 (S)	7.77E-12	1.65E-13	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	5.9E+00	.	5.6E+06	9.2E+00	.	1.1E+02	1.2E+02	.	.	.	3.4E+00	1.8E-14
Rhenium (75)	Re-186m	7.36E-12	1.6E-10 (S)	1.05E-11	8.40E-14	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	4.3E+00	.	1.1E+07	1.2E+00	.	8.1E+01	8.8E+01	.	.	.	9.4E-01	9.8E-08
Rhenium (75)	Re-186m+D	1.28E-11	1.7E-10 (S)	1.83E-11	2.49E-13	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.5E+00	.	3.7E+06	7.1E-01	.	4.6E+01	5.1E+01	.	.	.	5.4E-01	5.6E-08
Rhenium (75)	Re-187	1.67E-14	1.1E-13 (S)	2.39E-14	0.00E+00	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.9E+03	.	.	5.4E+02	.	3.5E+04	3.9E+04	.	.	.	4.1E+02	8.9E+00
Rhenium (75)	Re-188	4.92E-12	2.3E-12 (S)	7.07E-12	5.69E-13	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	6.5E+00	.	1.6E+06	1.0E+01	.	1.2E+02	1.3E+02	.	.	.	3.7E+00	3.8E-15
Rhenium (75)	Re-188m	9.88E-14	5.3E-14 (S)	1.42E-13	4.51E-13	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	3.2E+02	.	2.0E+06	5.0E+02	.	6.0E+03	6.5E+03	.	.	.	1.8E+02	3.4E-15
Rhenium (75)	Re-189	2.72E-12	1.7E-12 (S)	3.92E-12	4.82E-13	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	1.2E+01	.	1.9E+06	1.8E+01	.	2.2E+02	2.4E+02	.	.	.	6.7E+00	9.8E-15
Rhenium (75)	Re-190	0.00E+00	0.00E+00	0.00E+00	1.23E-11	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	.	.	7.5E+04	.	.	.	.	.	.	.	7.5E+04	2.3E-13
Rhenium (75)	Re-190m	1.08E-12	5.9E-13 (S)	1.54E-12	8.34E-12	2.00E-01	.	1.00E-02	2.00E-03	.	.	.	2.9E+01	.	1.1E+05	4.6E+01	.	5.5E+02	6.0E+02	.	.	.	1.7E+01	3.3E-15
Rhodium (45)	Rh-100	2.42E-12	9.5E-13 (S)	3.42E-12	2.70E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.3E+01	.	3.4E+04	2.1E+01	1.5E+01	1.2E+03	1.1E+03	.	.	.	5.2E+00	3.5E-15
Rhodium (45)	Rh-100m	0.00E+00	0.00E+00	0.00E+00	4.10E-13	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.2E+06	.	.	.	.	.	.	.	2.2E+06	5.5E-12
Rhodium (45)	Rh-101	2.05E-12	1.7E-11 (S)	2.86E-12	2.37E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.6E+01	.	3.9E+05	1.7E+01	1.8E+01	1.5E+03	1.3E+03	.	.	.	5.5E+00	5.2E-12
Rhodium (45)	Rh-101m	9.14E-13	7.0E-13 (S)	1.31E-12	2.45E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	3.5E+01	.	3.7E+05	5.4E+01	4.0E+01	3.2E+03	2.8E+03	.	.	.	1.4E+01	4.6E-14
Rhodium (45)	Rh-102	6.18E-12	2.6E-11 (S)	8.92E-12	4.54E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	5.2E+00	.	2.0E+05	7.3E+00	5.8E+00	4.8E+02	4.2E+02	.	.	.	2.0E+00	3.2E-13
Rhodium (45)	Rh-102m	8.14E-12	6.7E-11 (S)	1.10E-11	1.98E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	3.9E+00	.	4.6E+04	4.1E+00	4.7E+00	3.8E+02	3.4E+02	.	.	.	1.4E+00	1.5E-12
Rhodium (45)	Rh-103m	9.32E-15	9.1E-15 (S)	1.32E-14	9.63E-16	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	3.4E+03	.	9.5E+08	5.4E+03	3.9E+03	3.2E+05	2.8E+05	.	.	.	1.3E+03	4.2E-14
Rhodium (45)	Rh-104	0.00E+00	0.00E+00	0.00E+00	1.54E-13	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	5.9E+06	.	.	.	.	.	.	.	5.9E+06	2.3E-12
Rhodium (45)	Rh-104m	0.00E+00	0.00E+00	0.00E+00	1.79E-13	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	5.1E+06	.	.	.	.	.	.	.	5.1E+06	1.2E-11
Rhodium (45)	Rh-105	2.34E-12	1.6E-12 (S)	3.43E-12	6.91E-13	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.4E+01	.	1.3E+06	2.1E+01	1.5E+01	1.2E+03	1.1E+03	.	.	.	5.3E+00	6.3E-15
Rhodium (45)	Rh-106	0.00E+00	0.00E+00	0.00E+00	1.97E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	4.6E+05	.	.	.	.	.	.	.	4.6E+05	1.3E-13
Rhodium (45)	Rh-106m	5.66E-13	2.8E-13 (S)	7.99E-13	2.69E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	5.6E+01	.	3.4E+04	8.9E+01	6.5E+01	5.3E+03	4.6E+03	.	.	.	2.2E+01	1.6E-15
Rhodium (45)	Rh-107	4.14E-14	2.9E-14 (S)	5.77E-14	2.81E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	7.7E+02	.	3.2E+05	1.2E+03	9.0E+02	7.4E+04	6.4E+04	.	.	.	3.1E+02	3.8E-15
Rhodium (45)	Rh-108	0.00E+00	0.00E+00	0.00E+00	3.01E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	3.0E+05	.	.	.	.	.	.	.	3.0E+05	4.9E-14
Rhodium (45)	Rh-109	0.00E+00	0.00E+00	0.00E+00	2.69E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	3.4E+05	.	.	.	.	.	.	.	3.4E+05	2.6E-13
Rhodium (45)	Rh-94	0.00E+00	0.00E+00	0.00E+00	3.64E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.5E+04	.	.	.	.	.	.	.	2.5E+04	1.5E-14
Rhodium (45)	Rh-95	0.00E+00	0.00E+00	0.00E+00	2.46E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	3.7E+04	.	.	.	.	.	.	.	3.7E+04	9.4E-14
Rhodium (45)	Rh-95m	0.00E+00	0.00E+00	0.00E+00	8.77E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	1.0E-13
Rhodium (45)	Rh-96	0.00E+00	0.00E+00	0.00E+00	3.69E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	2.5E+04	.	.	.	.	.	.	.	2.5E+04	1.3E-13
Rhodium (45)	Rh-96m	0.00E+00	0.00E+00	0.00E+00	1.23E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	7.5E+04	.	.	.	.	.	.	.	7.5E+04	5.8E-14
Rhodium (45)	Rh-97	9.84E-14	4.6E-14 (S)	1.37E-13	1.34E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	3.2E+02	.	6.8E+04	5.2E+02	3.8E+02	3.1E+04	2.7E+04	.	.	.	1.3E+02	2.1E-15
Rhodium (45)	Rh-97m	1.20E-13	5.2E-14 (S)	1.67E-13	2.18E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	2.7E+02	.	4.2E+04	4.3E+02	3.1E+02	2.5E+04	2.2E+04	.	.	.	1.1E+02	2.5E-15
Rhodium (45)	Rh-98	0.00E+00	0.00E+00	0.00E+00	1.68E-11	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	.	.	5.4E+04	.	.	.	.	.	.	.	5.4E+04	2.5E-13

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Rhodium (45)	Rh-99	2.63E-12	4.7E-12 (S)	3.77E-12	4.93E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.2E+01	.	1.9E+05	1.9E+01	1.4E+01	1.1E+03	9.8E+02	.	.	.	4.7E+00	5.8E-14
Rhodium (45)	Rh-99m	2.46E-13	1.0E-13 (S)	3.49E-13	5.88E-12	3.00E-02	1.00E+01	2.00E-03	5.00E-04	.	.	.	1.3E+02	.	1.6E+05	2.0E+02	1.5E+02	1.2E+04	1.1E+04	.	.	.	5.1E+01	7.6E-15
Radon (86)	Rn-207	0.00E+00	0.00E+00	0.00E+00	8.96E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	1.0E-12
Radon (86)	Rn-209	0.00E+00	0.00E+00	0.00E+00	1.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	8.2E+04	.	.	.	.	.	.	.	8.2E+04	2.6E-12
Radon (86)	Rn-210	0.00E+00	0.00E+00	0.00E+00	5.50E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.7E+06	.	.	.	.	.	.	.	1.7E+06	2.7E-10
Radon (86)	Rn-211	0.00E+00	0.00E+00	0.00E+00	1.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	5.2E+04	.	.	.	.	.	.	.	5.2E+04	5.1E-11
Radon (86)	Rn-212	0.00E+00	0.00E+00	0.00E+00	3.12E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.9E+08	.	.	.	.	.	.	.	2.9E+08	7.9E-09
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	6.92E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.3E+08	.	.	.	.	.	.	.	1.3E+08	8.9E-14
Radon (86)	Rn-219	0.00E+00	0.00E+00	0.00E+00	5.20E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.8E+06	.	.	.	.	.	.	.	1.8E+06	1.4E-13
Radon (86)	Rn-219+D	0.00E+00	0.00E+00	0.00E+00	5.21E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.8E+06	.	.	.	.	.	.	.	1.8E+06	1.4E-13
Radon (86)	Rn-220	0.00E+00	0.00E+00	0.00E+00	5.71E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.6E+08	.	.	.	.	.	.	.	1.6E+08	1.7E-10
Radon (86)	Rn-222	0.00E+00	3.20E-11	0.00E+00	3.51E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	2.4E-01	2.6E+08	.	.	.	.	.	.	.	2.4E-01	1.6E-15
Radon (86)	Rn-222+D	0.00E+00	3.20E-11	0.00E+00	3.51E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	2.4E-01	2.6E+08	.	.	.	.	.	.	.	2.4E-01	1.6E-15
Radon (86)	Rn-223	0.00E+00	0.00E+00	0.00E+00	3.11E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.9E+05	.	.	.	.	.	.	.	2.9E+05	8.5E-12
Ruthenium (44)	Ru-103	3.64E-12	1.0E-11 (S)	5.25E-12	4.50E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	8.7E+00	.	2.0E+05	1.3E+01	1.8E+00	4.9E+02	3.8E+04	4.6E+03	4.5E+01	1.8E+05	1.3E+00	4.0E-14
Ruthenium (44)	Ru-105	1.43E-12	9.9E-13 (V)	2.08E-12	6.85E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	2.2E+01	.	1.3E+05	3.4E+01	4.5E+00	1.2E+03	9.5E+04	1.2E+04	1.1E+02	4.6E+05	3.3E+00	4.9E-16
Ruthenium (44)	Ru-106	4.22E-11	2.2E-10 (S)	6.11E-11	0.00E+00	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	7.6E-01	.	.	1.0E+00	1.5E-01	4.2E+01	3.2E+03	4.0E+02	3.9E+00	1.6E+04	1.1E-01	3.3E-14
Ruthenium (44)	Ru-106+D	4.22E-11	2.2E-10 (S)	6.11E-11	1.97E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	7.6E-01	.	4.6E+05	1.0E+00	1.5E-01	4.2E+01	3.2E+03	4.0E+02	3.9E+00	1.6E+04	1.1E-01	3.3E-14
Ruthenium (44)	Ru-107	0.00E+00	0.00E+00	0.00E+00	3.29E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	2.8E+05	.	.	.	.	.	.	.	2.8E+05	5.9E-13
Ruthenium (44)	Ru-108	0.00E+00	0.00E+00	0.00E+00	5.34E-13	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	1.7E+06	.	.	.	.	.	.	.	1.7E+06	4.5E-12
Ruthenium (44)	Ru-92	0.00E+00	0.00E+00	0.00E+00	1.91E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	.	.	4.8E+04	.	.	.	.	.	.	.	4.8E+04	8.5E-14
Ruthenium (44)	Ru-94	3.09E-13	2.2E-13 (V)	4.40E-13	4.65E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	1.0E+02	.	2.0E+05	1.6E+02	2.1E+01	5.8E+03	4.5E+05	5.5E+04	5.4E+02	2.2E+06	1.5E+01	4.0E-16
Ruthenium (44)	Ru-95	1.92E-13	1.4E-13 (V)	2.69E-13	1.16E-11	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	1.7E+02	.	7.9E+04	2.6E+02	3.5E+01	9.6E+03	7.3E+05	9.0E+04	8.8E+02	3.5E+06	2.5E+01	1.3E-15
Ruthenium (44)	Ru-97	6.36E-13	5.4E-13 (V)	9.07E-13	2.02E-12	2.61E-03	5.50E+01	3.30E-03	9.40E-06	3.00E-03	8.00E+00	4.00E-03	5.0E+01	.	4.5E+05	7.9E+01	1.0E+01	2.8E+03	2.2E+05	2.7E+04	2.6E+02	1.0E+06	7.5E+00	1.6E-14
Sulfur (16)	S-35	5.14E-13	6.5E-12 (S)	6.99E-13	6.59E-17	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	6.2E+01	.	1.4E+10	9.2E+01	7.4E-01	6.1E+01	3.4E+02	.	.	.	7.2E-01	1.7E-14
Sulphur (16)	S-37	0.00E+00	0.00E+00	0.00E+00	3.18E-11	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	.	.	2.9E+04	.	.	.	.	.	.	.	2.9E+04	2.9E-14
Sulphur (16)	S-38	9.69E-13	1.2E-12 (S)	1.26E-12	1.74E-11	6.00E-01	1.00E+03	2.00E-01	7.90E-03	.	.	.	3.3E+01	.	5.3E+04	5.7E+01	4.1E-01	3.4E+01	1.9E+02	.	.	.	4.0E-01	1.4E-17
Antimony (51)	Sb-111	0.00E+00	0.00E+00	0.00E+00	1.35E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	6.7E+04	.	.	.	.	.	.	.	6.7E+04	5.0E-14
Antimony (51)	Sb-113	0.00E+00	0.00E+00	0.00E+00	1.15E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	7.9E+04	.	.	.	.	.	.	.	7.9E+04	3.2E-13
Antimony (51)	Sb-114	0.00E+00	0.00E+00	0.00E+00	2.57E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	3.6E+04	.	.	.	.	.	.	.	3.6E+04	7.5E-14
Antimony (51)	Sb-115	5.11E-14	2.4E-14 (S)	7.07E-14	7.99E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	6.2E+02	.	1.1E+05	1.0E+03	2.0E+02	1.0E+05	6.9E+05	.	.	.	1.3E+02	2.6E-15
Antimony (51)	Sb-116	5.66E-14	2.2E-14 (S)	7.77E-14	2.20E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	5.6E+02	.	4.2E+04	9.2E+02	1.8E+02	9.1E+04	6.3E+05	.	.	.	1.2E+02	1.2E-15
Antimony (51)	Sb-116m	1.71E-13	8.8E-14 (S)	2.38E-13	2.93E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.9E+02	.	3.1E+04	3.0E+02	5.9E+01	3.0E+04	2.1E+05	.	.	.	3.9E+01	1.4E-15
Antimony (51)	Sb-117	6.70E-14	4.4E-14 (S)	9.58E-14	1.46E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	4.8E+02	.	6.3E+05	7.4E+02	1.5E+02	7.4E+04	5.1E+05	.	.	.	9.7E+01	1.0E-14
Antimony (51)	Sb-118	0.00E+00	0.00E+00	0.00E+00	7.31E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	2.8E-13
Antimony (51)	Sb-118m	6.99E-13	2.8E-13 (S)	9.81E-13	2.46E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	4.6E+01	.	3.7E+04	7.3E+01	1.4E+01	7.2E+03	5.0E+04	.	.	.	9.4E+00	1.8E-15
Antimony (51)	Sb-119	4.85E-13	1.8E-13 (S)	7.07E-13	2.59E-14	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	6.6E+01	.	3.5E+07	1.0E+02	2.0E+01	1.0E+04	6.9E+04	.	.	.	1.3E+01	1.9E-14
Antimony (51)	Sb-120	2.48E-14	1.2E-14 (S)	3.42E-14	4.03E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.3E+03	.	2.3E+05	2.1E+03	4.1E+02	2.1E+05	1.4E+06	.	.	.	2.7E+02	2.7E-15
Antimony (51)	Sb-120m	4.40E-12	3.6E-12 (S)	6.22E-12	2.31E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	7.2E+00	.	4.0E+04	1.1E+01	2.3E+00	1.1E+03	7.9E+03	.	.	.	1.5E+00	7.9E-15
Antimony (51)	Sb-122	1.06E-11	5.9E-12 (S)	1.55E-11	4.09E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	3.0E+00	.	2.2E+05	4.6E+00	9.0E-01	4.6E+02	3.1E+03	.	.	.	6.0E-01	1.5E-15
Antimony (51)	Sb-122m	0.00E+00	0.00E+00	0.00E+00	3.48E-13	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	2.6E+06	.	.	.	.	.	.	.	2.6E+06	7.2E-12
Antimony (51)	Sb-124	1.28E-11	3.2E-11 (S)	1.85E-11	1.80E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.5E+00	.	5.1E+04	3.8E+00	7.6E-01	3.8E+02	2.6E+03	.	.	.	5.0E-01	2.9E-14
Antimony (51)	Sb-124m	0.00E+00	0.00E+00	0.00E+00	4.02E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	2.3E+05	.	.	.	.	.	.	.	2.3E+05	2.3E-13
Antimony (51)	Sb-124n	1.97E-14	1.5E-14 (S)	2.73E-14	9.69E-19	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.6E+03	.	9.4E+11	2.6E+03	5.1E+02	2.6E+05	1.8E+06	.	.	.	3.4E+02	4.5E-15
Antimony (51)	Sb-125	4.44E-12	4.0E-11 (S)	6.22E-12	3.85E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	7.2E+00	.	2.4E+05	8.3E+00	2.3E+00	1.1E+03	7.9E+03	.	.	.	1.4E+00	1.4E-12
Antimony (51)	Sb-126	1.27E-11	1.4E-11 (S)	1.82E-11	2.53E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	2.5E+00	.	3.6E+04	3.9E+00	7.7E-01	3.9E+02	2.7E+03	.	.	.	5.1E-01	6.1E-15
Antimony (51)	Sb-126m	7.03E-14	3.5E-14 (S)	9.73E-14	1.42E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	4.5E+02	.	6.4E+04	7.3E+02	1.4E+02	7.3E+04	5.0E+05	.	.	.	9.5E+01	1.2E-15
Antimony (51)	Sb-127	1.01E-11	8.3E-12 (S)	1.47E-11	6.35E-12	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	3.2E+00	.	1.4E+05	4.8E+00	9.5E-01	4.8E+02	3.3E+03	.	.	.	6.3E-01	2.4E-15
Antimony (51)	Sb-128	3.77E-12	1.6E-12 (S)	5.44E-12	2.86E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	8.4E+00	.	3.2E+04	1.3E+01	2.6E+00	1.3E+03	9.0E+03	.	.	.	1.7E+00	6.3E-16
Antimony (51)	Sb-128m	5.81E-14	2.3E-14 (S)	7.99E-14	1.76E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	5.5E+02	.	5.2E+04	8.9E+02	1.8E+02	8.9E+04	6.1E+05	.	.	.	1.2E+02	8.2E-16
Antimony (51)	Sb-129	2.22E-12	1.0E-12 (S)	3.23E-12	1.39E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.4E+01	.	6.6E+04	2.2E+01	4.3E+00	2.2E+03	1.5E+04	.	.	.	2.9E+00	5.2E-16
Antimony (51)	Sb-130	2.10E-13	1.0E-13 (S)	2.92E-13	3.06E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.5E+02	.	3.0E+04	2.4E+02	4.8E+01	2.4E+04	1.7E+05	.	.	.	3.2E+01	8.6E-16
Antimony (51)	Sb-130m	0.00E+00	0.00E+00	0.00E+00	2.56E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	3.6E+04	.	.	.	.	.	.	.	3.6E+04	1.6E-13
Antimony (51)	Sb-131	2.66E-13	1.0E-13 (M)	3.74E-13	2.01E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	1.2E+02	.	4.6E+04	1.9E+02	3.7E+01	1.9E+04	1.3E+05	.	.	.	2.5E+01	4.0E-16
Antimony (51)	Sb-133	0.00E+00	0.00E+00	0.00E+00	2.72E-11	1.57E-03	3.70E+01	1.20E-03	3.80E-05	.	.	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	6.0E-14
Scandium (21)	Sc-42m	0.00E+00	0.00E+00	0.00E+00	4.03E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.3E+04	.	.	.	.	.	.	.	2.3E+04	5.2E-15
Scandium (21)	Sc-43	9.99E-13	4.5E-13 (S)	1.45E-12	8.91E-12	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	3.2E+01	.	1.0E+05	4.9E+01	1.9E+00	2.9E+03	2.1E+04	.	.	.	1.7E+00	9.2E-17
Scandium (21)	Sc-44	1.58E-12	6.5E-13 (S)	2.28E-12	2.01E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	2.0E+01	.	4.6E+04	3.1E+01	1.2E+00	1.9E+03	1.4E+04	.	.	.	1.1E+00	6.1E-17
Scandium (21)	Sc-44m	1.38E-11	7.0E-12 (S)	2.01E-11	2.46E-12	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	2.3E+00	.	3.7E+05	3.5E+00	1.4E-01	2.1E+02	1.5E+03	.	.	.	1.2E-01	1.0E-16
Scandium (21)	Sc-46	6.22E-12	2.5E-11 (S)	8.84E-12	1.91E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	5.1E+00	.	4.8E+04	7.8E+00	3.1E-01	4.8E+02	3.5E+03	.	.	.	2.8E-01	8.3E-15
Scandium (21)	Sc-47	3.49E-12	3.1E-12 (S)	5.11E-12	9.39E-13	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	9.1E+00	.	9.7E+05	1.4E+01	5.3E-01	8.3E+02	6.1E+03	.	.	.	4.9E-01	5.9E-16
Scandium (21)	Sc-48	7.18E-12	3.9E-12 (S)	1.03E-11	3.22E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	4.4E+00	.	2.8E+04	6.9E+00	2.6E-01	4.1E+02	3.0E+03	.	.	.	2.4E-01	1.6E-16
Scandium (21)	Sc-49	2.03E-13	1.1E-13 (S)	2.89E-13	3.89E-14	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	1.6E+02	.	2.4E+07	2.5E+02	9.4E+00	1.5E+04	1.1E+05	.	.	.	8.6E+00	1.3E-16
Scandium (21)	Sc-50	0.00E+00	0.00E+00	0.00E+00	3.12E-11	2.00E-03	1.90E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.9E+04	.	.	.	.	.	.	.	2.9E+04	1.3E-14
Selenium (34)	Se-70	2.58E-13	1.7E-13 (S)	3.60E-13	6.36E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.2E+02	.	1.4E+05	2.0E+02	2.4E-01	2.4E+02	1.3E+03	6.3E+02	5.4E+02	6.6E+02	2.4E-01	3.6E-18
Selenium (34)	Se-71	0.00E+00	0.00E+00	0.00E+00	1.48E-11	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	6.2E+04	.	.	.	.	.	.	.	6.2E+04	1.1E-13
Selenium (34)	Se-72	1.65E-11	1.6E-11 (S)	2.24E-11	1.18E-13	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	1.9E+00	.	7.8E+06	3.2E+00	3.8E-03	3.8E+00	2.1E+01	1.0E+01	8.7E+00	1.1E+01	3.8E-03	1.8E-17
Selenium (34)	Se-73	7.99E-13	8.5E-13 (S)	1.14E-12	9.74E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	4.0E+01	.	9.4E+04	6.3E+01	7.6E-02	7.5E+01	4.1E+02	2.0E+02	1.7E+02	2.1E+02	7.6E-02	1.3E-17
Selenium (34)	Se-73m	8.33E-14	7.7E-14 (S)	1.17E-13	2.37E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	3.8E+02	.	3.9E+05	6.1E+02	7.4E-01	7.2E+02	4.0E+03	1.9E+03	1.7E+03	2.0E+03	7.3E-01	1.1E-17
Selenium (34)	Se-75	8.03E-12	4.9E-12 (S)	1.06E-11	3.36E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	4.0E+00	.	2.7E+05	6.3E+00	8.1E-03	8.0E+00	4.4E+01	2.1E+01	1.8E+01	2.2E+01	8.1E-03	5.6E-16
Selenium (34)	Se-77m	0.00E+00	0.00E+00	0.00E+00	7.43E-13	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	1.2E+06	.	.	.	.	.	.	.	1.2E+06	1.5E-13
Selenium (34)	Se-79	6.92E-12	1.9E-11 (S)	9.18E-12	6.74E-17	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	4.6E+00	.	1.4E+10	1.7E+00	9.4E-03	9.3E+00	5.1E+01	2.5E+01	2.1E+01	2.6E+01	9.3E-03	6.1E-10
Selenium (34)	Se-79m	0.00E+00	0.00E+00	0.00E+00	7.17E-14	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	1.3E+07	.	.	.	.	.	.	.	1.3E+07	2.1E-11
Selenium (34)	Se-81	4.26E-14	2.6E-14 (S)	5.88E-14	8.97E-14	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	7.5E+02	.	1.0E+07	1.2E+03	1.5E+00	1.4E+03	7.9E+03	3.9E+03	3.3E+03	4.0E+03	1.5E+00	1.2E-17
Selenium (34)	Se-81m	1.31E-13	1.4E-13 (S)	1.85E-13	1.10E-13	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	2.4E+02	.	8.3E+06	3.8E+02	4.7E-01	4.6E+02	2.5E+03	1.2E+03	1.1E+03	1.3E+03	4.6E-01	1.1E-17
Selenium (34)	Se-83	1.00E-13	7.1E-14 (S)	1.39E-13	2.52E-11	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	3.2E+02	.	3.6E+04	5.1E+02	6.2E-01	6.1E+02	3.3E+03	1.6E+03	1.4E+03	1.7E+03	6.2E-01	6.1E-18
Selenium (34)	Se-83m	0.00E+00	0.00E+00	0.00E+00	9.60E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	9.5E+04	.	.	.	.	.	.	.	9.5E+04	4.9E-14
Selenium (34)	Se-84	0.00E+00	0.00E+00	0.00E+00	3.78E-12	1.00E-01	6.00E+03	1.00E-01	4.00E-03	3.20E-01	9.70E+00	1.60E+01	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	3.4E-13
Silicon (14)	Si-31	6.48E-13	3.0E-13 (S)	9.40E-13	2.44E-14	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	4.9E+01	.	3.7E+07	7.6E+01	.	3.0E+04	9.9E+04	.	.	.	3.0E+01	7.7E-16
Silicon (14)	Si-32	3.56E-12	2.9E-10 (S)	5.18E-12	2.03E-16	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	9.0E+00	.	4.5E+09	3.9E+00	.	5.5E+03	1.8E+04	.	.	.	2.7E+00	3.2E-11
Silicon (14)	Si-32+D	1.25E-11	3.0E-10 (S)	1.75E-11	2.11E-14	2.00E-02	.	3.00E-04	2.00E-05	.	.	.	2.5E+00	.	4.3E+07	1.1E+00	.	1.6E+03	5.3E+03	.	.	.	7.9E-01	9.4E-12

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Samarium (62)	Sm-139	0.00E+00	0.00E+00	0.00E+00	1.34E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	6.8E+04	.	.	.	.	.	.	.	6.8E+04	1.3E-13
Samarium (62)	Sm-140	1.86E-13	7.4E-14 (S)	2.60E-13	5.13E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.7E+02	.	1.8E+05	2.7E+02	8.0E+01	1.6E+04	1.2E+05	.	.	.	4.5E+01	5.0E-16
Samarium (62)	Sm-141	7.03E-14	2.9E-14 (S)	9.73E-14	1.31E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	4.5E+02	.	7.0E+04	7.3E+02	2.1E+02	4.4E+04	3.2E+05	.	.	.	1.2E+02	9.2E-16
Samarium (62)	Sm-141m	1.34E-13	6.4E-14 (S)	1.87E-13	1.81E-11	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.4E+02	.	5.1E+04	3.8E+02	1.1E+02	2.3E+04	1.7E+05	.	.	.	6.3E+01	1.1E-15
Samarium (62)	Sm-142	5.25E-13	2.2E-13 (S)	7.47E-13	8.37E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.1E+01	.	1.1E+06	9.5E+01	2.8E+01	5.7E+03	4.1E+04	.	.	.	1.6E+01	8.7E-16
Samarium (62)	Sm-143	0.00E+00	0.00E+00	0.00E+00	4.74E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.9E+05	.	.	.	.	.	.	.	1.9E+05	1.3E-12
Samarium (62)	Sm-143m	0.00E+00	0.00E+00	0.00E+00	6.34E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	1.2E-13
Samarium (62)	Sm-145	1.14E-12	5.8E-12 (F)	1.66E-12	2.35E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.8E+01	.	3.9E+06	3.8E+01	1.2E+01	2.6E+03	1.9E+04	.	.	.	7.0E+00	2.6E-12
Samarium (62)	Sm-146	4.07E-11	1.4E-08 (F)	5.22E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	7.8E-01	.	.	3.8E-01	4.0E-01	8.1E+01	5.9E+02	.	.	.	1.6E-01	6.6E-06
Samarium (62)	Sm-147	3.74E-11	1.3E-08 (F)	4.77E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	8.5E-01	.	.	4.2E-01	4.3E-01	8.9E+01	6.5E+02	.	.	.	1.7E-01	7.4E-03
Samarium (62)	Sm-148	3.20E-11	1.1E-08 (F)	4.11E-11	0.00E+00	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	1.0E+00	.	.	4.9E-01	5.0E-01	1.0E+02	7.5E+02	.	.	.	2.0E-01	5.7E+02
Samarium (62)	Sm-151	5.59E-13	9.3E-12 (F)	8.14E-13	4.46E-18	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	5.7E+01	.	2.0E+11	2.6E+01	2.5E+01	5.2E+03	3.8E+04	.	.	.	1.1E+01	4.0E-10
Samarium (62)	Sm-153	4.77E-12	3.2E-12 (S)	7.03E-12	4.00E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.7E+00	.	2.3E+06	1.0E+01	2.9E+00	6.0E+02	4.4E+03	.	.	.	1.7E+00	3.9E-15
Samarium (62)	Sm-155	5.03E-14	3.4E-14 (S)	6.96E-14	8.24E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	6.3E+02	.	1.1E+06	1.0E+03	3.0E+02	6.1E+04	4.4E+05	.	.	.	1.7E+02	3.1E-15
Samarium (62)	Sm-156	1.52E-12	1.1E-12 (S)	2.22E-12	9.40E-13	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	2.1E+01	.	9.7E+05	3.2E+01	9.3E+00	1.9E+03	1.4E+04	.	.	.	5.3E+00	2.5E-15
Samarium (62)	Sm-157	0.00E+00	0.00E+00	0.00E+00	3.77E-12	2.00E-03	2.50E+01	2.00E-03	6.00E-05	.	.	.	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	1.6E-12
Tin (50)	Sn-106	0.00E+00	0.00E+00	0.00E+00	1.10E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	8.3E+04	.	.	.	.	.	.	.	8.3E+04	9.0E-14
Tin (50)	Sn-108	5.33E-14	2.3E-14 (S)	7.44E-14	6.01E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	6.0E+02	.	1.5E+05	9.6E+02	2.3E+00	1.1E+04	2.5E+04	.	.	.	2.3E+00	1.4E-17
Tin (50)	Sn-109	4.92E-14	1.9E-14 (S)	6.81E-14	2.16E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	6.5E+02	.	4.2E+04	1.0E+03	2.5E+00	1.2E+04	2.7E+04	.	.	.	2.5E+00	2.6E-17
Tin (50)	Sn-110	1.94E-12	7.3E-13 (S)	2.82E-12	2.45E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.6E+01	.	3.7E+05	2.5E+01	6.1E-02	3.0E+02	6.6E+02	.	.	.	6.1E-02	8.8E-18
Tin (50)	Sn-111	5.07E-14	2.8E-14 (S)	7.10E-14	4.48E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	6.3E+02	.	2.0E+05	1.0E+03	2.4E+00	1.2E+04	2.6E+04	.	.	.	2.4E+00	5.0E-17
Tin (50)	Sn-113	4.40E-12	1.5E-11 (S)	6.44E-12	6.66E-14	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	7.2E+00	.	1.4E+07	1.0E+01	2.7E-02	1.3E+02	2.9E+02	.	.	.	2.7E-02	2.7E-15
Tin (50)	Sn-113m	5.96E-15	1.2E-14 (S)	8.29E-15	1.80E-14	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	5.3E+03	.	5.1E+07	8.6E+03	2.1E+01	1.0E+05	2.2E+05	.	.	.	2.1E+01	2.7E-16
Tin (50)	Sn-117m	4.40E-12	1.0E-11 (S)	6.44E-12	1.23E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	7.2E+00	.	7.5E+05	1.1E+01	2.7E-02	1.3E+02	2.9E+02	.	.	.	2.7E-02	3.3E-16
Tin (50)	Sn-119m	2.25E-12	1.2E-11 (S)	3.30E-12	1.59E-14	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.4E+01	.	5.8E+07	1.7E+01	5.2E-02	2.6E+02	5.6E+02	.	.	.	5.2E-02	1.4E-14
Tin (50)	Sn-121	1.51E-12	1.1E-12 (S)	2.22E-12	8.03E-16	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.1E+01	.	1.1E+09	3.2E+01	7.8E-02	3.8E+02	8.3E+02	.	.	.	7.7E-02	8.1E-17
Tin (50)	Sn-121m	2.36E-12	4.3E-11 (S)	3.44E-12	7.86E-15	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.3E+01	.	1.2E+08	3.8E+00	5.0E-02	2.5E+02	5.4E+02	.	.	.	4.9E-02	7.3E-13
Tin (50)	Sn-121m+D	3.53E-12	4.4E-11 (S)	5.18E-12	8.48E-15	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	9.0E+00	.	1.1E+08	2.5E+00	3.3E-02	1.6E+02	3.6E+02	.	.	.	3.3E-02	4.9E-13
Tin (50)	Sn-123	1.41E-11	4.7E-11 (S)	2.06E-11	7.92E-14	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	2.3E+00	.	1.2E+07	3.1E+00	8.4E-03	4.1E+01	9.0E+01	.	.	.	8.3E-03	1.0E-15
Tin (50)	Sn-123m	8.03E-14	6.0E-14 (S)	1.13E-13	1.20E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	4.0E+02	.	7.6E+05	6.3E+02	1.5E+00	7.5E+03	1.6E+04	.	.	.	1.5E+00	4.0E-17
Tin (50)	Sn-125	1.99E-11	1.6E-11 (S)	2.92E-11	3.25E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.6E+00	.	2.8E+05	2.4E+00	5.9E-03	2.9E+01	6.3E+01	.	.	.	5.9E-03	5.4E-17
Tin (50)	Sn-125m	0.00E+00	0.00E+00	0.00E+00	3.14E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	2.9E+05	.	.	.	.	.	.	.	2.9E+05	1.8E-12
Tin (50)	Sn-126	2.58E-11	4.2E-10 (S)	3.74E-11	3.61E-13	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.2E+00	.	2.5E+06	2.9E-01	4.6E-03	2.3E+01	5.0E+01	.	.	.	4.5E-03	3.7E-10
Tin (50)	Sn-126+D	2.76E-11	4.3E-10 (S)	4.00E-11	1.81E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	1.2E+00	.	5.1E+04	2.7E-01	4.3E-03	2.1E+01	4.6E+01	.	.	.	4.2E-03	3.4E-10
Tin (50)	Sn-127	8.18E-13	4.6E-13 (S)	1.17E-12	1.84E-11	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	3.9E+01	.	5.0E+04	6.1E+01	1.5E-01	7.2E+02	1.6E+03	.	.	.	1.5E-01	1.2E-17
Tin (50)	Sn-127m	0.00E+00	0.00E+00	0.00E+00	5.30E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	1.7E+05	.	.	.	.	.	.	.	1.7E+05	4.8E-13
Tin (50)	Sn-128	4.48E-13	2.4E-13 (S)	6.33E-13	5.10E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	7.1E+01	.	1.8E+05	1.1E+02	2.7E-01	1.3E+03	2.9E+03	.	.	.	2.7E-01	1.1E-17
Tin (50)	Sn-129	0.00E+00	0.00E+00	0.00E+00	9.54E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	9.6E+04	.	.	.	.	.	.	.	9.6E+04	1.5E-13
Tin (50)	Sn-130	0.00E+00	0.00E+00	0.00E+00	8.42E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	2.8E-13
Tin (50)	Sn-130m	0.00E+00	0.00E+00	0.00E+00	8.37E-12	3.00E-01	3.00E+03	1.00E-02	1.00E-03	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	1.3E-13
Strontium [38]	Sr-79	0.00E+00	0.00E+00	0.00E+00	1.07E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	8.6E+04	.	.	.	.	.	.	.	8.6E+04	8.1E-14
Strontium (38)	Sr-80	1.25E-12	5.6E-13 (S)	1.78E-12	3.90E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	2.6E+01	.	2.3E+05	4.0E+01	1.0E+02	3.7E+03	8.0E+02	1.6E+04	5.3E+04	6.1E+03	1.3E+01	6.0E-16
Strontium (38)	Sr-81	1.43E-13	7.1E-14 (S)	1.99E-13	1.26E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	2.2E+02	.	7.2E+04	3.6E+02	9.0E+02	3.3E+04	7.2E+03	1.5E+05	4.8E+05	5.5E+04	1.2E+02	1.1E-15
Strontium (38)	Sr-82	3.15E-11	4.5E-11 (S)	4.51E-11	8.23E-16	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.0E+00	.	1.1E+09	1.6E+00	4.0E+00	1.4E+02	3.2E+01	6.5E+02	2.1E+03	2.4E+02	5.2E-01	8.3E-15
Strontium (38)	Sr-82+D	3.15E-11	4.5E-11 (S)	4.51E-11	1.02E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.0E+00	.	9.0E+04	1.6E+00	4.0E+00	1.4E+02	3.2E+01	6.5E+02	2.1E+03	2.4E+02	5.2E-01	8.3E-15
Strontium (38)	Sr-83	2.34E-12	1.5E-12 (S)	3.36E-12	7.52E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.4E+01	.	1.2E+05	2.1E+01	5.3E+01	1.9E+03	4.3E+02	8.7E+03	2.8E+04	3.2E+03	7.0E+00	6.0E-15
Strontium (38)	Sr-85	2.22E-12	3.2E-12 (S)	3.05E-12	4.46E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.4E+01	.	2.0E+05	2.3E+01	5.9E+01	2.1E+03	4.7E+02	9.6E+03	3.1E+04	3.6E+03	7.5E+00	3.2E-13
Strontium (38)	Sr-85m	1.63E-14	9.1E-15 (S)	2.26E-14	1.90E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	2.0E+03	.	4.8E+05	3.2E+03	7.9E+03	2.9E+05	6.3E+04	1.3E+06	4.2E+06	4.8E+05	1.0E+03	3.1E-14
Strontium (38)	Sr-87m	1.07E-13	6.1E-14 (S)	1.52E-13	2.86E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	3.0E+02	.	3.2E+05	4.7E+02	1.2E+03	4.3E+04	9.4E+03	1.9E+05	6.2E+05	7.1E+04	1.5E+02	1.2E-14
Strontium (38)	Sr-89	1.28E-11	3.0E-11 (S)	1.84E-11	1.67E-14	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	2.5E+00	.	5.5E+07	3.8E+00	9.7E+00	3.6E+02	7.8E+01	1.6E+03	5.2E+03	5.9E+02	1.3E+00	4.4E-14
Strontium (38)	Sr-90	5.59E-11	4.3E-10 (S)	6.88E-11	2.22E-15	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	5.7E-01	.	4.1E+08	2.9E-01	2.6E+00	9.5E+01	2.1E+01	4.2E+02	1.4E+03	1.6E+02	1.8E-01	1.3E-12
Strontium (38)	Sr-90+D	7.40E-11	4.3E-10 (S)	9.51E-11	3.97E-14	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	4.3E-01	.	2.3E+07	2.1E-01	1.9E+00	6.9E+01	1.5E+01	3.1E+02	1.0E+03	1.1E+02	1.3E-01	9.5E-13
Strontium (38)	Sr-91	3.27E-12	1.9E-12 (S)	4.74E-12	6.69E-12	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	9.7E+00	.	1.4E+05	1.5E+01	3.8E+01	1.4E+03	3.0E+02	6.2E+03	2.0E+04	2.3E+03	5.0E+00	1.4E-15
Strontium (38)	Sr-92	2.21E-12	1.1E-12 (S)	3.21E-12	1.31E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	1.4E+01	.	7.0E+04	2.2E+01	5.6E+01	2.0E+03	4.4E+02	9.1E+03	3.0E+04	3.4E+03	7.4E+00	5.8E-16
Strontium (38)	Sr-93	0.00E+00	0.00E+00	0.00E+00	2.17E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	4.2E+04	.	.	.	.	.	.	.	4.2E+04	1.5E-13
Strontium (38)	Sr-94	0.00E+00	0.00E+00	0.00E+00	1.41E-11	9.57E-02	2.90E+00	1.30E-03	1.30E-03	2.50E-03	2.00E-02	3.50E-01	.	.	6.5E+04	.	.	.	.	.	.	.	6.5E+04	4.1E-14
Tantalum (73)	Ta-170	0.00E+00	0.00E+00	0.00E+00	9.70E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	.	.	9.4E+04	.	.	.	.	.	.	.	9.4E+04	5.8E-13
Tantalum (73)	Ta-172	1.24E-13	7.5E-14 (S)	1.73E-13	1.59E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.6E+02	.	5.8E+04	4.1E+02	3.0E+01	9.8E+06	2.1E+06	.	.	.	2.5E+01	8.5E-16
Tantalum (73)	Ta-173	4.74E-13	2.7E-13 (S)	6.81E-13	5.21E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	6.7E+01	.	1.8E+05	1.0E+02	7.6E+00	2.5E+06	5.4E+05	.	.	.	6.4E+00	1.1E-15
Tantalum (73)	Ta-174	1.99E-13	1.2E-13 (S)	2.82E-13	9.05E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.6E+02	.	1.0E+05	2.5E+02	1.8E+01	6.0E+06	1.3E+06	.	.	.	1.5E+01	9.8E-16
Tantalum (73)	Ta-175	9.69E-13	4.8E-13 (S)	1.38E-12	1.04E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	3.3E+01	.	8.8E+04	5.2E+01	3.7E+00	1.2E+06	2.7E+05	.	.	.	3.2E+00	1.9E-15
Tantalum (73)	Ta-176	1.20E-12	5.8E-13 (S)	1.69E-12	2.18E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.7E+01	.	4.2E+04	4.2E+01	3.1E+00	1.0E+06	2.2E+05	.	.	.	2.6E+00	1.2E-15
Tantalum (73)	Ta-177	5.99E-13	4.5E-13 (S)	8.70E-13	4.32E-13	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	5.3E+01	.	2.1E+06	8.2E+01	6.0E+00	2.0E+06	4.3E+05	.	.	.	5.0E+00	1.6E-14
Tantalum (73)	Ta-178	0.00E+00	0.00E+00	0.00E+00	9.53E-13	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	.	.	9.6E+05	.	.	.	.	.	.	.	9.6E+05	8.5E-12
Tantalum (73)	Ta-178m	2.95E-13	2.0E-13 (S)	4.18E-13	9.95E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.1E+02	.	9.2E+04	1.7E+02	1.2E+01	4.1E+06	8.9E+05	.	.	.	1.0E+01	1.4E-15
Tantalum (73)	Ta-179	3.24E-13	1.8E-12 (S)	4.70E-13	1.38E-13	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	9.8E+01	.	6.6E+06	1.2E+02	1.1E+01	3.6E+06	7.9E+05	.	.	.	9.2E+00	8.3E-12
Tantalum (73)	Ta-180	3.12E-13	1.9E-13 (S)	4.55E-13	2.78E-13	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.0E+02	.	3.3E+06	1.6E+02	1.1E+01	3.7E+06	8.2E+05	.	.	.	9.6E+00	4.5E-15
Tantalum (73)	Ta-182	7.81E-12	3.7E-11 (S)	1.13E-11	1.21E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	4.1E+00	.	7.5E+04	6.0E+00	4.6E-01	1.5E+05	3.3E+04	.	.	.	3.9E-01	6.2E-14
Tantalum (73)	Ta-182m	2.12E-14	3.6E-14 (S)	2.92E-14	2.10E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	1.5E+03	.	4.3E+05	2.4E+03	1.8E+02	5.8E+07	1.3E+07	.	.	.	1.5E+02	2.3E-15
Tantalum (73)	Ta-183	8.55E-12	9.1E-12 (S)	1.25E-11	2.39E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	3.7E+00	.	3.8E+05	5.7E+00	4.1E-01	1.4E+05	3.0E+04	.	.	.	3.5E-01	2.5E-15
Tantalum (73)	Ta-184	3.49E-12	1.7E-12 (S)	5.07E-12	1.44E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	9.1E+00	.	6.4E+04	1.4E+01	1.0E+00	3.3E+05	7.3E+04	.	.	.	8.6E-01	4.4E-16
Tantalum (73)	Ta-185	1.60E-13	1.2E-13 (S)	2.27E-13	1.27E-12	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	2.0E+02	.	7.2E+05	3.1E+02	2.3E+01	7.5E+06	1.6E+06	.	.	.	1.9E+01	9.3E-16
Tantalum (73)	Ta-186	5.74E-14	2.7E-14 (S)	7.88E-14	1.30E-11	2.00E-03	1.00E+02	5.00E-06	5.00E-06	.	.	.	5.6E+02	.	7.1E+04	9.0E+02	6.6E+01	2.2E+07	4.7E+06	.	.	.	5.5E+01	5.7E-16
Terbium (65)	Tb-146	0.00E+00	0.00E+00	0.00E+00	3.55E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	2.6E+04	.	.	.	.	.	.	.	2.6E+04	7.7E-15
Terbium (65)	Tb-147	4.18E-13	1.9E-13 (S)	5.92E-13	2.08E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	7.6E+01	.	4.4E+04	1.2E+02	2.1E+00	7.2E+03	5.2E+04	.	.	.	2.0E+00	1.6E-16
Terbium (65)	Tb-147m	0.00E+00	0.00E+00	0.00E+00	1.87E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	4.9E+04	.	.	.	.	.	.	.	4.9E+04	7.2E-14
Terbium (65)	Tb-148	3.23E-13	1.6E-13 (S)	4.55E-13	2.27E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	9.9E+01	.	4.0E+04	1.6E+02	2.8E+00	9.3E+03	6.8E+04	.	.	.	2.7E+00	1.3E-16
Terbium (65)	Tb-148m	0.00E+00	0.00E+00	0.00E+00	2.90E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	3.2E+04	.	.	.	.	.	.	.	3.2E+04	5.5E-14
Terbium (65)	Tb-149	7.73E-13	1.5E-11 (S)	1.11E-12	1.28E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	4.1E+01	.	7.1E+04	6.4E+01	1.1E+00	3.8E+03	2.8E+04	.	.	.	1.1E+00	2.1E-16
Terbium (65)	Tb-149m	0.00E+00	0.00E+00	0.00E+00	1.26E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	7.2E+04	.	.	.	.	.	.	.	7.2E+04	2.4E-13
Terbium (65)	Tb-150	8.44E-13	3.2E-13 (S)	1.21E-12	2.41E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	3.8E+01	.	3.8E+04	5.9E+01	1.0E+00	3.5E+03	2.6E+04	.	.	.	1.0E+00	1.7E-16
Terbium (65)	Tb-150m	0.00E+00	0.00E+00	0.00E+00	2.29E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	4.0E+04	.	.	.	.	.	.	.	4.0E+04	1.9E-13
Terbium (65)	Tb-151	1.56E-12	8.6E-13 (S)	2.23E-12	8.83E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.0E+01	.	1.0E+05	3.2E+01	5.6E-01	1.9E+03	1.4E+04	.	.	.	5.4E-01	4.6E-16
Terbium (65)	Tb-151m	0.00E+00	0.00E+00	0.00E+00	6.47E-13	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.4E+06	.	.	.	.	.	.	.	1.4E+06	4.7E-13

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Terbium (65)	Tb-152	3.48E-12	1.3E-12 (S)	5.03E-12	1.42E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	9.2E+00	.	6.4E+04	1.4E+01	2.5E-01	8.4E+02	6.1E+03	.	.	.	2.4E-01	2.0E-16
Terbium (65)	Tb-152m	0.00E+00	0.00E+00	0.00E+00	6.66E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.4E+05	.	.	.	.	.	.	.	1.4E+05	4.7E-13
Terbium (65)	Tb-153	1.40E-12	9.6E-13 (S)	2.02E-12	2.73E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.3E+01	.	3.3E+05	3.5E+01	6.2E-01	2.1E+03	1.5E+04	.	.	.	6.0E-01	1.6E-15
Terbium (65)	Tb-154	2.39E-12	1.1E-12 (S)	3.39E-12	2.27E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.3E+01	.	4.0E+04	2.1E+01	3.7E-01	1.3E+03	9.1E+03	.	.	.	3.6E-01	3.8E-16
Terbium (65)	Tb-155	1.38E-12	1.3E-12 (S)	2.00E-12	1.26E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	2.3E+01	.	7.2E+05	3.6E+01	6.3E-01	2.1E+03	1.5E+04	.	.	.	6.0E-01	3.8E-15
Terbium (65)	Tb-156	4.66E-12	4.3E-12 (S)	6.66E-12	1.81E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	6.8E+00	.	5.1E+04	1.1E+01	1.9E-01	6.4E+02	4.6E+03	.	.	.	1.8E-01	1.2E-15
Terbium (65)	Tb-156m	7.40E-13	8.1E-13 (S)	1.06E-12	1.80E-13	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	4.3E+01	.	5.1E+06	6.7E+01	1.2E+00	4.0E+03	2.9E+04	.	.	.	1.1E+00	1.4E-15
Terbium (65)	Tb-156n	4.29E-13	4.3E-13 (S)	6.22E-13	1.91E-14	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	7.4E+01	.	4.8E+07	1.1E+02	2.0E+00	6.8E+03	5.0E+04	.	.	.	1.9E+00	5.1E-16
Terbium (65)	Tb-157	2.08E-13	3.7E-12 (F)	3.03E-13	1.89E-14	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	1.5E+02	.	4.8E+07	7.2E+01	4.2E+00	1.4E+04	1.0E+05	.	.	.	3.8E+00	1.2E-10
Terbium (65)	Tb-158	4.81E-12	1.7E-10 (F)	6.88E-12	7.34E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	6.6E+00	.	1.2E+05	3.0E+00	1.8E-01	6.2E+02	4.5E+03	.	.	.	1.7E-01	1.3E-11
Terbium (65)	Tb-160	8.77E-12	3.0E-11 (S)	1.27E-11	1.06E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	3.6E+00	.	8.6E+04	5.4E+00	9.9E-02	3.3E+02	2.4E+03	.	.	.	9.5E-02	8.4E-15
Terbium (65)	Tb-161	4.92E-12	5.7E-12 (S)	7.22E-12	1.67E-13	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	6.5E+00	.	5.5E+06	9.9E+00	1.7E-01	5.9E+02	4.3E+03	.	.	.	1.7E-01	1.4E-15
Terbium (65)	Tb-162	0.00E+00	0.00E+00	0.00E+00	1.02E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	8.9E+04	.	.	.	.	.	.	.	8.9E+04	5.9E-13
Terbium (65)	Tb-163	3.89E-14	2.8E-14 (S)	5.33E-14	7.09E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	8.2E+02	.	1.3E+05	1.3E+03	2.4E+01	8.0E+04	5.8E+05	.	.	.	2.3E+01	3.8E-16
Terbium (65)	Tb-164	0.00E+00	0.00E+00	0.00E+00	2.31E-11	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	4.0E+04	.	.	.	.	.	.	.	4.0E+04	1.0E-13
Terbium (65)	Tb-165	0.00E+00	0.00E+00	0.00E+00	8.15E-12	2.00E-03	4.10E+02	2.00E-03	6.00E-05	.	.	.	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	2.1E-13
Technetium (43)	Tc-101	3.03E-14	1.9E-14 (S)	4.18E-14	3.02E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.1E+03	.	3.0E+05	1.7E+03	6.2E+02	2.0E+06	4.4E+04	1.2E+07	1.5E+06	3.0E+04	3.1E+02	2.4E-15
Technetium (43)	Tc-102	0.00E+00	0.00E+00	0.00E+00	9.12E-13	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	1.0E+06	.	.	.	.	.	.	.	1.0E+06	4.8E-14
Technetium (43)	Tc-102m	0.00E+00	0.00E+00	0.00E+00	2.42E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	3.8E+04	.	.	.	.	.	.	.	3.8E+04	8.9E-14
Technetium (43)	Tc-104	1.41E-13	5.5E-14 (S)	1.95E-13	2.23E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	2.3E+02	.	4.1E+04	3.7E+02	1.3E+02	4.4E+05	9.5E+03	2.5E+06	3.3E+05	6.5E+03	6.7E+01	6.8E-16
Technetium (43)	Tc-105	0.00E+00	0.00E+00	0.00E+00	7.53E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	5.2E-13
Technetium (43)	Tc-91	0.00E+00	0.00E+00	0.00E+00	2.44E-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	5.7E-14
Technetium (43)	Tc-91m	0.00E+00	0.00E+00	0.00E+00	1.32E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	6.9E+04	.	.	.	.	.	.	.	6.9E+04	1.1E-13
Technetium (43)	Tc-92	0.00E+00	0.00E+00	0.00E+00	3.64E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	.	.	2.5E+04	.	.	.	.	.	.	.	2.5E+04	5.2E-14
Technetium (43)	Tc-93	2.12E-13	9.7E-14 (S)	2.96E-13	1.53E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.5E+02	.	6.0E+04	2.4E+02	8.8E+01	2.9E+05	6.3E+03	1.6E+06	2.1E+05	4.3E+03	4.4E+01	3.6E-15
Technetium (43)	Tc-93m	8.73E-14	4.2E-14 (S)	1.22E-13	9.57E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	3.6E+02	.	9.5E+04	5.9E+02	2.1E+02	7.0E+05	1.5E+04	4.0E+06	5.2E+05	1.0E+04	1.1E+02	2.3E-15
Technetium (43)	Tc-94	6.29E-13	2.9E-13 (S)	8.81E-13	2.48E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	5.1E+01	.	3.7E+04	8.1E+01	2.9E+01	9.6E+04	2.1E+03	5.5E+05	7.2E+04	1.4E+03	1.5E+01	2.2E-15
Technetium (43)	Tc-94m	2.39E-13	1.1E-13 (S)	3.36E-13	1.86E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.3E+02	.	4.9E+04	2.1E+02	7.7E+01	2.5E+05	5.5E+03	1.4E+06	1.9E+05	3.8E+03	3.9E+01	1.0E-15
Technetium (43)	Tc-95	5.77E-13	2.8E-13 (S)	8.03E-13	7.31E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	5.5E+01	.	1.3E+05	8.9E+01	3.2E+01	1.1E+05	2.3E+03	6.1E+05	7.9E+04	1.6E+03	1.6E+01	9.9E-15
Technetium (43)	Tc-95m	1.82E-12	4.6E-12 (S)	2.54E-12	6.22E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.7E+01	.	1.5E+05	2.5E+01	1.0E+01	3.3E+04	7.3E+02	1.9E+05	2.5E+04	5.0E+02	5.0E+00	2.2E-13
Technetium (43)	Tc-96	3.42E-12	2.1E-12 (S)	4.70E-12	2.34E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	9.3E+00	.	3.9E+04	1.5E+01	5.5E+00	1.8E+04	3.9E+02	1.0E+05	1.3E+04	2.7E+02	2.8E+00	8.7E-15
Technetium (43)	Tc-96m	3.57E-14	2.1E-14 (S)	4.96E-14	3.96E-13	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	8.9E+02	.	2.3E+06	1.4E+03	5.2E+02	1.7E+06	3.7E+04	9.8E+06	1.3E+06	2.6E+04	2.6E+02	6.9E-15
Technetium (43)	Tc-97	2.71E-13	4.8E-12 (S)	3.92E-13	3.82E-15	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.2E+02	.	2.4E+08	1.2E+01	6.6E+01	2.2E+05	4.7E+03	1.2E+06	1.6E+05	3.2E+03	9.5E+00	6.7E-06
Technetium (43)	Tc-97m	2.38E-12	1.5E-11 (S)	3.45E-12	6.17E-15	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.3E+01	.	1.5E+08	1.7E+01	7.5E+00	2.5E+04	5.4E+02	1.4E+05	1.8E+04	3.7E+02	3.7E+00	2.5E-13
Technetium (43)	Tc-98	6.62E-12	1.2E-10 (S)	9.40E-12	1.31E-11	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	4.8E+00	.	7.0E+04	5.2E-01	2.8E+00	9.0E+03	2.0E+02	5.2E+04	6.7E+03	1.3E+02	4.0E-01	4.6E-07
Technetium (43)	Tc-99	2.75E-12	3.8E-11 (S)	4.00E-12	5.62E-16	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	1.2E+01	.	1.6E+09	1.2E+00	6.5E+00	2.1E+04	4.6E+02	1.2E+05	1.6E+04	3.2E+02	9.4E-01	5.5E-08
Technetium (43)	Tc-99m	7.96E-14	6.1E-14 (S)	1.13E-13	1.07E-12	1.13E+00	2.00E+01	1.00E-04	1.00E-03	1.50E-04	3.00E-02	3.00E+00	4.0E+02	.	8.6E+05	6.3E+02	2.3E+02	7.5E+05	1.6E+04	4.3E+06	5.6E+05	1.1E+04	1.2E+02	2.2E-14
Tellurium (52)	Te-113	0.00E+00	0.00E+00	0.00E+00	2.13E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	4.3E+04	.	.	.	.	.	.	.	4.3E+04	4.4E-14
Tellurium (52)	Te-114	1.21E-13	8.6E-14 (V)	1.66E-13	1.21E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.6E+02	.	7.5E+04	4.3E+02	2.1E+01	7.3E+03	3.3E+04	.	1.9E+04	4.5E+03	1.8E+01	1.7E-16
Tellurium (52)	Te-115	0.00E+00	0.00E+00	0.00E+00	2.13E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	4.3E+04	.	.	.	.	.	.	.	4.3E+04	1.5E-13
Tellurium (52)	Te-115m	0.00E+00	0.00E+00	0.00E+00	2.50E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	.	.	3.7E+04	.	.	.	.	.	.	.	3.7E+04	1.5E-13
Tellurium (52)	Te-116	7.81E-13	4.0E-13 (S)	1.12E-12	7.36E-13	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.1E+01	.	1.2E+06	6.4E+01	3.1E+00	1.1E+03	4.9E+03	.	2.8E+03	6.7E+02	2.7E+00	2.5E-16
Tellurium (52)	Te-117	1.47E-13	7.5E-14 (V)	2.06E-13	1.48E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.2E+02	.	6.2E+04	3.5E+02	1.7E+01	5.9E+03	2.6E+04	.	1.5E+04	3.6E+03	1.5E+01	5.7E-16
Tellurium (52)	Te-118	1.76E-11	1.3E-11 (S)	2.57E-11	2.63E-14	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.8E+00	.	3.5E+07	2.8E+00	1.3E-01	4.7E+01	2.1E+02	.	1.2E+02	2.9E+01	1.2E-01	6.4E-16
Tellurium (52)	Te-118+D	1.76E-11	1.3E-11 (S)	2.57E-11	7.33E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.8E+00	.	1.2E+05	2.8E+00	1.3E-01	4.7E+01	2.1E+02	.	1.2E+02	2.9E+01	1.2E-01	6.4E-16
Tellurium (52)	Te-119	6.77E-13	3.2E-13 (S)	9.58E-13	6.98E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.7E+01	.	1.3E+05	7.4E+01	3.6E+00	1.3E+03	5.7E+03	.	3.3E+03	7.8E+02	3.2E+00	1.9E-15
Tellurium (52)	Te-119m	2.52E-12	2.0E-12 (V)	3.52E-12	1.42E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.3E+01	.	6.4E+04	2.0E+01	9.8E-01	3.4E+02	1.6E+03	.	9.0E+02	2.1E+02	8.6E-01	3.7E-15
Tellurium (52)	Te-121	1.51E-12	2.0E-12 (V)	2.08E-12	5.10E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.1E+01	.	1.8E+05	3.4E+01	1.7E+00	5.8E+02	2.6E+03	.	1.5E+03	3.6E+02	1.5E+00	2.6E-14
Tellurium (52)	Te-121m	6.48E-12	2.1E-11 (S)	8.58E-12	1.82E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.9E+00	.	5.0E+05	7.7E+00	4.0E-01	1.4E+02	6.4E+02	.	3.7E+02	8.7E+01	3.5E-01	5.0E-14
Tellurium (52)	Te-123	1.08E-12	3.1E-12 (V)	1.32E-12	4.57E-17	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.9E+01	.	2.0E+10	1.2E+01	2.6E+00	9.2E+02	4.1E+03	.	2.4E+03	5.7E+02	2.0E+00	4.1E+02
Tellurium (52)	Te-123m	4.11E-12	1.8E-11 (S)	5.62E-12	1.17E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	7.8E+00	.	7.8E+05	1.2E+01	6.1E-01	2.2E+02	9.7E+02	.	5.6E+02	1.3E+02	5.4E-01	6.1E-14
Tellurium (52)	Te-125m	3.33E-12	1.4E-11 (S)	4.70E-12	5.83E-14	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	9.6E+00	.	1.6E+07	1.5E+01	7.3E-01	2.6E+02	1.2E+03	.	6.7E+02	1.6E+02	6.5E-01	3.6E-14
Tellurium (52)	Te-127	1.01E-12	6.8E-13 (S)	1.49E-12	4.65E-14	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	3.2E+01	.	2.0E+07	4.8E+01	2.3E+00	8.2E+02	3.7E+03	.	2.1E+03	5.0E+02	2.1E+00	7.8E-16
Tellurium (52)	Te-127m	8.66E-12	3.5E-11 (S)	1.20E-11	1.93E-14	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	3.7E+00	.	4.7E+07	5.6E+00	2.9E-01	1.0E+02	4.6E+02	.	2.6E+02	6.2E+01	2.5E-01	2.7E-14
Tellurium (52)	Te-129	1.71E-13	1.1E-13 (V)	2.44E-13	5.43E-13	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.9E+02	.	1.7E+06	2.9E+02	1.4E+01	5.0E+03	2.2E+04	.	1.3E+04	3.1E+03	1.2E+01	6.0E-16
Tellurium (52)	Te-129m	1.53E-11	3.0E-11 (S)	2.20E-11	2.91E-13	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	2.1E+00	.	3.1E+06	3.2E+00	1.6E-01	5.5E+01	2.5E+02	.	1.4E+02	3.4E+01	1.4E-01	4.6E-15
Tellurium (52)	Te-131	2.16E-13	2.4E-13 (V)	3.05E-13	3.82E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.5E+02	.	2.4E+05	2.3E+02	1.1E+01	4.0E+03	1.8E+04	.	1.0E+04	2.4E+03	1.0E+01	1.7E-16
Tellurium (52)	Te-131m	8.10E-12	9.5E-12 (V)	1.16E-11	1.37E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	3.9E+00	.	6.7E+04	6.1E+00	3.0E-01	1.0E+02	4.7E+02	.	2.7E+02	6.4E+01	2.6E-01	3.3E-16
Tellurium (52)	Te-132	1.69E-11	2.1E-11 (V)	2.43E-11	1.88E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.9E+00	.	4.9E+05	2.9E+00	1.4E-01	5.0E+01	2.2E+02	.	1.3E+02	3.1E+01	1.3E-01	4.1E-16
Tellurium (52)	Te-133	1.90E-13	2.2E-13 (V)	2.69E-13	1.15E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.7E+02	.	8.0E+04	2.6E+02	1.3E+01	4.5E+03	2.0E+04	.	1.2E+04	2.8E+03	1.1E+01	1.0E-16
Tellurium (52)	Te-133m	7.96E-13	8.5E-13 (V)	1.13E-12	1.76E-11	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	4.0E+01	.	5.2E+04	6.3E+01	3.0E+00	1.1E+03	4.8E+03	.	2.8E+03	6.6E+02	2.7E+00	1.1E-16
Tellurium (52)	Te-134	2.76E-13	2.9E-13 (V)	3.85E-13	7.86E-12	8.70E-02	1.50E+02	7.00E-03	3.40E-04	.	6.00E-01	5.10E+00	1.2E+02	.	1.2E+05	1.9E+02	9.0E+00	3.2E+03	1.4E+04	.	8.2E+03	1.9E+03	7.9E+00	2.4E-16
Thorium (90)	Th-223	0.00E+00	0.00E+00	0.00E+00	5.58E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	1.6E+06	.	.	.	.	.	.	.	1.6E+06	1.9E-14
Thorium (90)	Th-224	0.00E+00	0.00E+00	0.00E+00	1.97E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	4.6E+06	.	.	.	.	.	.	.	4.6E+06	9.7E-14
Thorium (90)	Th-226	6.59E-13	1.5E-10 (S)	9.25E-13	6.43E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	4.8E+01	.	1.4E+07	7.7E+01	9.3E+01	4.0E+04	4.0E+05	.	.	.	2.3E+01	8.3E-16
Thorium (90)	Th-227	4.81E-11	3.5E-08 (S)	7.03E-11	1.06E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	6.6E-01	.	8.7E+05	1.0E+00	1.2E+00	5.3E+02	5.3E+03	.	.	.	3.0E-01	9.8E-15
Thorium (90)	Th-228	1.08E-10	1.3E-07 (S)	1.48E-10	1.66E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	3.0E-01	.	5.5E+07	3.8E-01	5.8E-01	2.5E+02	2.5E+03	.	.	.	1.3E-01	1.6E-13
Thorium (90)	Th-229	2.23E-10	1.7E-07 (S)	2.90E-10	6.68E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.4E-01	.	1.4E+06	6.9E-02	3.0E-01	1.3E+02	1.3E+03	.	.	.	4.0E-02	1.9E-10
Thorium (90)	Th-229+D	3.38E-10	2.0E-07 (S)	4.44E-10	7.10E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	9.4E-02	.	1.3E+06	4.5E-02	1.9E-01	8.3E+01	8.4E+02	.	.	.	2.6E-02	1.2E-10
Thorium (90)	Th-230	9.14E-11	3.4E-08 (F)	1.19E-10	3.01E-15	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	3.5E-01	.	3.0E+08	1.7E-01	7.2E-01	3.1E+02	3.1E+03	.	.	.	9.8E-02	4.8E-09
Thorium (90)	Th-231	2.19E-12	1.5E-12 (S)	3.22E-12	8.89E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.5E+01	.	1.0E+07	2.2E+01	2.7E+01	1.1E+04	1.2E+05	.	.	.	6.6E+00	1.2E-14
Thorium (90)	Th-232	1.01E-10	4.3E-08 (S)	1.33E-10	1.54E-15	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	3.2E-01	.	5.9E+08	1.5E-01	6.5E-01	2.8E+02	2.8E+03	.	.	.	8.8E-02	8.0E-04
Thorium (90)	Th-232+D	1.14E-09	8.7E-08 (S)	1.56E-09	8.15E-12	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	2.8E-02	.	1.1E+05	1.3E-02	5.5E-02	2.4E+01	2.4E+02	.	.	.	7.6E-03	6.9E-05
Thorium (90)	Th-233	3.96E-14	3.7E-14 (S)	5.55E-14	3.18E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	8.0E+02	.	2.9E+06	1.3E+03	1.6E+03	6.7E+05	6.7E+06	.	.	.	3.7E+02	1.0E-14
Thorium (90)	Th-234	2.31E-11	3.1E-11 (S)	3.39E-11	6.39E-14	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.4E+00	.	1.4E+07	2.1E+00	2.5E+00	1.1E+03	1.1E+04	.	.	.	6.3E-01	2.7E-14
Thorium (90)	Th-234+D	2.31E-11	3.1E-11 (S)	3.39E-11	2.46E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.4E+00	.	3.7E+06	2.1E+00	2.5E+00	1.1E+03	1.1E+04	.	.	.	6.3E-01	2.7E-14
Thorium (90)	Th-235	0.00E+00	0.00E+00	0.00E+00	5.11E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	.	.	1.8E+06	.	.	.	.	.	.	.	1.8E+06	1.6E-11
Thorium (90)	Th-236	1.95E-13	1.3E-13 (S)	2.75E-13	3.01E-13	1.83E-03	6.00E+00	2.30E-04	5.00E-06	.	.	.	1.6E+02	.	3.0E+06	2.6E+02	3.1E+02	1.3E+05	1.3E+06	.	.	.	7.6E+01	3.6E-15
Titanium (22)	Ti-44	2.56E-11	3.4E-10 (S)	3.63E-11	9.75E-13	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	1.2E+00	.	9.4E+05	6.2E-01	7.5E-02	1.2E+01	5.1E+00	.	.	.	6.2E-02	4.6E-13
Titanium (22)	Ti-44+D	2.72E-11	3.4E-10 (S)	3.85E-11	2.10E-11	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	1.2E+00	.	4.3E+04	5.8E-01	7.1E-02	1.1E+01	4.8E+00	.	.	.	5.9E-02	4.3E-13
Titanium (22)	Ti-45	6.44E-13	3.1E-13 (S)	9.32E-13	7.89E-12	1.00E-03	1.90E+02	2.00E-02	1.00E-02	.	.	.	4.9E+01	.	1.2E+

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Thallium (81)	Tl-190m	0.00E+00	0.00E+00	0.00E+00	2.25E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	4.1E+04	.	.	.	.	.	.	.	4.1E+04	1.5E-13
Thallium (81)	Tl-194	7.84E-14	3.7E-14 (S)	1.07E-13	8.26E-12	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	4.1E+02	.	1.1E+05	6.6E+02	5.4E+00	4.0E+03	5.8E+03	.	.	.	5.2E+00	1.8E-16
Thallium (81)	Tl-194m	7.77E-14	5.0E-14 (S)	1.05E-13	2.30E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	4.1E+02	.	4.0E+04	6.8E+02	5.5E+00	4.0E+03	5.9E+03	.	.	.	5.3E+00	1.8E-16
Thallium (81)	Tl-195	5.92E-14	5.1E-14 (S)	7.99E-14	1.18E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	5.4E+02	.	7.8E+04	8.9E+02	7.2E+00	5.3E+03	7.7E+03	.	.	.	7.0E+00	5.1E-16
Thallium (81)	Tl-196	1.17E-13	6.8E-14 (S)	1.58E-13	1.80E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	2.7E+02	.	5.1E+04	4.5E+02	3.6E+00	2.7E+03	3.9E+03	.	.	.	3.6E+00	4.1E-16
Thallium (81)	Tl-197	6.44E-14	1.0E-13 (S)	8.81E-14	4.10E-12	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	4.9E+02	.	2.2E+05	8.1E+02	6.5E+00	4.8E+03	7.0E+03	.	.	.	6.4E+00	1.1E-15
Thallium (81)	Tl-198	2.07E-13	1.2E-13 (S)	2.76E-13	1.95E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	1.5E+02	.	4.7E+04	2.6E+02	2.1E+00	1.5E+03	2.2E+03	.	.	.	2.0E+00	6.8E-16
Thallium (81)	Tl-198m	1.31E-13	1.4E-13 (S)	1.76E-13	1.09E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	2.4E+02	.	8.4E+04	4.0E+02	3.3E+00	2.4E+03	3.5E+03	.	.	.	3.2E+00	3.8E-16
Thallium (81)	Tl-199	7.66E-14	1.3E-13 (S)	1.04E-13	2.09E-12	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	4.2E+02	.	4.4E+05	6.9E+02	5.5E+00	4.1E+03	5.9E+03	.	.	.	5.4E+00	2.5E-15
Thallium (81)	Tl-200	6.18E-13	4.1E-13 (S)	8.25E-13	1.21E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	5.2E+01	.	7.5E+04	8.6E+01	7.0E-01	5.1E+02	7.5E+02	.	.	.	6.8E-01	1.1E-15
Thallium (81)	Tl-201	3.70E-13	7.0E-13 (S)	5.11E-13	6.52E-13	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	8.6E+01	.	1.4E+06	1.4E+02	1.1E+00	8.3E+02	1.2E+03	.	.	.	1.1E+00	5.2E-15
Thallium (81)	Tl-202	1.49E-12	1.4E-12 (S)	2.01E-12	4.05E-12	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	2.1E+01	.	2.3E+05	3.5E+01	2.9E-01	2.1E+02	3.1E+02	.	.	.	2.8E-01	5.3E-15
Thallium (81)	Tl-204	5.81E-12	6.0E-11 (S)	8.21E-12	1.16E-14	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	5.5E+00	.	7.9E+07	4.6E+00	7.0E-02	5.2E+01	7.5E+01	.	.	.	6.8E-02	1.5E-13
Thallium (81)	Tl-206	0.00E+00	0.00E+00	0.00E+00	1.47E-14	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	6.2E+07	.	.	.	.	.	.	.	6.2E+07	2.9E-10
Thallium (81)	Tl-206m	0.00E+00	0.00E+00	0.00E+00	2.22E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	4.1E+04	.	.	.	.	.	.	.	4.1E+04	1.7E-13
Thallium (81)	Tl-207	0.00E+00	0.00E+00	0.00E+00	3.41E-14	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	2.7E+07	.	.	.	.	.	.	.	2.7E+07	1.4E-10
Thallium (81)	Tl-208	0.00E+00	0.00E+00	0.00E+00	3.46E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	2.6E+04	.	.	.	.	.	.	.	2.6E+04	8.9E-14
Thallium (81)	Tl-209	0.00E+00	0.00E+00	0.00E+00	2.08E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	4.4E+04	.	.	.	.	.	.	.	4.4E+04	1.1E-13
Thallium (81)	Tl-210	0.00E+00	0.00E+00	0.00E+00	2.69E-11	2.00E-01	9.00E+02	2.00E-02	3.00E-03	.	.	.	.	.	3.4E+04	.	.	.	.	.	.	.	3.4E+04	5.0E-14
Thulium (69)	Tm-161	1.09E-13	5.8E-14 (S)	1.53E-13	1.20E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.9E+02	.	7.6E+04	4.7E+02	.	2.8E+04	2.0E+05	.	.	.	1.8E+02	4.6E-15
Thulium (69)	Tm-162	7.47E-14	3.6E-14 (S)	1.03E-13	1.87E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.3E+02	.	4.9E+04	6.9E+02	.	4.1E+04	3.0E+05	.	.	.	2.6E+02	4.9E-15
Thulium (69)	Tm-163	1.69E-13	8.9E-14 (S)	2.37E-13	1.23E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.9E+02	.	7.5E+04	3.0E+02	.	1.8E+04	1.3E+05	.	.	.	1.1E+02	1.1E-14
Thulium (69)	Tm-164	0.00E+00	0.00E+00	0.00E+00	7.19E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.3E+05	.	.	.	.	.	.	.	1.3E+05	2.2E-13
Thulium (69)	Tm-165	1.67E-12	8.8E-13 (S)	2.41E-12	4.86E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.9E+01	.	1.9E+05	3.0E+01	.	1.8E+03	1.3E+04	.	.	.	1.2E+01	1.8E-14
Thulium (69)	Tm-166	1.09E-12	5.4E-13 (S)	1.55E-12	1.90E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.9E+01	.	4.8E+04	4.6E+01	.	2.7E+03	2.0E+04	.	.	.	1.8E+01	7.2E-15
Thulium (69)	Tm-167	3.59E-12	5.1E-12 (S)	5.25E-12	1.09E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	8.9E+00	.	8.4E+05	1.4E+01	.	8.1E+02	5.9E+03	.	.	.	5.3E+00	6.3E-14
Thulium (69)	Tm-168	4.48E-12	1.9E-11 (S)	6.44E-12	1.12E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.1E+00	.	8.1E+04	1.1E+01	.	6.6E+02	4.8E+03	.	.	.	4.2E+00	5.1E-13
Thulium (69)	Tm-170	8.84E-12	3.3E-11 (S)	1.30E-11	3.08E-14	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	3.6E+00	.	3.0E+07	5.2E+00	.	3.3E+02	2.4E+03	.	.	.	2.1E+00	3.6E-13
Thulium (69)	Tm-171	6.96E-13	4.3E-12 (S)	1.02E-12	3.34E-15	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.6E+01	.	2.7E+08	5.5E+01	.	4.2E+03	3.0E+04	.	.	.	2.5E+01	2.3E-11
Thulium (69)	Tm-172	1.08E-11	6.1E-12 (S)	1.58E-11	4.62E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.9E+00	.	2.0E+05	4.5E+00	.	2.7E+02	2.0E+03	.	.	.	1.8E+00	6.2E-15
Thulium (69)	Tm-173	1.68E-12	8.1E-13 (S)	2.46E-12	3.47E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.9E+01	.	2.6E+05	2.9E+01	.	1.7E+03	1.3E+04	.	.	.	1.1E+01	5.2E-15
Thulium (69)	Tm-174	0.00E+00	0.00E+00	0.00E+00	1.63E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	5.6E+04	.	.	.	.	.	.	.	5.6E+04	2.8E-13
Thulium (69)	Tm-175	5.03E-14	3.4E-14 (S)	6.99E-14	1.01E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	6.3E+02	.	9.1E+04	1.0E+03	.	6.1E+04	4.4E+05	.	.	.	3.9E+02	5.5E-15
Thulium (69)	Tm-176	0.00E+00	0.00E+00	0.00E+00	1.91E-11	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	4.8E+04	.	.	.	.	.	.	.	4.8E+04	8.3E-14
Uranium (92)	U-227	0.00E+00	0.00E+00	0.00E+00	9.76E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	.	.	9.4E+05	.	.	.	.	.	.	.	9.4E+05	1.2E-12
Uranium (92)	U-228	0.00E+00	0.00E+00	0.00E+00	3.20E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	.	.	2.9E+07	.	.	.	.	.	.	.	2.9E+07	3.2E-10
Uranium (92)	U-230	2.09E-10	5.5E-08 (S)	2.98E-10	9.11E-15	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.5E-01	.	1.0E+08	2.4E-01	1.8E+00	7.3E+01	3.5E+00	5.6E+00	8.5E+00	1.2E+01	8.3E-02	3.1E-15
Uranium (92)	U-231	2.12E-12	2.1E-12 (S)	3.11E-12	5.35E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.5E+01	.	1.7E+06	2.3E+01	1.7E+02	7.0E+03	3.3E+02	5.3E+02	8.1E+02	1.1E+03	8.1E+00	6.0E-14
Uranium (92)	U-232	2.90E-10	9.3E-08 (S)	3.85E-10	2.09E-15	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	1.1E-01	.	4.4E+08	5.7E-02	1.4E+00	5.7E+01	2.7E+00	4.3E+00	6.6E+00	9.0E+00	3.5E-02	1.6E-12
Uranium (92)	U-233	7.18E-11	2.8E-08 (S)	9.69E-11	2.09E-15	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.4E-01	.	4.4E+08	2.0E-01	5.6E+00	2.2E+02	1.1E+01	1.7E+01	2.6E+01	3.6E+01	1.3E-01	1.4E-08
Uranium (92)	U-234	7.07E-11	2.8E-08 (S)	9.55E-11	1.17E-15	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.5E-01	.	7.8E+08	2.1E-01	5.6E+00	2.3E+02	1.1E+01	1.7E+01	2.7E+01	3.6E+01	1.3E-01	2.2E-08
Uranium (92)	U-235	6.96E-11	2.5E-08 (S)	9.44E-11	1.39E-12	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.6E-01	.	6.6E+05	2.1E-01	5.7E+00	2.3E+02	1.1E+01	1.8E+01	2.7E+01	3.7E+01	1.4E-01	6.3E-05
Uranium (92)	U-235+D	7.18E-11	2.5E-08 (S)	9.77E-11	1.48E-12	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.4E-01	.	6.2E+05	2.0E-01	5.5E+00	2.2E+02	1.1E+01	1.7E+01	2.6E+01	3.5E+01	1.3E-01	6.1E-05
Uranium (92)	U-235m	7.62E-18	1.9E-18 (M)	1.06E-17	0.00E+00	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.2E+06	.	.	6.7E+06	5.1E+07	2.0E+09	9.7E+07	1.6E+08	2.4E+08	3.3E+08	2.3E+06	7.5E-11
Uranium (92)	U-236	6.66E-11	2.6E-08 (S)	8.99E-11	7.01E-16	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.8E-01	.	1.3E+09	2.2E-01	6.0E+00	2.4E+02	1.1E+01	1.8E+01	2.8E+01	3.8E+01	1.4E-01	2.2E-06
Uranium (92)	U-237	5.00E-12	7.4E-12 (S)	7.29E-12	1.06E-12	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	6.4E+00	.	8.6E+05	9.8E+00	7.4E+01	3.0E+03	1.4E+02	2.3E+02	3.5E+02	4.7E+02	3.5E+00	4.2E-14
Uranium (92)	U-238	6.40E-11	2.4E-08 (S)	8.66E-11	5.98E-16	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	5.0E-01	.	1.5E+09	2.3E-01	6.2E+00	2.5E+02	1.2E+01	1.9E+01	2.9E+01	4.0E+01	1.5E-01	4.4E-04
Uranium (92)	U-238+D	8.70E-11	2.4E-08 (S)	1.21E-10	2.69E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	3.7E-01	.	3.4E+06	1.6E-01	4.5E+00	1.8E+02	8.5E+00	1.4E+01	2.1E+01	2.9E+01	1.1E-01	3.2E-04
Uranium (92)	U-239	7.44E-14	6.1E-14 (S)	1.06E-13	3.76E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.3E+02	.	2.4E+06	6.7E+02	5.1E+03	2.1E+05	9.7E+03	1.6E+04	2.4E+04	3.3E+04	2.3E+02	7.0E-15
Uranium (92)	U-240	6.92E-12	3.1E-12 (S)	1.01E-11	3.62E-14	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	4.6E+00	.	2.5E+07	7.0E+00	5.3E+01	2.1E+03	1.0E+02	1.6E+02	2.5E+02	3.4E+02	2.5E+00	2.7E-15
Uranium (92)	U-242	8.66E-14	5.1E-14 (S)	1.20E-13	3.53E-13	5.39E-03	9.60E-01	3.90E-04	1.80E-03	4.40E-02	7.50E-01	1.10E+00	3.7E+02	.	2.6E+06	6.0E+02	4.5E+03	1.8E+05	8.6E+03	1.4E+04	2.1E+04	2.9E+04	2.0E+02	4.4E-15
Vanadium (23)	V-47	1.25E-13	6.3E-14 (S)	1.74E-13	9.06E-12	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	2.5E+02	.	1.0E+05	4.1E+02	3.1E+01	4.9E+03	2.1E+04	.	.	.	2.5E+01	2.1E-16
Vanadium (23)	V-48	8.29E-12	1.0E-11 (S)	1.18E-11	2.78E-11	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	3.8E+00	.	3.3E+04	6.0E+00	4.5E-01	7.2E+01	3.1E+02	.	.	.	3.8E-01	2.2E-15
Vanadium (23)	V-49	1.21E-13	2.8E-13 (S)	1.77E-13	0.00E+00	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	2.6E+02	.	.	3.6E+02	3.0E+01	4.8E+03	2.1E+04	.	.	.	2.5E+01	3.1E-12
Vanadium (23)	V-50	5.92E-12	9.5E-11 (F)	7.96E-12	1.41E-11	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	5.4E+00	.	6.5E+04	2.5E+00	6.7E-01	1.1E+02	4.7E+02	.	.	.	4.8E-01	1.0E+04
Vanadium (23)	V-52	0.00E+00	0.00E+00	0.00E+00	1.42E-11	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	.	.	6.4E+04	.	.	.	.	.	.	.	6.4E+04	6.7E-14
Vanadium (23)	V-53	0.00E+00	0.00E+00	0.00E+00	9.95E-12	2.00E-03	9.70E+01	1.00E-02	5.00E-04	.	.	.	.	.	9.2E+04	.	.	.	.	.	.	.	9.2E+04	4.2E-14
Tungsten (74)	W-177	1.93E-13	1.2E-13 (S)	2.73E-13	8.10E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	1.7E+02	.	1.1E+05	2.6E+02	1.6E+00	7.8E+02	3.6E+04	.	.	.	1.6E+00	1.9E-16
Tungsten (74)	W-178	1.37E-12	3.1E-12 (S)	1.99E-12	8.57E-14	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	2.3E+01	.	1.1E+07	3.5E+01	2.2E-01	1.1E+02	4.9E+03	.	.	.	2.1E-01	6.3E-15
Tungsten (74)	W-178+D	1.37E-12	3.1E-12 (S)	1.99E-12	1.04E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	2.3E+01	.	8.8E+05	3.5E+01	2.2E-01	1.1E+02	4.9E+03	.	.	.	2.1E-01	6.3E-15
Tungsten (74)	W-179	7.59E-15	3.0E-15 (S)	1.06E-14	2.86E-13	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	4.2E+03	.	3.2E+06	6.7E+03	4.1E+01	2.0E+04	9.2E+05	.	.	.	4.0E+01	1.4E-15
Tungsten (74)	W-179m	0.00E+00	0.00E+00	0.00E+00	3.88E-13	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	.	.	2.4E+06	.	.	.	.	.	.	.	2.4E+06	1.4E-11
Tungsten (74)	W-181	4.51E-13	1.1E-12 (S)	6.51E-13	2.28E-13	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	7.1E+01	.	4.0E+06	9.2E+01	6.6E-01	3.3E+02	1.5E+04	.	.	.	6.5E-01	1.1E-13
Tungsten (74)	W-185	2.93E-12	1.4E-11 (S)	4.29E-12	1.35E-15	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	1.1E+01	.	6.7E+08	1.5E+01	1.0E-01	4.9E+01	2.3E+03	.	.	.	9.9E-02	1.1E-14
Tungsten (74)	W-185m	0.00E+00	0.00E+00	0.00E+00	1.83E-13	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	.	.	5.0E+06	.	.	.	.	.	.	.	5.0E+06	7.8E-12
Tungsten (74)	W-187	3.49E-12	1.9E-12 (S)	5.07E-12	4.03E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	9.1E+00	.	2.3E+05	1.4E+01	8.5E-02	4.2E+01	1.9E+03	.	.	.	8.4E-02	1.2E-16
Tungsten (74)	W-188	1.39E-11	5.6E-11 (S)	2.04E-11	1.68E-14	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	2.3E+00	.	5.4E+07	3.1E+00	2.1E-02	1.0E+01	4.8E+02	.	.	.	2.1E-02	2.1E-15
Tungsten (74)	W-190	1.64E-13	1.4E-13 (S)	2.29E-13	1.12E-12	8.00E-01	1.20E+03	4.00E-02	1.90E-04	.	.	.	1.9E+02	.	8.2E+05	3.1E+02	1.9E+00	9.3E+02	4.3E+04	.	.	.	1.8E+00	5.6E-17
Xenon (54)	Xe-120	0.00E+00	0.00E+00	0.00E+00	3.35E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.7E+05	.	.	.	.	.	.	.	2.7E+05	7.0E-12
Xenon (54)	Xe-121	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	1.7E-12
Xenon (54)	Xe-122	0.00E+00	0.00E+00	0.00E+00	4.38E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.1E+06	.	.	.	.	.	.	.	2.1E+06	1.6E-09
Xenon (54)	Xe-123	0.00E+00	0.00E+00	0.00E+00	5.79E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.6E+05	.	.	.	.	.	.	.	1.6E+05	1.3E-11
Xenon (54)	Xe-125	0.00E+00	0.00E+00	0.00E+00	2.18E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.2E+05	.	.	.	.	.	.	.	4.2E+05	2.8E-10
Xenon (54)	Xe-127	0.00E+00	0.00E+00	0.00E+00	2.28E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.0E+05	.	.	.	.	.	.	.	4.0E+05	1.4E-08
Xenon (54)	Xe-127m	0.00E+00	0.00E+00	0.00E+00	1.32E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	6.9E+05	.	.	.	.	.	.	.	6.9E+05	5.4E-13
Xenon (54)	Xe-129m	0.00E+00	0.00E+00	0.00E+00	1.63E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	5.6E+06	.	.	.	.	.	.	.	5.6E+06	4.9E-08
Xenon (54)	Xe-131m	0.00E+00	0.00E+00	0.00E+00	6.00E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	1.5E+07	.	.	.	.	.	.	.	1.5E+07	1.8E-07
Xenon (54)	Xe-133	0.00E+00	0.00E+00	0.00E+00	2.65E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.4E+06	.	.	.	.	.	.	.	3.4E+06	1.8E-08
Xenon (54)	Xe-133m	0.00E+00	0.00E+00	0.00E+00	2.39E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	3.8E+06	.	.	.	.	.	.	.	3.8E+06	8.5E-09
Xenon (54)	Xe-135	0.00E+00	0.00E+00	0.00E+00	2.21E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.1E+05	.	.	.	.	.	.	.	4.1E+05	1.6E-10
Xenon (54)	Xe-135m	0.00E+00	0.00E+00	0.00E+00	3.83E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	2.4E+05	.	.	.	.	.	.	.	2.4E+05	2.6E-12
Xenon (54)	Xe-137	0.00E+00	0.00E+00	0.00E+00	1.88E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	4.9E+05	.	.	.	.	.	.	.	4.9E+05	1.4E-12
Xenon (54)	Xe-138	0.00E+00	0.00E+00	0.00E+00	1.11E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	.	.	.	.	.	8.2E+04	.	.	.	.	.	.	.	8.2E+04	8.5E-13
Yttrium (39)	Y-81	0.00E+00	0.00E+00	0.00E+00	1.06E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	8.6E+04	.	.	.	.	.	.	.	8.6E+04	4.4E-14

Radionuclides		Slope Factors and Isotope-specific Information											Carcinogenic Target Risk (TR) = 1E-06											
Element (Atomic Number)	Isotope	Water Ingestion Slope Factor (risk/pCi)	Inhalation Slope Factor (Lungtype) (risk/pCi)	Food Ingestion Slope Factor (risk/pCi)	Immersion Slope Factor (risk/yr per pCi/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 (pCi/L)	Inhalation PRG (pCi/L)	Immersion PRG (pCi/L)	Produce Consumption PRG (pCi/L)	Fish Consumption PRG (pCi/L)	Beef Consumption PRG (pCi/L)	Dairy Consumption PRG (pCi/L)	Swine Consumption PRG (pCi/L)	Poultry Consumption PRG (pCi/L)	Egg Consumption PRG (pCi/L)	Total PRG (pCi/L)	Total PRG (mg/L)
Actinium (89)	Ac-223	0.00E+00	0.00E+00	0.00E+00	1.47E-13	1.00E-03	1.50E+01	2.00E-05	2.00E-06	.	.	.	.	.	6.2E+06	.	.	.	.	.	.	.	6.2E+06	1.6E-11
Yttrium (39)	Y-83	0.00E+00	0.00E+00	0.00E+00	1.24E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	7.4E+04	.	.	.	.	.	.	.	7.4E+04	2.3E-13
Yttrium (39)	Y-83m	0.00E+00	0.00E+00	0.00E+00	7.57E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	1.2E+05	.	.	.	.	.	.	.	1.2E+05	1.5E-13
Yttrium (39)	Y-84m	3.03E-13	1.3E-13 (S)	4.22E-13	3.74E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.1E+02	.	2.4E+04	1.7E+02	3.1E+01	1.0E+04	7.3E+04	.	4.5E+05	4.5E+06	2.1E+01	3.7E-16
Yttrium (39)	Y-85	7.44E-13	3.2E-13 (S)	1.07E-12	9.80E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	4.3E+01	.	9.3E+04	6.7E+01	1.2E+01	4.0E+03	2.9E+04	.	1.8E+05	1.8E+06	8.2E+00	6.0E-16
Yttrium (39)	Y-85m	1.81E-12	7.0E-13 (S)	2.62E-12	1.26E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.8E+01	.	7.2E+04	2.7E+01	4.9E+00	1.6E+03	1.2E+04	.	7.2E+04	7.3E+05	3.4E+00	4.5E-16
Yttrium (39)	Y-86	3.96E-12	1.5E-12 (S)	5.66E-12	3.43E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	8.0E+00	.	2.7E+04	1.3E+01	2.3E+00	7.5E+02	5.5E+03	.	3.4E+04	3.4E+05	1.6E+00	6.3E-16
Yttrium (39)	Y-86m	2.30E-13	9.1E-14 (S)	3.29E-13	1.94E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.4E+02	.	4.7E+05	2.2E+02	3.9E+01	1.3E+04	9.4E+04	.	5.8E+05	5.8E+06	2.7E+01	5.9E-16
Yttrium (39)	Y-87	2.57E-12	1.5E-12 (S)	3.70E-12	3.95E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.2E+01	.	2.3E+05	1.9E+01	3.5E+00	1.1E+03	8.4E+03	.	5.1E+04	5.1E+05	2.4E+00	5.3E-15
Yttrium (39)	Y-87m	1.11E-12	5.6E-13 (S)	1.61E-12	2.74E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	2.9E+01	.	3.3E+05	4.4E+01	8.1E+00	2.6E+03	1.9E+04	.	1.2E+05	1.2E+06	5.5E+00	2.0E-15
Yttrium (39)	Y-88	4.22E-12	2.0E-11 (F)	5.88E-12	2.67E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	7.6E+00	.	3.4E+04	1.2E+01	2.2E+00	7.2E+02	5.3E+03	.	3.2E+04	3.2E+05	1.5E+00	1.1E-13
Yttrium (39)	Y-89m	0.00E+00	0.00E+00	0.00E+00	8.49E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	.	.	1.1E+05	.	.	.	.	.	.	.	1.1E+05	1.3E-14
Yttrium (39)	Y-90	1.80E-11	8.4E-12 (S)	2.65E-11	3.75E-14	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.8E+00	.	2.4E+07	2.7E+00	4.9E-01	1.6E+02	1.2E+03	.	7.2E+03	7.2E+04	3.3E-01	6.2E-16
Yttrium (39)	Y-90m	1.04E-12	4.8E-13 (S)	1.52E-12	5.67E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	3.1E+01	.	1.6E+05	4.7E+01	8.5E+00	2.8E+03	2.0E+04	.	1.2E+05	1.3E+06	5.8E+00	5.3E-16
Yttrium (39)	Y-91	1.61E-11	3.4E-11 (S)	2.36E-11	4.72E-14	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	2.0E+00	.	1.9E+07	3.0E+00	5.5E-01	1.8E+02	1.3E+03	.	8.1E+03	8.1E+04	3.7E-01	1.5E-14
Yttrium (39)	Y-91m	3.52E-14	3.0E-14 (S)	4.96E-14	4.80E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	9.0E+02	.	1.9E+05	1.4E+03	2.6E+02	8.6E+04	6.2E+05	.	3.8E+06	3.8E+07	1.8E+02	4.3E-15
Yttrium (39)	Y-92	2.48E-12	9.3E-13 (S)	3.62E-12	2.49E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	1.3E+01	.	3.7E+05	2.0E+01	3.6E+00	1.2E+03	8.5E+03	.	5.2E+04	5.3E+05	2.4E+00	2.5E-16
Yttrium (39)	Y-93	7.25E-12	2.7E-12 (S)	1.06E-11	9.90E-13	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	4.4E+00	.	9.2E+05	6.7E+00	1.2E+00	4.0E+02	2.9E+03	.	1.8E+04	1.8E+05	8.3E-01	2.5E-16
Yttrium (39)	Y-94	1.40E-13	5.6E-14 (S)	1.94E-13	7.54E-12	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	2.3E+02	.	1.2E+05	3.7E+02	6.7E+01	2.2E+04	1.6E+05	.	9.8E+05	9.8E+06	4.5E+01	4.2E-16
Yttrium (39)	Y-95	6.73E-14	2.7E-14 (S)	9.29E-14	1.16E-11	4.35E-04	4.00E+01	2.00E-03	6.00E-05	.	1.00E-02	2.00E-03	4.7E+02	.	7.9E+04	7.7E+02	1.4E+02	4.6E+04	3.3E+05	.	2.0E+06	2.0E+07	9.4E+01	4.9E-16
Ytterbium (70)	Yb-162	6.96E-14	3.8E-14 (S)	9.69E-14	2.03E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	4.6E+02	.	4.5E+05	7.4E+02	.	4.4E+04	3.2E+05	.	.	.	2.8E+02	4.6E-15
Ytterbium (70)	Yb-163	3.57E-14	1.7E-14 (S)	4.96E-14	6.68E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	8.9E+02	.	1.4E+05	1.4E+03	.	8.6E+04	6.2E+05	.	.	.	5.4E+02	5.2E-15
Ytterbium (70)	Yb-164	2.74E-13	1.3E-13 (S)	3.92E-13	3.20E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.2E+02	.	2.9E+06	1.8E+02	.	1.1E+04	7.9E+04	.	.	.	7.0E+01	4.7E-15
Ytterbium (70)	Yb-165	0.00E+00	0.00E+00	0.00E+00	2.78E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	3.3E+05	.	.	.	.	.	.	.	3.3E+05	2.9E-12
Ytterbium (70)	Yb-166	4.26E-12	2.8E-12 (S)	6.11E-12	4.66E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	7.5E+00	.	2.0E+06	1.2E+01	.	7.0E+02	5.1E+03	.	.	.	4.5E+00	1.4E-14
Ytterbium (70)	Yb-167	1.61E-14	1.8E-14 (S)	2.25E-14	1.91E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	2.0E+03	.	4.8E+05	3.2E+03	.	1.9E+05	1.4E+06	.	.	.	1.2E+03	1.9E-14
Ytterbium (70)	Yb-169	4.70E-12	1.2E-11 (S)	6.81E-12	2.38E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	6.8E+00	.	3.8E+05	1.0E+01	.	6.2E+02	4.5E+03	.	.	.	4.1E+00	1.7E-13
Ytterbium (70)	Yb-175	2.89E-12	3.0E-12 (S)	4.26E-12	3.41E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	1.1E+01	.	2.7E+06	1.7E+01	.	1.0E+03	7.3E+03	.	.	.	6.6E+00	3.7E-14
Ytterbium (70)	Yb-177	3.55E-13	2.4E-13 (S)	5.14E-13	1.81E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	9.0E+01	.	5.1E+05	1.4E+02	.	8.3E+03	6.0E+04	.	.	.	5.4E+01	5.8E-15
Ytterbium (70)	Yb-178	3.81E-13	2.3E-13 (S)	5.51E-13	3.41E-13	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	8.4E+01	.	2.7E+06	1.3E+02	.	7.7E+03	5.6E+04	.	.	.	5.0E+01	3.5E-15
Ytterbium (70)	Yb-179	0.00E+00	0.00E+00	0.00E+00	8.87E-12	2.00E-03	.	2.00E-03	6.00E-05	.	.	.	.	.	1.0E+05	.	.	.	.	.	.	.	1.0E+05	7.9E-13
Zinc (30)	Zn-60	0.00E+00	0.00E+00	0.00E+00	1.39E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	6.6E+04	.	.	.	.	.	.	.	6.6E+04	5.0E-14
Zinc (30)	Zn-61	0.00E+00	0.00E+00	0.00E+00	1.45E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	6.3E+04	.	.	.	.	.	.	.	6.3E+04	3.0E-14
Zinc (30)	Zn-62	4.92E-12	2.9E-12 (S)	7.22E-12	3.93E-12	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	6.5E+00	.	2.3E+05	9.9E+00	2.1E-02	7.4E+00	9.5E+01	5.9E+01	5.6E+02	3.8E+02	2.1E-02	3.8E-18
Zinc (30)	Zn-63	1.63E-13	8.1E-14 (S)	2.29E-13	1.00E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	2.0E+02	.	9.1E+04	3.1E+02	6.7E-01	2.3E+02	3.0E+03	1.9E+03	1.8E+04	1.2E+04	6.6E-01	8.5E-18
Zinc (30)	Zn-65	1.16E-11	7.5E-12 (F)	1.53E-11	5.55E-12	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	2.7E+00	.	1.6E+05	2.8E+00	9.9E-03	3.5E+00	4.5E+01	2.8E+01	2.6E+02	1.8E+02	9.8E-03	1.2E-15
Zinc (30)	Zn-69	7.14E-14	6.5E-14 (S)	1.02E-13	5.48E-15	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	4.5E+02	.	1.7E+08	7.0E+02	1.5E+00	5.2E+02	6.8E+03	4.2E+03	4.0E+04	2.7E+04	1.5E+00	3.1E-17
Zinc (30)	Zn-69m	1.87E-12	1.4E-12 (S)	2.73E-12	3.75E-12	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	1.7E+01	.	2.4E+05	2.6E+01	5.6E-02	1.9E+01	2.5E+02	1.6E+02	1.5E+03	9.9E+02	5.5E-02	1.7E-17
Zinc (30)	Zn-71	0.00E+00	0.00E+00	0.00E+00	2.95E-12	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	.	.	3.1E+05	.	.	.	.	.	.	.	3.1E+05	2.9E-13
Zinc (30)	Zn-71m	9.73E-13	5.8E-13 (S)	1.40E-12	1.42E-11	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	3.3E+01	.	6.4E+04	5.1E+01	1.1E-01	3.8E+01	4.9E+02	3.1E+02	2.9E+03	1.9E+03	1.1E-01	9.7E-18
Zinc (30)	Zn-72	6.66E-12	6.1E-12 (S)	9.55E-12	1.25E-12	1.57E+00	3.40E+03	1.60E-01	2.70E-03	1.70E-01	4.70E-01	1.40E+00	4.8E+00	.	7.3E+05	7.4E+00	1.6E-02	5.6E+00	7.2E+01	4.5E+01	4.2E+02	2.8E+02	1.6E-02	1.7E-17
Zirconium (40)	Zr-85	0.00E+00	0.00E+00	0.00E+00	1.35E-11	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	.	.	6.7E+04	.	.	.	.	.	.	.	6.7E+04	2.4E-13
Zirconium (40)	Zr-86	3.81E-12	1.6E-12 (S)	5.48E-12	2.43E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	8.4E+00	.	3.8E+05	1.3E+01	4.3E+00	1.3E+06	9.4E+04	.	5.8E+06	3.5E+06	2.3E+00	1.1E-15
Zirconium (40)	Zr-87	6.73E-13	3.0E-13 (S)	9.69E-13	8.49E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	4.7E+01	.	1.1E+05	7.4E+01	2.4E+01	7.3E+06	5.3E+05	.	3.3E+07	2.0E+07	1.3E+01	6.2E-16
Zirconium (40)	Zr-88	1.55E-12	1.3E-11 (S)	2.15E-12	3.43E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	2.1E+01	.	2.7E+05	3.2E+01	1.1E+01	3.3E+06	2.4E+05	.	1.5E+07	8.8E+06	5.8E+00	3.3E-13
Zirconium (40)	Zr-89	3.60E-12	2.0E-12 (S)	5.18E-12	1.08E-11	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	8.8E+00	.	8.5E+04	1.4E+01	4.5E+00	1.4E+06	9.9E+04	.	6.1E+06	3.7E+06	2.5E+00	5.5E-15
Zirconium (40)	Zr-89m	0.00E+00	0.00E+00	0.00E+00	5.86E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	.	.	1.6E+05	.	.	.	.	.	.	.	1.6E+05	3.1E-13
Zirconium (40)	Zr-93	1.08E-12	1.5E-11 (F)	1.41E-12	7.86E-21	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	2.9E+01	.	1.2E+14	1.4E+01	1.7E+01	5.0E+06	3.7E+05	.	2.3E+07	1.4E+07	6.1E+00	2.4E-06
Zirconium (40)	Zr-95	4.63E-12	2.1E-11 (S)	6.66E-12	6.80E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	6.9E+00	.	1.3E+05	1.0E+01	3.5E+00	1.1E+06	7.7E+04	.	4.8E+06	2.9E+06	1.9E+00	8.9E-14
Zirconium (40)	Zr-97	1.25E-11	5.1E-12 (S)	1.83E-11	8.22E-12	8.70E-04	2.20E+01	1.20E-06	3.60E-06	.	6.00E-05	2.00E-04	2.5E+00	.	1.1E+05	3.9E+00	1.3E+00	3.9E+05	2.8E+04	.	1.7E+06	1.0E+06	7.0E-01	3.6E-16