

Summary : RESRAD Default

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ac-225 (Source: FGR 12)	6.371E-02	6.371E-02	DCF1 (1)
A-1	Ac-227 (Source: FGR 12)	4.951E-04	4.951E-04	DCF1 (2)
A-1	Ac-228 (Source: FGR 12)	5.978E+00	5.978E+00	DCF1 (3)
A-1	Ag-108 (Source: FGR 12)	1.143E-01	1.143E-01	DCF1 (4)
A-1	Ag-108m (Source: FGR 12)	9.640E+00	9.640E+00	DCF1 (5)
A-1	Am-241 (Source: FGR 12)	4.372E-02	4.372E-02	DCF1 (6)
A-1	Am-243 (Source: FGR 12)	1.420E-01	1.420E-01	DCF1 (7)
A-1	At-217 (Source: FGR 12)	1.773E-03	1.773E-03	DCF1 (8)
A-1	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	DCF1 (9)
A-1	At-219 (Source: no data)	0.000E+00	-2.000E+00	DCF1 (10)
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1 (11)
A-1	Bi-210 (Source: FGR 12)	3.606E-03	3.606E-03	DCF1 (12)
A-1	Bi-211 (Source: FGR 12)	2.559E-01	2.559E-01	DCF1 (13)
A-1	Bi-212 (Source: FGR 12)	1.171E+00	1.171E+00	DCF1 (14)
A-1	Bi-213 (Source: FGR 12)	7.660E-01	7.660E-01	DCF1 (15)
A-1	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	DCF1 (16)
A-1	Bi-215 (Source: no data)	0.000E+00	-2.000E+00	DCF1 (17)
A-1	C-14 (Source: FGR 12)	1.345E-05	1.345E-05	DCF1 (18)
A-1	Cm-243 (Source: FGR 12)	5.829E-01	5.829E-01	DCF1 (19)
A-1	Cm-244 (Source: FGR 12)	1.259E-04	1.259E-04	DCF1 (20)
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1 (21)
A-1	Cs-134 (Source: FGR 12)	9.472E+00	9.472E+00	DCF1 (22)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1 (23)
A-1	Eu-152 (Source: FGR 12)	7.006E+00	7.006E+00	DCF1 (24)
A-1	Eu-154 (Source: FGR 12)	7.678E+00	7.678E+00	DCF1 (25)
A-1	Eu-155 (Source: FGR 12)	1.822E-01	1.822E-01	DCF1 (26)
A-1	Fe-55 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (27)
A-1	Fr-221 (Source: FGR 12)	1.536E-01	1.536E-01	DCF1 (28)
A-1	Fr-223 (Source: FGR 12)	1.980E-01	1.980E-01	DCF1 (29)
A-1	Gd-152 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (30)
A-1	H-3 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (31)
A-1	Hg-206 (Source: no data)	0.000E+00	-2.000E+00	DCF1 (32)
A-1	Nb-94 (Source: FGR 12)	9.677E+00	9.677E+00	DCF1 (33)
A-1	Nd-144 (Source: Zion ROC Screen BFM)	0.000E+00	-1.000E+00	DCF1 (34)
A-1	Ni-59 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (35)
A-1	Ni-63 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (36)
A-1	Np-237 (Source: FGR 12)	7.790E-02	7.790E-02	DCF1 (37)
A-1	Np-239 (Source: FGR 12)	7.529E-01	7.529E-01	DCF1 (38)
A-1	Pa-231 (Source: FGR 12)	1.906E-01	1.906E-01	DCF1 (39)
A-1	Pa-233 (Source: FGR 12)	1.020E+00	1.020E+00	DCF1 (40)
A-1	Pb-209 (Source: FGR 12)	7.734E-04	7.734E-04	DCF1 (41)
A-1	Pb-210 (Source: FGR 12)	2.447E-03	2.447E-03	DCF1 (42)
A-1	Pb-211 (Source: FGR 12)	3.064E-01	3.064E-01	DCF1 (43)
A-1	Pb-212 (Source: FGR 12)	7.043E-01	7.043E-01	DCF1 (44)
A-1	Pb-214 (Source: FGR 12)	1.341E+00	1.341E+00	DCF1 (45)
A-1	Pm-147 (Source: FGR 12)	5.007E-05	5.007E-05	DCF1 (46)
A-1	Po-210 (Source: FGR 12)	5.231E-05	5.231E-05	DCF1 (47)
A-1	Po-211 (Source: FGR 12)	4.764E-02	4.764E-02	DCF1 (48)
A-1	Po-212 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (49)

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Po-213 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (50)
A-1	Po-214 (Source: FGR 12)	5.138E-04	5.138E-04	DCF1 (51)
A-1	Po-215 (Source: FGR 12)	1.016E-03	1.016E-03	DCF1 (52)
A-1	Po-216 (Source: FGR 12)	1.042E-04	1.042E-04	DCF1 (53)
A-1	Po-218 (Source: FGR 12)	5.642E-05	5.642E-05	DCF1 (54)
A-1	Pu-238 (Source: FGR 12)	1.513E-04	1.513E-04	DCF1 (55)
A-1	Pu-239 (Source: FGR 12)	2.952E-04	2.952E-04	DCF1 (56)
A-1	Pu-240 (Source: FGR 12)	1.467E-04	1.467E-04	DCF1 (57)
A-1	Pu-241 (Source: FGR 12)	5.904E-06	5.904E-06	DCF1 (58)
A-1	Ra-223 (Source: FGR 12)	6.034E-01	6.034E-01	DCF1 (59)
A-1	Ra-224 (Source: FGR 12)	5.119E-02	5.119E-02	DCF1 (60)
A-1	Ra-225 (Source: FGR 12)	1.102E-02	1.102E-02	DCF1 (61)
A-1	Ra-226 (Source: FGR 12)	3.176E-02	3.176E-02	DCF1 (62)
A-1	Ra-228 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (63)
A-1	Rn-218 (Source: FGR 12)	4.540E-03	4.540E-03	DCF1 (64)
A-1	Rn-219 (Source: FGR 12)	3.083E-01	3.083E-01	DCF1 (65)
A-1	Rn-220 (Source: FGR 12)	2.298E-03	2.298E-03	DCF1 (66)
A-1	Rn-222 (Source: FGR 12)	2.354E-03	2.354E-03	DCF1 (67)
A-1	Sb-125 (Source: FGR 12)	2.447E+00	2.447E+00	DCF1 (68)
A-1	Sm-147 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (69)
A-1	Sm-148 (Source: Zion ROC Screen BFM)	0.000E+00	-1.000E+00	DCF1 (70)
A-1	Sr-90 (Source: FGR 12)	7.043E-04	7.043E-04	DCF1 (71)
A-1	Tc-99 (Source: FGR 12)	1.255E-04	1.255E-04	DCF1 (72)
A-1	Te-125m (Source: FGR 12)	1.515E-02	1.515E-02	DCF1 (73)
A-1	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCF1 (74)
A-1	Th-228 (Source: FGR 12)	7.940E-03	7.940E-03	DCF1 (75)
A-1	Th-229 (Source: FGR 12)	3.213E-01	3.213E-01	DCF1 (76)
A-1	Th-230 (Source: FGR 12)	1.209E-03	1.209E-03	DCF1 (77)
A-1	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCF1 (78)
A-1	Th-232 (Source: FGR 12)	5.212E-04	5.212E-04	DCF1 (79)
A-1	Tl-206 (Source: FGR 12)	7.697E-03	7.697E-03	DCF1 (80)
A-1	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCF1 (81)
A-1	Tl-208 (Source: FGR 12)	2.298E+01	2.298E+01	DCF1 (82)
A-1	Tl-209 (Source: FGR 12)	1.293E+01	1.293E+01	DCF1 (83)
A-1	Tl-210 (Source: no data)	0.000E+00	-2.000E+00	DCF1 (84)
A-1	U-233 (Source: FGR 12)	1.397E-03	1.397E-03	DCF1 (85)
A-1	U-234 (Source: FGR 12)	4.017E-04	4.017E-04	DCF1 (86)
A-1	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCF1 (87)
A-1	U-235m (Source: no data)	0.000E+00	-1.000E+00	DCF1 (88)
A-1	U-236 (Source: FGR 12)	2.148E-04	2.148E-04	DCF1 (89)
A-1	U-237 (Source: FGR 12)	5.306E-01	5.306E-01	DCF1 (90)
A-1	Y-90 (Source: FGR 12)	2.391E-02	2.391E-02	DCF1 (91)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.724E+00	6.700E+00	DCF2 (1)
B-1	Ac-227+D1	6.724E+00	6.700E+00	DCF2 (2)
B-1	Ac-227+D2	6.708E+00	6.700E+00	DCF2 (3)
B-1	Ac-227+D3	6.708E+00	6.700E+00	DCF2 (4)
B-1	Ac-227+D4	6.700E+00	6.700E+00	DCF2 (5)
B-1	Ac-227+D5	6.700E+00	6.700E+00	DCF2 (6)

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	Ag-108m+D	2.830E-04	2.830E-04	DCF2(7)
B-1	Am-241	4.440E-01	4.440E-01	DCF2(8)
B-1	Am-243+D	4.400E-01	4.400E-01	DCF2(9)
B-1	C-14(p) (Class: ORGANIC)	2.090E-06	2.090E-06	DCF2(21)
B-1	C-14(g) (Class: CO2)	2.350E-08	2.350E-08	C14GInhDCF
B-1	Cm-243	3.070E-01	3.070E-01	DCF2(22)
B-1	Cm-244	2.480E-01	2.480E-01	DCF2(46)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(49)
B-1	Cs-134	4.620E-05	4.620E-05	DCF2(50)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(51)
B-1	Eu-152	2.210E-04	2.210E-04	DCF2(52)
B-1	Eu-154	2.860E-04	2.860E-04	DCF2(54)
B-1	Eu-155	4.140E-05	4.140E-05	DCF2(55)
B-1	Fe-55	2.690E-06	2.690E-06	DCF2(56)
B-1	Gd-152	2.430E-01	2.430E-01	DCF2(57)
B-1	H-3	6.400E-08	6.400E-08	DCF2(58)
B-1	Nb-94	4.140E-04	4.140E-04	DCF2(59)
B-1	Nd-144	7.040E-02	-1.000E+00	DCF2(60)
B-1	Ni-59	2.700E-06	2.700E-06	DCF2(61)
B-1	Ni-63	6.290E-06	6.290E-06	DCF2(62)
B-1	Np-237+D	5.400E-01	5.400E-01	DCF2(63)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(64)
B-1	Pb-210+D	1.380E-02	1.360E-02	DCF2(70)
B-1	Pb-210+D1	1.380E-02	1.360E-02	DCF2(71)
B-1	Pb-210+D2	1.360E-02	1.360E-02	DCF2(72)
B-1	Pm-147	3.920E-05	3.920E-05	DCF2(73)
B-1	Po-210	9.400E-03	9.400E-03	DCF2(74)
B-1	Pu-238	3.920E-01	3.920E-01	DCF2(75)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(91)
B-1	Pu-239+D	4.290E-01	4.290E-01	DCF2(97)
B-1	Pu-240	4.290E-01	4.290E-01	DCF2(103)
B-1	Pu-241	8.250E-03	8.250E-03	DCF2(105)
B-1	Pu-241+D	8.254E-03	8.250E-03	DCF2(106)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(107)
B-1	Ra-226+D1	8.594E-03	8.580E-03	DCF2(110)
B-1	Ra-226+D2	8.587E-03	8.580E-03	DCF2(113)
B-1	Ra-226+D3	8.587E-03	8.580E-03	DCF2(116)
B-1	Ra-226+D4	8.580E-03	8.580E-03	DCF2(119)
B-1	Ra-228+D	5.078E-03	4.770E-03	DCF2(122)
B-1	Sb-125	1.220E-05	1.220E-05	DCF2(123)
B-1	Sm-147	7.470E-02	7.470E-02	DCF2(125)
B-1	Sm-148	7.340E-02	-1.000E+00	DCF2(126)
B-1	Sr-90+D	1.308E-03	1.300E-03	DCF2(127)
B-1	Tc-99	8.320E-06	8.320E-06	DCF2(128)
B-1	Te-125m	7.290E-06	7.290E-06	DCF2(129)
B-1	Th-228+D	3.454E-01	3.420E-01	DCF2(130)
B-1	Th-229+D	2.169E+00	2.150E+00	DCF2(131)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(132)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(147)
B-1	U-233	1.350E-01	1.350E-01	DCF2(148)

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	U-234	1.320E-01	1.320E-01	DCF2(149)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(164)
B-1	U-236	1.250E-01	1.250E-01	DCF2(170)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.410E-02	DCF3(1)
D-1	Ac-227+D1	1.480E-02	1.410E-02	DCF3(2)
D-1	Ac-227+D2	1.477E-02	1.410E-02	DCF3(3)
D-1	Ac-227+D3	1.477E-02	1.410E-02	DCF3(4)
D-1	Ac-227+D4	1.411E-02	1.410E-02	DCF3(5)
D-1	Ac-227+D5	1.411E-02	1.410E-02	DCF3(6)
D-1	Ag-108m+D	7.620E-06	7.620E-06	DCF3(7)
D-1	Am-241	3.640E-03	3.640E-03	DCF3(8)
D-1	Am-243+D	3.623E-03	3.620E-03	DCF3(9)
D-1	C-14	2.090E-06	2.090E-06	DCF3(21)
D-1	Cm-243	2.510E-03	2.510E-03	DCF3(22)
D-1	Cm-244	2.020E-03	2.020E-03	DCF3(46)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(49)
D-1	Cs-134	7.330E-05	7.330E-05	DCF3(50)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(51)
D-1	Eu-152	6.480E-06	6.480E-06	DCF3(52)
D-1	Eu-154	9.550E-06	9.550E-06	DCF3(54)
D-1	Eu-155	1.530E-06	1.530E-06	DCF3(55)
D-1	Fe-55	6.070E-07	6.070E-07	DCF3(56)
D-1	Gd-152	1.610E-04	1.610E-04	DCF3(57)
D-1	H-3	6.400E-08	6.400E-08	DCF3(58)
D-1	Nb-94	7.140E-06	7.140E-06	DCF3(59)
D-1	Nd-144	1.510E-04	-1.000E+00	DCF3(60)
D-1	Ni-59	2.100E-07	2.100E-07	DCF3(61)
D-1	Ni-63	5.770E-07	5.770E-07	DCF3(62)
D-1	Np-237+D	4.444E-03	4.440E-03	DCF3(63)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(64)
D-1	Pb-210+D	5.376E-03	5.370E-03	DCF3(70)
D-1	Pb-210+D1	5.376E-03	5.370E-03	DCF3(71)
D-1	Pb-210+D2	5.370E-03	5.370E-03	DCF3(72)
D-1	Pm-147	1.050E-06	1.050E-06	DCF3(73)
D-1	Po-210	1.900E-03	1.900E-03	DCF3(74)
D-1	Pu-238	3.200E-03	3.200E-03	DCF3(75)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(91)
D-1	Pu-239+D	3.540E-03	3.540E-03	DCF3(97)
D-1	Pu-240	3.540E-03	3.540E-03	DCF3(103)
D-1	Pu-241	6.840E-05	6.840E-05	DCF3(105)
D-1	Pu-241+D	7.157E-05	6.840E-05	DCF3(106)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(107)
D-1	Ra-226+D1	1.321E-03	1.320E-03	DCF3(110)
D-1	Ra-226+D2	1.320E-03	1.320E-03	DCF3(113)
D-1	Ra-226+D3	1.320E-03	1.320E-03	DCF3(116)
D-1	Ra-226+D4	1.320E-03	1.320E-03	DCF3(119)
D-1	Ra-228+D	1.442E-03	1.440E-03	DCF3(122)
D-1	Sb-125	2.810E-06	2.810E-06	DCF3(123)

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	Sm-147	1.850E-04	1.850E-04	DCF3(125)
D-1	Sm-148	1.580E-04	-1.000E+00	DCF3(126)
D-1	Sr-90+D	1.528E-04	1.420E-04	DCF3(127)
D-1	Tc-99	1.460E-06	1.460E-06	DCF3(128)
D-1	Te-125m	3.670E-06	3.670E-06	DCF3(129)
D-1	Th-228+D	8.086E-04	3.960E-04	DCF3(130)
D-1	Th-229+D	4.027E-03	3.530E-03	DCF3(131)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(132)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(147)
D-1	U-233	2.890E-04	2.890E-04	DCF3(148)
D-1	U-234	2.830E-04	2.830E-04	DCF3(149)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(164)
D-1	U-236	2.690E-04	2.690E-04	DCF3(170)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(1,3)
D-34				
D-34	Ac-227+D1 , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(2,1)
D-34	Ac-227+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(2,2)
D-34	Ac-227+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(2,3)
D-34				
D-34	Ac-227+D2 , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(3,1)
D-34	Ac-227+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(3,2)
D-34	Ac-227+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(3,3)
D-34				
D-34	Ac-227+D3 , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(4,1)
D-34	Ac-227+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(4,2)
D-34	Ac-227+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(4,3)
D-34				
D-34	Ac-227+D4 , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(5,1)
D-34	Ac-227+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(5,2)
D-34	Ac-227+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(5,3)
D-34				
D-34	Ac-227+D5 , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(6,1)
D-34	Ac-227+D5 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(6,2)
D-34	Ac-227+D5 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(6,3)
D-34				
D-34	Ag-108m+D , plant/soil concentration ratio, dimensionless	7.400E-03	1.500E-01	RTF(7,1)
D-34	Ag-108m+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.200E-03	3.000E-03	RTF(7,2)
D-34	Ag-108m+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	9.500E-03	2.500E-02	RTF(7,3)
D-34				
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(8,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.700E-05	5.000E-05	RTF(8,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-06	2.000E-06	RTF(8,3)
D-34				
D-34	Am-243+D , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(9,1)
D-34	Am-243+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.700E-05	5.000E-05	RTF(9,2)
D-34	Am-243+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-06	2.000E-06	RTF(9,3)

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	C-14 , plant/soil concentration ratio, dimensionless	1.280E+00	5.500E+00	RTF(21,1)
D-34	C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.000E-02	3.100E-02	RTF(21,2)
D-34	C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-06	1.200E-02	RTF(21,3)
D-34				
D-34	Cm-243 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(22,1)
D-34	Cm-243 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-05	2.000E-05	RTF(22,2)
D-34	Cm-243 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.700E-06	2.000E-06	RTF(22,3)
D-34				
D-34	Cm-244 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(46,1)
D-34	Cm-244 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-05	2.000E-05	RTF(46,2)
D-34	Cm-244 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.700E-06	2.000E-06	RTF(46,3)
D-34				
D-34	Co-60 , plant/soil concentration ratio, dimensionless	1.500E-01	8.000E-02	RTF(49,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.800E-02	2.000E-02	RTF(49,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(49,3)
D-34				
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	7.800E-02	4.000E-02	RTF(50,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.500E-02	3.000E-02	RTF(50,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.400E-02	8.000E-03	RTF(50,3)
D-34				
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	7.800E-02	4.000E-02	RTF(51,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.500E-02	3.000E-02	RTF(51,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.400E-02	8.000E-03	RTF(51,3)
D-34				
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(52,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-03	2.000E-03	RTF(52,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(52,3)
D-34				
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(54,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-03	2.000E-03	RTF(54,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(54,3)
D-34				
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(55,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-03	2.000E-03	RTF(55,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-05	5.000E-05	RTF(55,3)
D-34				
D-34	Fe-55 , plant/soil concentration ratio, dimensionless	1.900E-03	1.000E-03	RTF(56,1)
D-34	Fe-55 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.900E-02	2.000E-02	RTF(56,2)
D-34	Fe-55 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.700E-04	3.000E-04	RTF(56,3)
D-34				
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(57,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(57,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-05	2.000E-05	RTF(57,3)
D-34				
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(58,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(58,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(58,3)
D-34				

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Nb-94 , plant/soil concentration ratio, dimensionless	2.100E-02	1.000E-02	RTF(59,1)
D-34	Nb-94 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.800E-06	3.000E-07	RTF(59,2)
D-34	Nb-94 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-06	2.000E-06	RTF(59,3)
D-34				
D-34	Nd-144 , plant/soil concentration ratio, dimensionless	2.000E-03	2.400E-03	RTF(60,1)
D-34	Nd-144 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(60,2)
D-34	Nd-144 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-05	2.000E-05	RTF(60,3)
D-34				
D-34	Ni-59 , plant/soil concentration ratio, dimensionless	9.200E-02	5.000E-02	RTF(61,1)
D-34	Ni-59 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(61,2)
D-34	Ni-59 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-02	2.000E-02	RTF(61,3)
D-34				
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	9.200E-02	5.000E-02	RTF(62,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(62,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.200E-02	2.000E-02	RTF(62,3)
D-34				
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(63,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(63,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-05	5.000E-06	RTF(63,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(64,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-06	5.000E-03	RTF(64,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(64,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	4.000E-03	1.000E-02	RTF(70,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(70,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(70,3)
D-34				
D-34	Pb-210+D1 , plant/soil concentration ratio, dimensionless	4.000E-03	1.000E-02	RTF(71,1)
D-34	Pb-210+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(71,2)
D-34	Pb-210+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(71,3)
D-34				
D-34	Pb-210+D2 , plant/soil concentration ratio, dimensionless	4.000E-03	1.000E-02	RTF(72,1)
D-34	Pb-210+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(72,2)
D-34	Pb-210+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(72,3)
D-34				
D-34	Pm-147 , plant/soil concentration ratio, dimensionless	4.200E-03	2.500E-03	RTF(73,1)
D-34	Pm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.000E-03	2.000E-03	RTF(73,2)
D-34	Pm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.100E-04	2.000E-05	RTF(73,3)
D-34				
D-34	Po-210 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(74,1)
D-34	Po-210 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(74,2)
D-34	Po-210 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-04	3.400E-04	RTF(74,3)
D-34				
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(75,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(75,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(75,3)
D-34				

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(91,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(91,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(91,3)
D-34				
D-34	Pu-239+D , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(97,1)
D-34	Pu-239+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(97,2)
D-34	Pu-239+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(97,3)
D-34				
D-34	Pu-240 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(103,1)
D-34	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(103,2)
D-34	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(103,3)
D-34				
D-34	Pu-241 , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(105,1)
D-34	Pu-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(105,2)
D-34	Pu-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(105,3)
D-34				
D-34	Pu-241+D , plant/soil concentration ratio, dimensionless	1.800E-03	1.000E-03	RTF(106,1)
D-34	Pu-241+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.100E-04	1.000E-04	RTF(106,2)
D-34	Pu-241+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-06	1.000E-06	RTF(106,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(107,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(107,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(107,3)
D-34				
D-34	Ra-226+D1 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(110,1)
D-34	Ra-226+D1 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(110,2)
D-34	Ra-226+D1 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(110,3)
D-34				
D-34	Ra-226+D2 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(113,1)
D-34	Ra-226+D2 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(113,2)
D-34	Ra-226+D2 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(113,3)
D-34				
D-34	Ra-226+D3 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(116,1)
D-34	Ra-226+D3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(116,2)
D-34	Ra-226+D3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(116,3)
D-34				
D-34	Ra-226+D4 , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(119,1)
D-34	Ra-226+D4 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(119,2)
D-34	Ra-226+D4 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(119,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(122,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(122,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(122,3)
D-34				
D-34	Sb-125 , plant/soil concentration ratio, dimensionless	1.900E-02	1.000E-02	RTF(123,1)
D-34	Sb-125 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.850E-03	1.000E-03	RTF(123,2)
D-34	Sb-125 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.100E-04	1.000E-04	RTF(123,3)
D-34				

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Sm-147 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(125,1)
D-34	Sm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(125,2)
D-34	Sm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-05	2.000E-05	RTF(125,3)
D-34				
D-34	Sm-148 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(126,1)
D-34	Sm-148 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(126,2)
D-34	Sm-148 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-05	2.000E-05	RTF(126,3)
D-34				
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	5.900E-01	3.000E-01	RTF(127,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(127,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.700E-03	2.000E-03	RTF(127,3)
D-34				
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	9.110E+00	5.000E+00	RTF(128,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.600E-04	1.000E-04	RTF(128,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.600E-03	1.000E-03	RTF(128,3)
D-34				
D-34	Te-125m , plant/soil concentration ratio, dimensionless	1.000E-01	6.000E-01	RTF(129,1)
D-34	Te-125m , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(129,2)
D-34	Te-125m , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-04	5.000E-04	RTF(129,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(130,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(130,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(130,3)
D-34				
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(131,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(131,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(131,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(132,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(132,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(132,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(147,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(147,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(147,3)
D-34				
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(148,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	3.400E-04	RTF(148,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-04	6.000E-04	RTF(148,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(149,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	3.400E-04	RTF(149,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-04	6.000E-04	RTF(149,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(164,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	3.400E-04	RTF(164,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-04	6.000E-04	RTF(164,3)
D-34				

Summary : RESRAD Default

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	U-236 , plant/soil concentration ratio, dimensionless	2.000E-03	2.500E-03	RTF(170,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	3.400E-04	RTF(170,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.000E-04	6.000E-04	RTF(170,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5				
D-5	Ac-227+D1 , fish	1.500E+01	1.500E+01	BIOFAC(2,1)
D-5	Ac-227+D1 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5				
D-5	Ac-227+D2 , fish	1.500E+01	1.500E+01	BIOFAC(3,1)
D-5	Ac-227+D2 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5				
D-5	Ac-227+D3 , fish	1.500E+01	1.500E+01	BIOFAC(4,1)
D-5	Ac-227+D3 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(4,2)
D-5				
D-5	Ac-227+D4 , fish	1.500E+01	1.500E+01	BIOFAC(5,1)
D-5	Ac-227+D4 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)
D-5				
D-5	Ac-227+D5 , fish	1.500E+01	1.500E+01	BIOFAC(6,1)
D-5	Ac-227+D5 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5				
D-5	Ag-108m+D , fish	5.000E+00	5.000E+00	BIOFAC(7,1)
D-5	Ag-108m+D , crustacea and mollusks	7.700E+02	7.700E+02	BIOFAC(7,2)
D-5				
D-5	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(8,2)
D-5				
D-5	Am-243+D , fish	3.000E+01	3.000E+01	BIOFAC(9,1)
D-5	Am-243+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(9,2)
D-5				
D-5	C-14 , fish	5.000E+04	5.000E+04	BIOFAC(21,1)
D-5	C-14 , crustacea and mollusks	9.100E+03	9.100E+03	BIOFAC(21,2)
D-5				
D-5	Cm-243 , fish	3.000E+01	3.000E+01	BIOFAC(22,1)
D-5	Cm-243 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(22,2)
D-5				
D-5	Cm-244 , fish	3.000E+01	3.000E+01	BIOFAC(46,1)
D-5	Cm-244 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(46,2)
D-5				
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(49,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(49,2)
D-5				
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(50,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(50,2)
D-5				
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(51,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(51,2)
D-5				

Summary : RESRAD Default

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC (52,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (52,2)
D-5				
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC (54,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (54,2)
D-5				
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC (55,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (55,2)
D-5				
D-5	Fe-55 , fish	2.000E+02	2.000E+02	BIOFAC (56,1)
D-5	Fe-55 , crustacea and mollusks	3.200E+03	3.200E+03	BIOFAC (56,2)
D-5				
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC (57,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (57,2)
D-5				
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC (58,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC (58,2)
D-5				
D-5	Nb-94 , fish	3.000E+02	3.000E+02	BIOFAC (59,1)
D-5	Nb-94 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (59,2)
D-5				
D-5	Nd-144 , fish	1.000E+02	1.000E+02	BIOFAC (60,1)
D-5	Nd-144 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (60,2)
D-5				
D-5	Ni-59 , fish	1.000E+02	1.000E+02	BIOFAC (61,1)
D-5	Ni-59 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (61,2)
D-5				
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC (62,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (62,2)
D-5				
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC (63,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC (63,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC (64,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC (64,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC (70,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (70,2)
D-5				
D-5	Pb-210+D1 , fish	3.000E+02	3.000E+02	BIOFAC (71,1)
D-5	Pb-210+D1 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (71,2)
D-5				
D-5	Pb-210+D2 , fish	3.000E+02	3.000E+02	BIOFAC (72,1)
D-5	Pb-210+D2 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC (72,2)
D-5				
D-5	Pm-147 , fish	3.000E+01	3.000E+01	BIOFAC (73,1)
D-5	Pm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC (73,2)
D-5				
D-5	Po-210 , fish	1.000E+02	1.000E+02	BIOFAC (74,1)
D-5	Po-210 , crustacea and mollusks	2.000E+04	2.000E+04	BIOFAC (74,2)

Summary : RESRAD Default

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Pu-238 , fish	3.000E+01	3.000E+01	BIOFAC(75,1)
D-5	Pu-238 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(75,2)
D-5				
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(91,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(91,2)
D-5				
D-5	Pu-239+D , fish	3.000E+01	3.000E+01	BIOFAC(97,1)
D-5	Pu-239+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(97,2)
D-5				
D-5	Pu-240 , fish	3.000E+01	3.000E+01	BIOFAC(103,1)
D-5	Pu-240 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(103,2)
D-5				
D-5	Pu-241 , fish	3.000E+01	3.000E+01	BIOFAC(105,1)
D-5	Pu-241 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(105,2)
D-5				
D-5	Pu-241+D , fish	3.000E+01	3.000E+01	BIOFAC(106,1)
D-5	Pu-241+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(106,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(107,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(107,2)
D-5				
D-5	Ra-226+D1 , fish	5.000E+01	5.000E+01	BIOFAC(110,1)
D-5	Ra-226+D1 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(110,2)
D-5				
D-5	Ra-226+D2 , fish	5.000E+01	5.000E+01	BIOFAC(113,1)
D-5	Ra-226+D2 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(113,2)
D-5				
D-5	Ra-226+D3 , fish	5.000E+01	5.000E+01	BIOFAC(116,1)
D-5	Ra-226+D3 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(116,2)
D-5				
D-5	Ra-226+D4 , fish	5.000E+01	5.000E+01	BIOFAC(119,1)
D-5	Ra-226+D4 , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(119,2)
D-5				
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(122,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(122,2)
D-5				
D-5	Sb-125 , fish	1.000E+02	1.000E+02	BIOFAC(123,1)
D-5	Sb-125 , crustacea and mollusks	1.000E+01	1.000E+01	BIOFAC(123,2)
D-5				
D-5	Sm-147 , fish	2.500E+01	2.500E+01	BIOFAC(125,1)
D-5	Sm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(125,2)
D-5				
D-5	Sm-148 , fish	2.500E+01	2.500E+01	BIOFAC(126,1)
D-5	Sm-148 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(126,2)
D-5				
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(127,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(127,2)
D-5				
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(128,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(128,2)

Summary : RESRAD Default

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Dose Conversion Factor (and Related) Parameter Summary (continued)

Dose Library: Zion ROC Screen BFM Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Te-125m , fish	4.000E+02	4.000E+02	BIOFAC(129,1)
D-5	Te-125m , crustacea and mollusks	7.500E+01	7.500E+01	BIOFAC(129,2)
D-5				
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(130,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(130,2)
D-5				
D-5	Th-229+D , fish	1.000E+02	1.000E+02	BIOFAC(131,1)
D-5	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(131,2)
D-5				
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(132,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(132,2)
D-5				
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(147,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(147,2)
D-5				
D-5	U-233 , fish	1.000E+01	1.000E+01	BIOFAC(148,1)
D-5	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(148,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(149,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(149,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(164,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(164,2)
D-5				
D-5	U-236 , fish	1.000E+01	1.000E+01	BIOFAC(170,1)
D-5	U-236 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(170,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See ETEG table in Ground Pathway of Detailed Report.

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Summary : RESRAD Default

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Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	3.000E-01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Fraction of contamination that is submerged	0.000E+00	0.000E+00	---	SUBMFRACT
R011	Length parallel to aquifer flow (m)	6.200E-01	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Ag-108m	1.000E+00	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Am-241	1.000E+00	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Am-243	1.000E+00	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): C-14	1.000E+00	0.000E+00	---	S1(21)
R012	Initial principal radionuclide (pCi/g): Cm-243	1.000E+00	0.000E+00	---	S1(22)
R012	Initial principal radionuclide (pCi/g): Cm-244	1.000E+00	0.000E+00	---	S1(46)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(49)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+00	0.000E+00	---	S1(50)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(51)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+00	0.000E+00	---	S1(52)
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+00	0.000E+00	---	S1(54)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+00	0.000E+00	---	S1(55)
R012	Initial principal radionuclide (pCi/g): Fe-55	1.000E+00	0.000E+00	---	S1(56)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+00	0.000E+00	---	S1(58)
R012	Initial principal radionuclide (pCi/g): Nb-94	1.000E+00	0.000E+00	---	S1(59)
R012	Initial principal radionuclide (pCi/g): Ni-59	1.000E+00	0.000E+00	---	S1(61)
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+00	0.000E+00	---	S1(62)
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+00	0.000E+00	---	S1(63)
R012	Initial principal radionuclide (pCi/g): Pm-147	1.000E+00	0.000E+00	---	S1(73)
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+00	0.000E+00	---	S1(75)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+00	0.000E+00	---	S1(91)
R012	Initial principal radionuclide (pCi/g): Pu-240	1.000E+00	0.000E+00	---	S1(103)
R012	Initial principal radionuclide (pCi/g): Pu-241	1.000E+00	0.000E+00	---	S1(105)
R012	Initial principal radionuclide (pCi/g): Sb-125	1.000E+00	0.000E+00	---	S1(123)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+00	0.000E+00	---	S1(127)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+00	0.000E+00	---	S1(128)
R012	Concentration in groundwater (pCi/L): Ag-108m	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Am-243	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): C-14	not used	0.000E+00	---	W1(21)
R012	Concentration in groundwater (pCi/L): Cm-243	not used	0.000E+00	---	W1(22)
R012	Concentration in groundwater (pCi/L): Cm-244	not used	0.000E+00	---	W1(46)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(49)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	---	W1(50)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1 (51)
R012	Concentration in groundwater (pCi/L): Eu-152	not used	0.000E+00	---	W1 (52)
R012	Concentration in groundwater (pCi/L): Eu-154	not used	0.000E+00	---	W1 (54)
R012	Concentration in groundwater (pCi/L): Eu-155	not used	0.000E+00	---	W1 (55)
R012	Concentration in groundwater (pCi/L): Fe-55	not used	0.000E+00	---	W1 (56)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1 (58)
R012	Concentration in groundwater (pCi/L): Nb-94	not used	0.000E+00	---	W1 (59)
R012	Concentration in groundwater (pCi/L): Ni-59	not used	0.000E+00	---	W1 (61)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1 (62)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1 (63)
R012	Concentration in groundwater (pCi/L): Pm-147	not used	0.000E+00	---	W1 (73)
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1 (75)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1 (91)
R012	Concentration in groundwater (pCi/L): Pu-240	not used	0.000E+00	---	W1 (**)
R012	Concentration in groundwater (pCi/L): Pu-241	not used	0.000E+00	---	W1 (**)
R012	Concentration in groundwater (pCi/L): Sb-125	not used	0.000E+00	---	W1 (**)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1 (**)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1 (**)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.800E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.500E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	3.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	6.600E-02	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.880E+03	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	9.700E-01	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	4.200E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	7.200E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	6.250E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	8.300E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.900E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.800E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.500E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.900E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	6.600E-02	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.880E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	3.900E-03	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	3.300E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.250E+03	2.500E+02	---	UW

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Number of unsaturated zone strata	1	1	---	NS
R015	Unsat. zone 1, thickness (m)	3.450E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.800E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	3.500E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.900E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	6.600E-02	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	9.700E-01	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	2.880E+03	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Ag-108m				
R016	Contaminated zone (cm**3/g)	5.260E+01	0.000E+00	---	DCNUCC (7)
R016	Unsat. zone 1 (cm**3/g)	5.260E+01	0.000E+00	---	DCNUCU (7,1)
R016	Saturated zone (cm**3/g)	5.260E+01	0.000E+00	---	DCNUCS (7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.253E-02	ALEACH (7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (7)
R016	Distribution coefficients for Am-241				
R016	Contaminated zone (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCC (8)
R016	Unsat. zone 1 (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCU (8,1)
R016	Saturated zone (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCS (8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.700E-03	ALEACH (8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (8)
R016	Distribution coefficients for Am-243				
R016	Contaminated zone (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCC (9)
R016	Unsat. zone 1 (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCU (9,1)
R016	Saturated zone (cm**3/g)	1.770E+02	2.000E+01	---	DCNUCS (9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.700E-03	ALEACH (9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (9)
R016	Distribution coefficients for C-14				
R016	Contaminated zone (cm**3/g)	1.240E+00	0.000E+00	---	DCNUCC(21)
R016	Unsat. zone 1 (cm**3/g)	1.240E+00	0.000E+00	---	DCNUCU(21,1)
R016	Saturated zone (cm**3/g)	1.240E+00	0.000E+00	---	DCNUCS(21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.291E-01	ALEACH(21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(21)
R016	Distribution coefficients for Cm-243				
R016	Contaminated zone (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCC(22)
R016	Unsat. zone 1 (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCU(22,1)
R016	Saturated zone (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCS(22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.960E-04	ALEACH(22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(22)
R016	Distribution coefficients for Cm-244				
R016	Contaminated zone (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCC(46)
R016	Unsat. zone 1 (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCU(46,1)
R016	Saturated zone (cm**3/g)	1.990E+03	-1.000E+00	---	DCNUCS(46)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.960E-04	ALEACH(46)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(46)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.161E+03	1.000E+03	---	DCNUCC (49)
R016	Unsaturated zone 1 (cm**3/g)	1.161E+03	1.000E+03	---	DCNUCU (49,1)
R016	Saturated zone (cm**3/g)	1.161E+03	1.000E+03	---	DCNUCS (49)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.022E-03	ALEACH (49)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (49)
R016	Distribution coefficients for Cs-134				
R016	Contaminated zone (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCC (50)
R016	Unsaturated zone 1 (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCU (50,1)
R016	Saturated zone (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCS (50)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.929E-03	ALEACH (50)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (50)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCC (51)
R016	Unsaturated zone 1 (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCU (51,1)
R016	Saturated zone (cm**3/g)	6.150E+02	4.600E+03	---	DCNUCS (51)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.929E-03	ALEACH (51)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (51)
R016	Distribution coefficients for Eu-152				
R016	Contaminated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCC (52)
R016	Unsaturated zone 1 (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCU (52,1)
R016	Saturated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCS (52)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.248E-02	ALEACH (52)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (52)
R016	Distribution coefficients for Eu-154				
R016	Contaminated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCC (54)
R016	Unsaturated zone 1 (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCU (54,1)
R016	Saturated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCS (54)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.248E-02	ALEACH (54)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (54)
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCC (55)
R016	Unsaturated zone 1 (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCU (55,1)
R016	Saturated zone (cm**3/g)	9.500E+01	-1.000E+00	---	DCNUCS (55)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.248E-02	ALEACH (55)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (55)
R016	Distribution coefficients for Fe-55				
R016	Contaminated zone (cm**3/g)	2.857E+03	1.000E+03	---	DCNUCC (56)
R016	Unsaturated zone 1 (cm**3/g)	2.857E+03	1.000E+03	---	DCNUCU (56,1)
R016	Saturated zone (cm**3/g)	2.857E+03	1.000E+03	---	DCNUCS (56)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.152E-04	ALEACH (56)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (56)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for H-3				
R016	Contaminated zone (cm**3/g)	4.000E-02	0.000E+00	---	DCNUCC (58)
R016	Unsaturated zone 1 (cm**3/g)	4.000E-02	0.000E+00	---	DCNUCU (58,1)
R016	Saturated zone (cm**3/g)	4.000E-02	0.000E+00	---	DCNUCS (58)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.547E+01	ALEACH (58)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (58)
R016	Distribution coefficients for Nb-94				
R016	Contaminated zone (cm**3/g)	4.460E+01	0.000E+00	---	DCNUCC (59)
R016	Unsaturated zone 1 (cm**3/g)	4.460E+01	0.000E+00	---	DCNUCU (59,1)
R016	Saturated zone (cm**3/g)	4.460E+01	0.000E+00	---	DCNUCS (59)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.657E-02	ALEACH (59)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (59)
R016	Distribution coefficients for Ni-59				
R016	Contaminated zone (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCC (61)
R016	Unsaturated zone 1 (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCU (61,1)
R016	Saturated zone (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCS (61)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.912E-02	ALEACH (61)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (61)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCC (62)
R016	Unsaturated zone 1 (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCU (62,1)
R016	Saturated zone (cm**3/g)	6.200E+01	1.000E+03	---	DCNUCS (62)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.912E-02	ALEACH (62)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (62)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	3.750E+00	-1.000E+00	---	DCNUCC (63)
R016	Unsaturated zone 1 (cm**3/g)	3.750E+00	-1.000E+00	---	DCNUCU (63,1)
R016	Saturated zone (cm**3/g)	3.750E+00	-1.000E+00	---	DCNUCS (63)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.132E-01	ALEACH (63)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (63)
R016	Distribution coefficients for Pm-147				
R016	Contaminated zone (cm**3/g)	9.480E+01	-1.000E+00	---	DCNUCC (73)
R016	Unsaturated zone 1 (cm**3/g)	9.480E+01	-1.000E+00	---	DCNUCU (73,1)
R016	Saturated zone (cm**3/g)	9.480E+01	-1.000E+00	---	DCNUCS (73)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.251E-02	ALEACH (73)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (73)
R016	Distribution coefficients for Pu-238				
R016	Contaminated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCC (75)
R016	Unsaturated zone 1 (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCU (75,1)
R016	Saturated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCS (75)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.425E-03	ALEACH (75)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (75)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCC (91)
R016	Unsaturated zone 1 (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCU (91,1)
R016	Saturated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCS (91)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.425E-03	ALEACH (91)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (91)
	Distribution coefficients for Pu-240				
R016	Contaminated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.425E-03	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
	Distribution coefficients for Pu-241				
R016	Contaminated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	2.600E+01	2.000E+03	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	2.680E+02	2.000E+03	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.425E-03	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
	Distribution coefficients for Sb-125				
R016	Contaminated zone (cm**3/g)	1.700E+01	0.000E+00	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	1.700E+01	0.000E+00	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	1.700E+01	0.000E+00	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.962E-02	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	2.300E+00	3.000E+01	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	2.300E+00	3.000E+01	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	2.300E+00	3.000E+01	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.076E-01	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
	Distribution coefficients for Tc-99				
R016	Contaminated zone (cm**3/g)	6.000E-02	0.000E+00	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	6.000E-02	0.000E+00	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	6.000E-02	0.000E+00	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.227E+01	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	8.250E+02	2.000E+01	---	DCNUCC (1)
R016	Unsaturated zone 1 (cm**3/g)	8.250E+02	2.000E+01	---	DCNUCU (1,1)
R016	Saturated zone (cm**3/g)	8.250E+02	2.000E+01	---	DCNUCS (1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.438E-03	ALEACH (1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (1)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for daughter Gd-152				
R016	Contaminated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCC (57)
R016	Unsaturated zone 1 (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCU (57,1)
R016	Saturated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCS (57)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.438E-03	ALEACH (57)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (57)
R016	Distribution coefficients for daughter Nd-144				
R016	Contaminated zone (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCC (60)
R016	Unsaturated zone 1 (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCU (60,1)
R016	Saturated zone (cm**3/g)	1.580E+02	1.580E+02	---	DCNUCS (60)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.505E-03	ALEACH (60)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (60)
R016	Distribution coefficients for daughter Pa-231				
R016	Contaminated zone (cm**3/g)	3.800E+02	5.000E+01	---	DCNUCC (64)
R016	Unsaturated zone 1 (cm**3/g)	3.800E+02	5.000E+01	---	DCNUCU (64,1)
R016	Saturated zone (cm**3/g)	3.800E+02	5.000E+01	---	DCNUCS (64)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.121E-03	ALEACH (64)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (64)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	2.392E+03	1.000E+02	---	DCNUCC (70)
R016	Unsaturated zone 1 (cm**3/g)	2.392E+03	1.000E+02	---	DCNUCU (70,1)
R016	Saturated zone (cm**3/g)	2.392E+03	1.000E+02	---	DCNUCS (70)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.959E-04	ALEACH (70)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (70)
R016	Distribution coefficients for daughter Po-210				
R016	Contaminated zone (cm**3/g)	1.810E+02	1.000E+01	---	DCNUCC (74)
R016	Unsaturated zone 1 (cm**3/g)	1.810E+02	1.000E+01	---	DCNUCU (74,1)
R016	Saturated zone (cm**3/g)	1.810E+02	1.000E+01	---	DCNUCS (74)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.552E-03	ALEACH (74)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (74)
R016	Distribution coefficients for daughter Ra-226				
R016	Contaminated zone (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.357E-04	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)
R016	Distribution coefficients for daughter Ra-228				
R016	Contaminated zone (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCC (**)
R016	Unsaturated zone 1 (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCU (**,1)
R016	Saturated zone (cm**3/g)	3.533E+03	7.000E+01	---	DCNUCS (**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.357E-04	ALEACH (**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (**)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for daughter Sm-147				
R016	Contaminated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.438E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Sm-148				
R016	Contaminated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	8.250E+02	-1.000E+00	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.438E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Te-125m				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.235E+01	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Th-228				
R016	Contaminated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.016E-04	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Th-229				
R016	Contaminated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.016E-04	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Th-230				
R016	Contaminated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.016E-04	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter Th-232				
R016	Contaminated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	5.884E+03	6.000E+04	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.016E-04	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.411E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter U-234				
R016	Contaminated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.411E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter U-235				
R016	Contaminated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.411E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R016	Distribution coefficients for daughter U-236				
R016	Contaminated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCC(**)
R016	Unsaturated zone 1 (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCU(**,1)
R016	Saturated zone (cm**3/g)	1.260E+02	5.000E+01	---	DCNUCS(**)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.411E-03	ALEACH(**)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(**)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	2.350E-05	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	5.500E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	4.000E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	6.490E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.240E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE (1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE (2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE (3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE (4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE (5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE (6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE (7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE (8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE (9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.120E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	2.140E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	2.330E+02	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.510E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	4.780E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.150E-03	FPLANT
R018	Contamination fraction of meat	-1	-1	0.150E-04	FMEAT
R018	Contamination fraction of milk	-1	-1	0.150E-04	FMILK
R019	Livestock fodder intake for meat (kg/day)	2.830E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	6.520E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.060E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	6.000E+01	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	4.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	1.220E+00	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	1.750E+00	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	2.900E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.900E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	2.460E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	1.230E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.200E-02	8.000E-02	---	TE(3)

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	5.800E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	3.300E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	2.000E-05	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	3.000E-02	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	2.000E-02	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	9.800E-01	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	4.300E-01	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	7.000E-07	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	1.000E-10	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	2.500E-01	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	1.000E-01	2.000E-01	---	AVFG5
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	1.000E+00	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	512	---	---	NPTS

Summary : RESRAD Default

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	17	---	---	KYMAX

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	suppressed
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	active

Summary : RESRAD Default

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	0.30 square meters	Ag-108m	1.000E+00
Thickness:	0.15 meters	Am-241	1.000E+00
Cover Depth:	0.00 meters	Am-243	1.000E+00
		C-14	1.000E+00
		Cm-243	1.000E+00
		Cm-244	1.000E+00
		Co-60	1.000E+00
		Cs-134	1.000E+00
		Cs-137	1.000E+00
		Eu-152	1.000E+00
		Eu-154	1.000E+00
		Eu-155	1.000E+00
		Fe-55	1.000E+00
		H-3	1.000E+00
		Nb-94	1.000E+00
		Ni-59	1.000E+00
		Ni-63	1.000E+00
		Np-237	1.000E+00
		Pm-147	1.000E+00
		Pu-238	1.000E+00
		Pu-239	1.000E+00
		Pu-240	1.000E+00
		Pu-241	1.000E+00
		Sb-125	1.000E+00
		Sr-90	1.000E+00
		Tc-99	1.000E+00

Total Dose TDOSE(t), mrem/yr

Basic Radiation Dose Limit = 2.500E+01 mrem/yr

Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years)	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
TDOSE(t)	5.922E-01	5.275E-01	4.312E-01	2.584E-01	1.010E-01	7.865E-08	5.442E-09	5.002E-08
M(t)	2.369E-02	2.110E-02	1.725E-02	1.034E-02	4.038E-03	3.146E-09	2.177E-10	2.001E-09

Maximum TDOSE(t): 5.922E-01 mrem/yr at t = 0.000E+00 years

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	8.984E-02	0.1517	6.985E-07	0.0000	0.000E+00	0.0000	1.366E-07	0.0000	1.231E-08	0.0000	1.392E-07	0.0000	3.179E-08	0.0000
Am-241	6.297E-04	0.0011	1.105E-03	0.0019	0.000E+00	0.0000	1.601E-05	0.0000	1.017E-07	0.0000	2.076E-08	0.0000	1.531E-05	0.0000
Am-243	1.036E-02	0.0175	1.096E-03	0.0018	0.000E+00	0.0000	1.594E-05	0.0000	1.013E-07	0.0000	2.068E-08	0.0000	1.525E-05	0.0000
C-14	8.832E-09	0.0000	4.179E-08	0.0000	0.000E+00	0.0000	1.005E-07	0.0000	7.140E-09	0.0000	6.512E-09	0.0000	3.920E-10	0.0000
Cm-243	6.376E-03	0.0108	7.577E-04	0.0013	0.000E+00	0.0000	1.095E-05	0.0000	4.880E-08	0.0000	1.642E-08	0.0000	1.047E-05	0.0000
Cm-244	2.385E-06	0.0000	6.078E-04	0.0010	0.000E+00	0.0000	8.748E-06	0.0000	3.900E-08	0.0000	1.312E-08	0.0000	8.367E-06	0.0000
Co-60	1.284E-01	0.2168	5.125E-07	0.0000	0.000E+00	0.0000	9.255E-06	0.0000	1.452E-06	0.0000	2.986E-07	0.0000	1.064E-07	0.0000
Cs-134	7.424E-02	0.1254	9.798E-08	0.0000	0.000E+00	0.0000	1.189E-05	0.0000	3.033E-06	0.0000	3.412E-06	0.0000	2.628E-07	0.0000
Cs-137	3.119E-02	0.0527	7.871E-08	0.0000	0.000E+00	0.0000	9.433E-06	0.0000	2.407E-06	0.0000	2.708E-06	0.0000	2.085E-07	0.0000
Eu-152	5.998E-02	0.1013	5.349E-07	0.0000	0.000E+00	0.0000	3.849E-08	0.0000	1.241E-08	0.0000	5.679E-10	0.0000	2.651E-08	0.0000
Eu-154	6.382E-02	0.1078	6.823E-07	0.0000	0.000E+00	0.0000	5.591E-08	0.0000	1.803E-08	0.0000	8.249E-10	0.0000	3.851E-08	0.0000
Eu-155	2.193E-03	0.0037	9.568E-08	0.0000	0.000E+00	0.0000	8.678E-09	0.0000	2.799E-09	0.0000	1.280E-10	0.0000	5.977E-09	0.0000
Fe-55	0.000E+00	0.0000	5.937E-09	0.0000	0.000E+00	0.0000	2.499E-09	0.0000	1.030E-08	0.0000	4.517E-10	0.0000	2.264E-09	0.0000
H-3	0.000E+00	0.0000	8.196E-08	0.0000	0.000E+00	0.0000	6.128E-08	0.0000	9.769E-10	0.0000	7.674E-09	0.0000	9.927E-12	0.0000
Nb-94	8.665E-02	0.1463	1.021E-06	0.0000	0.000E+00	0.0000	3.626E-07	0.0000	7.067E-12	0.0000	5.247E-11	0.0000	2.975E-08	0.0000
Ni-59	0.000E+00	0.0000	6.681E-09	0.0000	0.000E+00	0.0000	4.689E-08	0.0000	8.298E-10	0.0000	2.870E-08	0.0000	8.783E-10	0.0000
Ni-63	0.000E+00	0.0000	1.551E-08	0.0000	0.000E+00	0.0000	1.284E-07	0.0000	2.272E-09	0.0000	7.859E-08	0.0000	2.405E-09	0.0000
Np-237	9.983E-03	0.0169	1.159E-03	0.0020	0.000E+00	0.0000	1.885E-04	0.0003	2.122E-06	0.0000	8.843E-08	0.0000	1.611E-05	0.0000
Pm-147	6.030E-07	0.0000	8.557E-08	0.0000	0.000E+00	0.0000	9.445E-09	0.0000	1.835E-09	0.0000	1.874E-10	0.0000	3.874E-09	0.0000
Pu-238	2.713E-06	0.0000	9.733E-04	0.0016	0.000E+00	0.0000	1.404E-05	0.0000	1.721E-07	0.0000	7.797E-09	0.0000	1.343E-05	0.0000
Pu-239	3.457E-06	0.0000	1.069E-03	0.0018	0.000E+00	0.0000	1.560E-05	0.0000	1.911E-07	0.0000	8.659E-09	0.0000	1.491E-05	0.0000
Pu-240	2.474E-06	0.0000	1.069E-03	0.0018	0.000E+00	0.0000	1.559E-05	0.0000	1.911E-07	0.0000	8.659E-09	0.0000	1.491E-05	0.0000
Pu-241	7.119E-07	0.0000	2.095E-05	0.0000	0.000E+00	0.0000	3.068E-07	0.0000	3.686E-09	0.0000	1.797E-10	0.0000	2.934E-07	0.0000
Sb-125	1.986E-02	0.0335	2.650E-08	0.0000	0.000E+00	0.0000	1.344E-07	0.0000	2.988E-09	0.0000	8.209E-10	0.0000	1.051E-08	0.0000
Sr-90	1.804E-04	0.0003	2.537E-06	0.0000	0.000E+00	0.0000	1.736E-04	0.0003	2.458E-06	0.0000	6.113E-06	0.0000	5.007E-07	0.0000
Tc-99	1.259E-07	0.0000	1.704E-09	0.0000	0.000E+00	0.0000	2.889E-06	0.0000	9.489E-10	0.0000	7.781E-08	0.0000	5.055E-10	0.0000
Total	5.838E-01	0.9857	7.864E-03	0.0133	0.000E+00	0.0000	4.939E-04	0.0008	1.239E-05	0.0000	1.306E-05	0.0000	1.103E-04	0.0002

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.984E-02	0.1517
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.766E-03	0.0030
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.149E-02	0.0194
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.651E-07	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.156E-03	0.0121
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.273E-04	0.0011
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.284E-01	0.2169
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.426E-02	0.1254
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.120E-02	0.0527
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.999E-02	0.1013
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.382E-02	0.1078
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.193E-03	0.0037
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.145E-08	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.519E-07	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.665E-02	0.1463
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.398E-08	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.272E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.135E-02	0.0192
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.040E-07	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.004E-03	0.0017
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.104E-03	0.0019
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.103E-03	0.0019
Pu-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.226E-05	0.0000
Sb-125	1.090E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.147E-11	0.0000	9.323E-13	0.0000	3.282E-13	0.0000	1.986E-02	0.0335
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.657E-04	0.0006
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.096E-06	0.0000
Total	1.090E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.147E-11	0.0000	9.323E-13	0.0000	3.282E-13	0.0000	5.922E-01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	8.710E-02	0.1651	6.750E-07	0.0000	0.000E+00	0.0000	1.320E-07	0.0000	1.190E-08	0.0000	1.345E-07	0.0000	3.072E-08	0.0000
Am-241	6.236E-04	0.0012	1.085E-03	0.0021	0.000E+00	0.0000	1.572E-05	0.0000	9.980E-08	0.0000	2.038E-08	0.0000	1.503E-05	0.0000
Am-243	1.023E-02	0.0194	1.077E-03	0.0020	0.000E+00	0.0000	1.568E-05	0.0000	9.957E-08	0.0000	2.033E-08	0.0000	1.499E-05	0.0000
C-14	8.627E-19	0.0000	4.041E-18	0.0000	0.000E+00	0.0000	2.233E-17	0.0000	5.917E-18	0.0000	6.085E-18	0.0000	3.791E-20	0.0000
Cm-243	6.182E-03	0.0117	7.320E-04	0.0014	0.000E+00	0.0000	1.058E-05	0.0000	4.715E-08	0.0000	1.586E-08	0.0000	1.012E-05	0.0000
Cm-244	2.294E-06	0.0000	5.788E-04	0.0011	0.000E+00	0.0000	8.332E-06	0.0000	3.715E-08	0.0000	1.249E-08	0.0000	7.968E-06	0.0000
Co-60	1.117E-01	0.2117	4.444E-07	0.0000	0.000E+00	0.0000	8.025E-06	0.0000	1.259E-06	0.0000	2.590E-07	0.0000	9.225E-08	0.0000
Cs-134	5.261E-02	0.0997	6.921E-08	0.0000	0.000E+00	0.0000	8.395E-06	0.0000	2.142E-06	0.0000	2.410E-06	0.0000	1.856E-07	0.0000
Cs-137	3.022E-02	0.0573	7.601E-08	0.0000	0.000E+00	0.0000	9.109E-06	0.0000	2.325E-06	0.0000	2.615E-06	0.0000	2.014E-07	0.0000
Eu-152	5.589E-02	0.1059	4.969E-07	0.0000	0.000E+00	0.0000	3.576E-08	0.0000	1.153E-08	0.0000	5.275E-10	0.0000	2.462E-08	0.0000
Eu-154	5.774E-02	0.1095	6.154E-07	0.0000	0.000E+00	0.0000	5.043E-08	0.0000	1.626E-08	0.0000	7.440E-10	0.0000	3.473E-08	0.0000
Eu-155	1.863E-03	0.0035	8.087E-08	0.0000	0.000E+00	0.0000	7.335E-09	0.0000	2.366E-09	0.0000	1.082E-10	0.0000	5.051E-09	0.0000
Fe-55	0.000E+00	0.0000	4.561E-09	0.0000	0.000E+00	0.0000	1.920E-09	0.0000	7.909E-09	0.0000	3.470E-10	0.0000	1.739E-09	0.0000
H-3	0.000E+00	0.0000	3.606E-20	0.0000	0.000E+00	0.0000	7.265E-20	0.0000	1.067E-20	0.0000	8.427E-20	0.0000	4.368E-24	0.0000
Nb-94	8.380E-02	0.1589	9.839E-07	0.0000	0.000E+00	0.0000	3.496E-07	0.0000	6.813E-12	0.0000	5.059E-11	0.0000	2.868E-08	0.0000
Ni-59	0.000E+00	0.0000	6.489E-09	0.0000	0.000E+00	0.0000	4.554E-08	0.0000	8.061E-10	0.0000	2.788E-08	0.0000	8.530E-10	0.0000
Ni-63	0.000E+00	0.0000	1.496E-08	0.0000	0.000E+00	0.0000	1.238E-07	0.0000	2.192E-09	0.0000	7.583E-08	0.0000	2.320E-09	0.0000
Np-237	7.252E-03	0.0137	8.385E-04	0.0016	0.000E+00	0.0000	1.367E-04	0.0003	1.538E-06	0.0000	6.411E-08	0.0000	1.166E-05	0.0000
Pm-147	4.556E-07	0.0000	6.423E-08	0.0000	0.000E+00	0.0000	7.091E-09	0.0000	1.378E-09	0.0000	1.407E-10	0.0000	2.908E-09	0.0000
Pu-238	2.679E-06	0.0000	9.517E-04	0.0018	0.000E+00	0.0000	1.373E-05	0.0000	1.683E-07	0.0000	7.625E-09	0.0000	1.313E-05	0.0000
Pu-239	3.424E-06	0.0000	1.054E-03	0.0020	0.000E+00	0.0000	1.537E-05	0.0000	1.884E-07	0.0000	8.534E-09	0.0000	1.470E-05	0.0000
Pu-240	2.459E-06	0.0000	1.054E-03	0.0020	0.000E+00	0.0000	1.537E-05	0.0000	1.884E-07	0.0000	8.533E-09	0.0000	1.470E-05	0.0000
Pu-241	1.652E-06	0.0000	2.137E-05	0.0000	0.000E+00	0.0000	3.128E-07	0.0000	3.618E-09	0.0000	2.007E-10	0.0000	2.991E-07	0.0000
Sb-125	1.431E-02	0.0271	1.904E-08	0.0000	0.000E+00	0.0000	9.734E-08	0.0000	2.168E-09	0.0000	5.993E-10	0.0000	7.558E-09	0.0000
Sr-90	1.054E-04	0.0002	1.476E-06	0.0000	0.000E+00	0.0000	1.013E-04	0.0002	1.443E-06	0.0000	3.594E-06	0.0000	2.912E-07	0.0000
Tc-99	5.868E-13	0.0000	7.912E-15	0.0000	0.000E+00	0.0000	1.875E-11	0.0000	1.290E-14	0.0000	1.062E-12	0.0000	2.347E-15	0.0000
Total	5.196E-01	0.9850	7.397E-03	0.0140	0.000E+00	0.0000	3.595E-04	0.0007	9.596E-06	0.0000	9.276E-06	0.0000	1.035E-04	0.0002

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.711E-02	0.1651
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.739E-03	0.0033
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.134E-02	0.0215
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.927E-17	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.935E-03	0.0131
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.975E-04	0.0011
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.117E-01	0.2117
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.263E-02	0.0998
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.023E-02	0.0573
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.589E-02	0.1059
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.774E-02	0.1095
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.863E-03	0.0035
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.648E-08	0.0000
H-3	5.985E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.360E-11	0.0000	6.189E-13	0.0000	2.950E-12	0.0000	5.986E-07	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.381E-02	0.1589
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.157E-08	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.191E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.240E-03	0.0156
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.314E-07	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.815E-04	0.0019
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.088E-03	0.0021
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.087E-03	0.0021
Pu-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.364E-05	0.0000
Sb-125	2.744E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.024E-11	0.0000	2.615E-12	0.0000	9.791E-13	0.0000	1.431E-02	0.0271
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.135E-04	0.0004
Tc-99	2.368E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.809E-10	0.0000	6.529E-13	0.0000	3.801E-11	0.0000	2.368E-05	0.0000
Total	2.702E-05	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	7.247E-10	0.0000	3.887E-12	0.0000	4.194E-11	0.0000	5.275E-01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	8.186E-02	0.1898	6.301E-07	0.0000	0.000E+00	0.0000	1.232E-07	0.0000	1.110E-08	0.0000	1.256E-07	0.0000	2.867E-08	0.0000
Am-241	6.114E-04	0.0014	1.045E-03	0.0024	0.000E+00	0.0000	1.514E-05	0.0000	9.616E-08	0.0000	1.964E-08	0.0000	1.448E-05	0.0000
Am-243	9.977E-03	0.0231	1.041E-03	0.0024	0.000E+00	0.0000	1.515E-05	0.0000	9.625E-08	0.0000	1.965E-08	0.0000	1.449E-05	0.0000
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	5.810E-03	0.0135	6.831E-04	0.0016	0.000E+00	0.0000	9.869E-06	0.0000	4.400E-08	0.0000	1.480E-08	0.0000	9.439E-06	0.0000
Cm-244	2.123E-06	0.0000	5.248E-04	0.0012	0.000E+00	0.0000	7.555E-06	0.0000	3.371E-08	0.0000	1.132E-08	0.0000	7.225E-06	0.0000
Co-60	8.441E-02	0.1957	3.340E-07	0.0000	0.000E+00	0.0000	6.032E-06	0.0000	9.464E-07	0.0000	1.946E-07	0.0000	6.934E-08	0.0000
Cs-134	2.641E-02	0.0613	3.451E-08	0.0000	0.000E+00	0.0000	4.187E-06	0.0000	1.068E-06	0.0000	1.202E-06	0.0000	9.255E-08	0.0000
Cs-137	2.836E-02	0.0658	7.084E-08	0.0000	0.000E+00	0.0000	8.490E-06	0.0000	2.167E-06	0.0000	2.437E-06	0.0000	1.877E-07	0.0000
Eu-152	4.850E-02	0.1125	4.286E-07	0.0000	0.000E+00	0.0000	3.084E-08	0.0000	9.947E-09	0.0000	4.550E-10	0.0000	2.124E-08	0.0000
Eu-154	4.724E-02	0.1096	5.004E-07	0.0000	0.000E+00	0.0000	4.101E-08	0.0000	1.323E-08	0.0000	6.050E-10	0.0000	2.824E-08	0.0000
Eu-155	1.344E-03	0.0031	5.776E-08	0.0000	0.000E+00	0.0000	5.239E-09	0.0000	1.689E-09	0.0000	7.728E-11	0.0000	3.608E-09	0.0000
Fe-55	0.000E+00	0.0000	2.690E-09	0.0000	0.000E+00	0.0000	1.132E-09	0.0000	4.665E-09	0.0000	2.047E-10	0.0000	1.026E-09	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	7.837E-02	0.1817	9.140E-07	0.0000	0.000E+00	0.0000	3.248E-07	0.0000	6.328E-12	0.0000	4.699E-11	0.0000	2.664E-08	0.0000
Ni-59	0.000E+00	0.0000	6.119E-09	0.0000	0.000E+00	0.0000	4.294E-08	0.0000	7.601E-10	0.0000	2.629E-08	0.0000	8.043E-10	0.0000
Ni-63	0.000E+00	0.0000	1.391E-08	0.0000	0.000E+00	0.0000	1.152E-07	0.0000	2.039E-09	0.0000	7.052E-08	0.0000	2.157E-09	0.0000
Np-237	3.826E-03	0.0089	4.391E-04	0.0010	0.000E+00	0.0000	7.156E-05	0.0002	8.051E-07	0.0000	3.357E-08	0.0000	6.106E-06	0.0000
Pm-147	2.601E-07	0.0000	3.618E-08	0.0000	0.000E+00	0.0000	3.994E-09	0.0000	7.761E-10	0.0000	7.923E-11	0.0000	1.638E-09	0.0000
Pu-238	2.611E-06	0.0000	9.097E-04	0.0021	0.000E+00	0.0000	1.313E-05	0.0000	1.609E-07	0.0000	7.289E-09	0.0000	1.255E-05	0.0000
Pu-239	3.358E-06	0.0000	1.023E-03	0.0024	0.000E+00	0.0000	1.493E-05	0.0000	1.829E-07	0.0000	8.287E-09	0.0000	1.427E-05	0.0000
Pu-240	2.431E-06	0.0000	1.023E-03	0.0024	0.000E+00	0.0000	1.492E-05	0.0000	1.829E-07	0.0000	8.285E-09	0.0000	1.427E-05	0.0000
Pu-241	3.356E-06	0.0000	2.205E-05	0.0001	0.000E+00	0.0000	3.223E-07	0.0000	3.485E-09	0.0000	2.372E-10	0.0000	3.082E-07	0.0000
Sb-125	7.430E-03	0.0172	9.820E-09	0.0000	0.000E+00	0.0000	5.019E-08	0.0000	1.118E-09	0.0000	3.091E-10	0.0000	3.898E-09	0.0000
Sr-90	3.596E-05	0.0001	4.991E-07	0.0000	0.000E+00	0.0000	3.427E-05	0.0001	4.882E-07	0.0000	1.216E-06	0.0000	9.852E-08	0.0000
Tc-99	1.275E-23	0.0000	1.705E-25	0.0000	0.000E+00	0.0000	4.041E-22	0.0000	2.781E-25	0.0000	2.289E-23	0.0000	5.057E-26	0.0000
Total	4.242E-01	0.9837	6.715E-03	0.0156	0.000E+00	0.0000	2.163E-04	0.0005	6.321E-06	0.0000	5.397E-06	0.0000	9.371E-05	0.0002

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
 As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.186E-02	0.1898
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.686E-03	0.0039
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.105E-02	0.0256
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.513E-03	0.0151
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.418E-04	0.0013
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.442E-02	0.1958
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.642E-02	0.0613
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.837E-02	0.0658
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.850E-02	0.1125
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.724E-02	0.1096
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.344E-03	0.0031
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.718E-09	0.0000
H-3	5.348E-28	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.348E-28	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.837E-02	0.1817
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.692E-08	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.038E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.344E-03	0.0101
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.027E-07	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.382E-04	0.0022
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.056E-03	0.0024
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.055E-03	0.0024
Pu-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.604E-05	0.0001
Sb-125	1.661E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.830E-11	0.0000	1.582E-12	0.0000	5.925E-13	0.0000	7.431E-03	0.0172
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.253E-05	0.0002
Tc-99	9.870E-13	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.699E-17	0.0000	7.020E-20	0.0000	5.111E-18	0.0000	9.871E-13	0.0000
Total	1.661E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.830E-11	0.0000	1.582E-12	0.0000	5.925E-13	0.0000	4.312E-01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	6.569E-02	0.2542	4.933E-07	0.0000	0.000E+00	0.0000	9.646E-08	0.0000	8.695E-09	0.0000	9.832E-08	0.0000	2.245E-08	0.0000
Am-241	5.706E-04	0.0022	9.145E-04	0.0035	0.000E+00	0.0000	1.325E-05	0.0001	8.415E-08	0.0000	1.718E-08	0.0000	1.267E-05	0.0000
Am-243	9.110E-03	0.0353	9.210E-04	0.0036	0.000E+00	0.0000	1.341E-05	0.0001	8.515E-08	0.0000	1.738E-08	0.0000	1.282E-05	0.0000
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	4.665E-03	0.0181	5.342E-04	0.0021	0.000E+00	0.0000	7.718E-06	0.0000	3.443E-08	0.0000	1.157E-08	0.0000	7.381E-06	0.0000
Cm-244	1.618E-06	0.0000	3.714E-04	0.0014	0.000E+00	0.0000	5.346E-06	0.0000	2.392E-08	0.0000	8.005E-09	0.0000	5.113E-06	0.0000
Co-60	3.160E-02	0.1223	1.225E-07	0.0000	0.000E+00	0.0000	2.213E-06	0.0000	3.472E-07	0.0000	7.140E-08	0.0000	2.543E-08	0.0000
Cs-134	2.362E-03	0.0091	3.012E-09	0.0000	0.000E+00	0.0000	3.654E-07	0.0000	9.326E-08	0.0000	1.049E-07	0.0000	8.077E-09	0.0000
Cs-137	2.265E-02	0.0876	5.519E-08	0.0000	0.000E+00	0.0000	6.615E-06	0.0000	1.688E-06	0.0000	1.899E-06	0.0000	1.462E-07	0.0000
Eu-152	2.944E-02	0.1139	2.545E-07	0.0000	0.000E+00	0.0000	1.832E-08	0.0000	5.907E-09	0.0000	2.702E-10	0.0000	1.261E-08	0.0000
Eu-154	2.334E-02	0.0903	2.418E-07	0.0000	0.000E+00	0.0000	1.982E-08	0.0000	6.391E-09	0.0000	2.923E-10	0.0000	1.365E-08	0.0000
Eu-155	4.285E-04	0.0017	1.772E-08	0.0000	0.000E+00	0.0000	1.607E-09	0.0000	5.182E-10	0.0000	2.371E-11	0.0000	1.107E-09	0.0000
Fe-55	0.000E+00	0.0000	4.226E-10	0.0000	0.000E+00	0.0000	1.779E-10	0.0000	7.328E-10	0.0000	3.215E-11	0.0000	1.612E-10	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	6.179E-02	0.2391	7.036E-07	0.0000	0.000E+00	0.0000	2.500E-07	0.0000	4.872E-12	0.0000	3.618E-11	0.0000	2.051E-08	0.0000
Ni-59	0.000E+00	0.0000	4.964E-09	0.0000	0.000E+00	0.0000	3.484E-08	0.0000	6.167E-10	0.0000	2.133E-08	0.0000	6.525E-10	0.0000
Ni-63	0.000E+00	0.0000	1.075E-08	0.0000	0.000E+00	0.0000	8.902E-08	0.0000	1.576E-09	0.0000	5.451E-08	0.0000	1.667E-09	0.0000
Np-237	4.071E-04	0.0016	4.546E-05	0.0002	0.000E+00	0.0000	7.409E-06	0.0000	8.335E-08	0.0000	3.478E-09	0.0000	6.322E-07	0.0000
Pm-147	3.651E-08	0.0000	4.837E-09	0.0000	0.000E+00	0.0000	5.339E-10	0.0000	1.037E-10	0.0000	1.059E-11	0.0000	2.190E-10	0.0000
Pu-238	2.386E-06	0.0000	7.740E-04	0.0030	0.000E+00	0.0000	1.117E-05	0.0000	1.369E-07	0.0000	6.205E-09	0.0000	1.068E-05	0.0000
Pu-239	3.130E-06	0.0000	9.200E-04	0.0036	0.000E+00	0.0000	1.342E-05	0.0001	1.644E-07	0.0000	7.450E-09	0.0000	1.283E-05	0.0000
Pu-240	2.334E-06	0.0000	9.193E-04	0.0036	0.000E+00	0.0000	1.341E-05	0.0001	1.643E-07	0.0000	7.444E-09	0.0000	1.282E-05	0.0000
Pu-241	7.796E-06	0.0000	2.296E-05	0.0001	0.000E+00	0.0000	3.345E-07	0.0000	3.047E-09	0.0000	3.179E-10	0.0000	3.198E-07	0.0000
Sb-125	7.473E-04	0.0029	9.636E-10	0.0000	0.000E+00	0.0000	4.925E-09	0.0000	1.097E-10	0.0000	3.033E-11	0.0000	3.824E-10	0.0000
Sr-90	8.322E-07	0.0000	1.120E-08	0.0000	0.000E+00	0.0000	7.690E-07	0.0000	1.096E-08	0.0000	2.728E-08	0.0000	2.210E-09	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.528E-01	0.9783	5.425E-03	0.0210	0.000E+00	0.0000	9.594E-05	0.0004	2.944E-06	0.0000	2.356E-06	0.0000	7.552E-05	0.0003

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.569E-02	0.2542
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.511E-03	0.0058
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.006E-02	0.0389
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.214E-03	0.0202
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.835E-04	0.0015
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.161E-02	0.1223
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.363E-03	0.0091
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.266E-02	0.0877
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.944E-02	0.1139
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.334E-02	0.0903
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.285E-04	0.0017
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.527E-09	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.179E-02	0.2391
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.240E-08	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.575E-07	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.607E-04	0.0018
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.221E-08	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.983E-04	0.0031
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.496E-04	0.0037
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.480E-04	0.0037
Pu-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.142E-05	0.0001
Sb-125	2.910E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.207E-12	0.0000	2.773E-13	0.0000	1.038E-13	0.0000	7.476E-04	0.0029
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.653E-06	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.910E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.207E-12	0.0000	2.773E-13	0.0000	1.038E-13	0.0000	2.584E-01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	3.398E-02	0.3365	2.361E-07	0.0000	0.000E+00	0.0000	4.618E-08	0.0000	4.162E-09	0.0000	4.706E-08	0.0000	1.075E-08	0.0000
Am-241	4.674E-04	0.0046	6.015E-04	0.0060	0.000E+00	0.0000	8.717E-06	0.0001	5.535E-08	0.0000	1.130E-08	0.0000	8.334E-06	0.0001
Am-243	6.877E-03	0.0681	6.247E-04	0.0062	0.000E+00	0.0000	9.094E-06	0.0001	5.779E-08	0.0000	1.179E-08	0.0000	8.694E-06	0.0001
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	2.426E-03	0.0240	2.549E-04	0.0025	0.000E+00	0.0000	3.683E-06	0.0000	1.646E-08	0.0000	5.517E-09	0.0000	3.522E-06	0.0000
Cm-244	7.465E-07	0.0000	1.335E-04	0.0013	0.000E+00	0.0000	1.922E-06	0.0000	8.713E-09	0.0000	2.864E-09	0.0000	1.838E-06	0.0000
Co-60	1.848E-03	0.0183	6.719E-09	0.0000	0.000E+00	0.0000	1.214E-07	0.0000	1.905E-08	0.0000	3.917E-09	0.0000	1.395E-09	0.0000
Cs-134	2.313E-06	0.0000	2.732E-12	0.0000	0.000E+00	0.0000	3.315E-10	0.0000	8.460E-11	0.0000	9.518E-11	0.0000	7.326E-12	0.0000
Cs-137	1.156E-02	0.1145	2.604E-08	0.0000	0.000E+00	0.0000	3.122E-06	0.0000	7.967E-07	0.0000	8.963E-07	0.0000	6.900E-08	0.0000
Eu-152	6.852E-03	0.0679	5.530E-08	0.0000	0.000E+00	0.0000	3.980E-09	0.0000	1.283E-09	0.0000	5.871E-11	0.0000	2.741E-09	0.0000
Eu-154	3.018E-03	0.0299	2.915E-08	0.0000	0.000E+00	0.0000	2.389E-09	0.0000	7.704E-10	0.0000	3.524E-11	0.0000	1.645E-09	0.0000
Eu-155	1.609E-05	0.0002	5.829E-10	0.0000	0.000E+00	0.0000	5.288E-11	0.0000	1.705E-11	0.0000	7.800E-13	0.0000	3.641E-11	0.0000
Fe-55	0.000E+00	0.0000	2.055E-12	0.0000	0.000E+00	0.0000	8.650E-13	0.0000	3.564E-12	0.0000	1.564E-13	0.0000	7.837E-13	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	3.038E-02	0.3010	3.209E-07	0.0000	0.000E+00	0.0000	1.141E-07	0.0000	2.222E-12	0.0000	1.650E-11	0.0000	9.355E-09	0.0000
Ni-59	0.000E+00	0.0000	2.629E-09	0.0000	0.000E+00	0.0000	1.846E-08	0.0000	3.267E-10	0.0000	1.130E-08	0.0000	3.456E-10	0.0000
Ni-63	0.000E+00	0.0000	4.960E-09	0.0000	0.000E+00	0.0000	4.106E-08	0.0000	7.269E-10	0.0000	2.515E-08	0.0000	7.691E-10	0.0000
Np-237	6.583E-07	0.0000	6.980E-08	0.0000	0.000E+00	0.0000	1.096E-08	0.0000	1.240E-10	0.0000	6.695E-12	0.0000	9.435E-10	0.0000
Pm-147	1.325E-10	0.0000	1.483E-11	0.0000	0.000E+00	0.0000	1.637E-12	0.0000	3.181E-13	0.0000	3.248E-14	0.0000	6.714E-13	0.0000
Pu-238	1.841E-06	0.0000	4.697E-04	0.0047	0.000E+00	0.0000	6.777E-06	0.0001	8.306E-08	0.0000	3.771E-09	0.0000	6.480E-06	0.0001
Pu-239	2.517E-06	0.0000	6.535E-04	0.0065	0.000E+00	0.0000	9.533E-06	0.0001	1.168E-07	0.0000	5.292E-09	0.0000	9.115E-06	0.0001
Pu-240	2.079E-06	0.0000	6.520E-04	0.0065	0.000E+00	0.0000	9.511E-06	0.0001	1.165E-07	0.0000	5.280E-09	0.0000	9.093E-06	0.0001
Pu-241	1.255E-05	0.0001	1.899E-05	0.0002	0.000E+00	0.0000	2.758E-07	0.0000	2.001E-09	0.0000	3.262E-10	0.0000	2.636E-07	0.0000
Sb-125	1.025E-06	0.0000	1.221E-12	0.0000	0.000E+00	0.0000	6.244E-12	0.0000	1.390E-13	0.0000	3.845E-14	0.0000	4.848E-13	0.0000
Sr-90	1.722E-11	0.0000	2.095E-13	0.0000	0.000E+00	0.0000	1.439E-11	0.0000	2.050E-13	0.0000	5.106E-13	0.0000	4.136E-14	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	9.745E-02	0.9652	3.409E-03	0.0338	0.000E+00	0.0000	5.299E-05	0.0005	1.280E-06	0.0000	1.030E-06	0.0000	4.744E-05	0.0005

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.398E-02	0.3365
Am-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.086E-03	0.0108
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.520E-03	0.0745
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.688E-03	0.0266
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.380E-04	0.0014
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.848E-03	0.0183
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.313E-06	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.156E-02	0.1145
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.852E-03	0.0679
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.018E-03	0.0299
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.609E-05	0.0002
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.424E-12	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.039E-02	0.3010
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.306E-08	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.267E-08	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.402E-07	0.0000
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.500E-10	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.849E-04	0.0048
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.748E-04	0.0067
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.728E-04	0.0067
Pu-241	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.209E-05	0.0003
Sb-125	2.229E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.456E-14	0.0000	2.123E-15	0.0000	7.949E-16	0.0000	1.027E-06	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.258E-11	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.229E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.456E-14	0.0000	2.123E-15	0.0000	7.949E-16	0.0000	1.010E-01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	8.278E-12	0.0001	4.090E-17	0.0000	0.000E+00	0.0000	8.040E-14	0.0000	4.776E-15	0.0000	1.111E-13	0.0000	1.861E-18	0.0000
Am-241	1.344E-12	0.0000	3.143E-13	0.0000	0.000E+00	0.0000	4.576E-11	0.0006	6.193E-14	0.0000	2.406E-14	0.0000	4.355E-15	0.0000
Am-243	6.607E-12	0.0001	3.634E-13	0.0000	0.000E+00	0.0000	5.314E-11	0.0007	7.212E-14	0.0000	2.789E-14	0.0000	5.057E-15	0.0000
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	6.840E-13	0.0000	4.394E-14	0.0000	0.000E+00	0.0000	6.381E-12	0.0001	6.189E-15	0.0000	3.844E-15	0.0000	6.073E-16	0.0000
Cm-244	6.030E-15	0.0000	9.558E-15	0.0000	0.000E+00	0.0000	1.385E-12	0.0000	1.635E-15	0.0000	7.669E-16	0.0000	1.318E-16	0.0000
Co-60	2.616E-16	0.0000	6.250E-22	0.0000	0.000E+00	0.0000	1.135E-16	0.0000	1.110E-16	0.0000	3.149E-17	0.0000	1.298E-22	0.0000
Cs-134	1.907E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.990E-25	0.0000	2.172E-25	0.0000	3.837E-25	0.0000	0.000E+00	0.0000
Cs-137	2.700E-12	0.0000	4.293E-18	0.0000	0.000E+00	0.0000	5.173E-12	0.0001	5.723E-12	0.0001	1.011E-11	0.0001	1.137E-17	0.0000
Eu-152	1.186E-13	0.0000	6.154E-19	0.0000	0.000E+00	0.0000	4.452E-16	0.0000	3.880E-17	0.0000	3.495E-18	0.0000	3.050E-20	0.0000
Eu-154	6.511E-15	0.0000	4.185E-20	0.0000	0.000E+00	0.0000	3.448E-17	0.0000	3.003E-18	0.0000	2.704E-19	0.0000	2.362E-21	0.0000
Eu-155	5.761E-19	0.0000	9.180E-24	0.0000	0.000E+00	0.0000	8.371E-21	0.0000	7.277E-22	0.0000	6.549E-23	0.0000	5.734E-25	0.0000
Fe-55	0.000E+00	0.0000	4.205E-29	0.0000	0.000E+00	0.0000	1.779E-25	0.0000	1.611E-25	0.0000	1.351E-26	0.0000	1.604E-29	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	6.413E-12	0.0001	4.699E-17	0.0000	0.000E+00	0.0000	1.679E-13	0.0000	5.285E-18	0.0000	7.603E-17	0.0000	1.370E-18	0.0000
Ni-59	0.000E+00	0.0000	6.476E-19	0.0000	0.000E+00	0.0000	4.570E-14	0.0000	3.891E-15	0.0000	2.044E-13	0.0000	8.513E-20	0.0000
Ni-63	0.000E+00	0.0000	7.553E-19	0.0000	0.000E+00	0.0000	6.287E-14	0.0000	5.351E-15	0.0000	2.811E-13	0.0000	1.171E-19	0.0000
Np-237	2.083E-18	0.0000	1.514E-18	0.0000	0.000E+00	0.0000	5.706E-17	0.0000	9.703E-19	0.0000	3.355E-18	0.0000	5.340E-21	0.0000
Pm-147	1.891E-27	0.0000	2.496E-24	0.0000	0.000E+00	0.0000	1.220E-22	0.0000	5.626E-24	0.0000	1.185E-24	0.0000	1.045E-26	0.0000
Pu-238	8.513E-14	0.0000	1.855E-13	0.0000	0.000E+00	0.0000	2.690E-11	0.0003	7.023E-14	0.0000	6.108E-15	0.0000	2.560E-15	0.0000
Pu-239	4.987E-14	0.0000	4.463E-13	0.0000	0.000E+00	0.0000	6.540E-11	0.0008	1.708E-13	0.0000	1.472E-14	0.0000	6.224E-15	0.0000
Pu-240	1.497E-13	0.0000	4.428E-13	0.0000	0.000E+00	0.0000	6.490E-11	0.0008	1.695E-13	0.0000	1.461E-14	0.0000	6.176E-15	0.0000
Pu-241	4.796E-14	0.0000	1.128E-14	0.0000	0.000E+00	0.0000	1.643E-12	0.0000	2.236E-15	0.0000	8.606E-16	0.0000	1.563E-16	0.0000
Sb-125	3.206E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.203E-26	0.0000	6.030E-28	0.0000	3.197E-28	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.649E-11	0.0003	1.817E-12	0.0000	0.000E+00	0.0000	2.710E-10	0.0034	6.292E-12	0.0001	1.080E-11	0.0001	2.528E-14	0.0000

Summary : RESRAD Default

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.474E-12	0.0001
Am-241	1.549E-08	0.1970	0.000E+00	0.0000	0.000E+00	0.0000	1.820E-13	0.0000	2.490E-15	0.0000	1.413E-16	0.0000	1.554E-08	0.1976
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.022E-11	0.0008
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.119E-12	0.0001
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.403E-12	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.177E-16	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.906E-25	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.371E-11	0.0003
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.191E-13	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.549E-15	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.853E-19	0.0000
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.526E-25	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.581E-12	0.0001
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.540E-13	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.494E-13	0.0000
Np-237	6.241E-08	0.7935	0.000E+00	0.0000	0.000E+00	0.0000	7.364E-13	0.0000	1.016E-14	0.0000	8.154E-16	0.0000	6.241E-08	0.7935
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.313E-22	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.725E-11	0.0003
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.609E-11	0.0008
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.568E-11	0.0008
Pu-241	4.332E-10	0.0055	0.000E+00	0.0000	0.000E+00	0.0000	5.087E-15	0.0000	6.960E-17	0.0000	3.947E-18	0.0000	4.349E-10	0.0055
Sb-125	1.052E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.160E-21	0.0000	1.003E-22	0.0000	3.753E-23	0.0000	1.052E-16	0.0000
Sr-90	6.232E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.095E-24	0.0000	8.292E-25	0.0000	1.611E-24	0.0000	6.232E-19	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	7.833E-08	0.9960	0.000E+00	0.0000	0.000E+00	0.0000	9.235E-13	0.0000	1.272E-14	0.0000	9.606E-16	0.0000	7.865E-08	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Am-241	4.632E-09	0.8512	0.000E+00	0.0000	0.000E+00	0.0000	5.439E-14	0.0000	7.441E-16	0.0000	4.221E-17	0.0000	4.632E-09	0.8512
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-59	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-63	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Np-237	6.671E-10	0.1226	0.000E+00	0.0000	0.000E+00	0.0000	7.775E-15	0.0000	8.486E-17	0.0000	2.403E-16	0.0000	6.671E-10	0.1226
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-241	1.429E-10	0.0263	0.000E+00	0.0000	0.000E+00	0.0000	1.678E-15	0.0000	2.295E-17	0.0000	1.302E-18	0.0000	1.429E-10	0.0263
Sb-125	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	5.442E-09	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.384E-14	0.0000	8.519E-16	0.0000	2.838E-16	0.0000	5.442E-09	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ag-108m	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Am-241	1.471E-09	0.0294	0.000E+00	0.0000	0.000E+00	0.0000	1.727E-14	0.0000	2.363E-16	0.0000	1.341E-17	0.0000	1.471E-09	0.0294
Am-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cm-244	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-134	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-154	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Eu-155	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Fe-55	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Nb-94	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Ni-59	4.770E-08	0.9535	0.000E+00	0.0000	0.000E+00	0.0000	5.752E-13	0.0000	3.791E-14	0.0000	1.369E-12	0.0000	4.770E-08	0.9535
Ni-63	1.293E-10	0.0026	0.000E+00	0.0000	0.000E+00	0.0000	1.559E-15	0.0000	1.027E-16	0.0000	3.712E-15	0.0000	1.293E-10	0.0026
Np-237	6.771E-10	0.0135	0.000E+00	0.0000	0.000E+00	0.0000	7.892E-15	0.0000	8.479E-17	0.0000	2.396E-16	0.0000	6.771E-10	0.0135
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-241	4.542E-11	0.0009	0.000E+00	0.0000	0.000E+00	0.0000	5.334E-16	0.0000	7.288E-18	0.0000	4.138E-19	0.0000	4.542E-11	0.0009
Sb-125	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Tc-99	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	5.002E-08	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.025E-13	0.0000	3.834E-14	0.0000	1.373E-12	0.0000	5.002E-08	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
 Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ag-108m+D	Ag-108m+D	1.000E+00	8.984E-02	8.711E-02	8.186E-02	6.569E-02	3.398E-02	8.474E-12	0.000E+00	0.000E+00
Am-241	Am-241	1.000E+00	1.766E-03	1.739E-03	1.686E-03	1.511E-03	1.086E-03	4.751E-11	0.000E+00	0.000E+00
Am-241	Np-237+D	1.000E+00	1.920E-09	5.006E-09	8.725E-09	1.146E-08	8.511E-09	1.549E-08	4.632E-09	1.471E-09
Am-241	U-233	1.000E+00	7.712E-17	4.887E-16	2.094E-15	9.941E-15	2.406E-14	6.736E-15	1.876E-14	3.559E-14
Am-241	Th-229+D	1.000E+00	1.120E-19	1.561E-18	1.557E-17	2.533E-16	2.255E-15	1.540E-16	2.934E-16	8.259E-16
Am-241	ΣDSR(j)		1.766E-03	1.739E-03	1.686E-03	1.511E-03	1.086E-03	1.554E-08	4.632E-09	1.471E-09
Am-243+D	Am-243+D	9.829E-01	1.129E-02	1.115E-02	1.086E-02	9.885E-03	7.390E-03	5.902E-11	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	9.829E-01	1.554E-08	4.598E-08	1.040E-07	2.783E-07	5.613E-07	1.665E-13	0.000E+00	0.000E+00
Am-243+D	U-235+D	9.829E-01	4.047E-17	2.800E-16	1.441E-15	1.169E-14	7.253E-14	1.457E-21	0.000E+00	0.000E+00
Am-243+D	Pa-231	9.829E-01	1.321E-22	1.961E-21	2.226E-20	5.310E-19	9.252E-18	9.269E-23	0.000E+00	0.000E+00
Am-243+D	Ac-227+D	9.829E-01	5.855E-24	1.784E-22	4.329E-21	2.947E-19	1.369E-17	7.601E-24	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		1.129E-02	1.115E-02	1.086E-02	9.885E-03	7.391E-03	5.919E-11	0.000E+00	0.000E+00
Am-243+D	Am-243+D	2.720E-03	3.126E-05	3.085E-05	3.005E-05	2.736E-05	2.045E-05	1.634E-13	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	2.720E-03	4.301E-11	1.273E-10	2.878E-10	7.701E-10	1.553E-09	4.608E-16	0.000E+00	0.000E+00
Am-243+D	U-235+D	2.720E-03	1.120E-19	7.749E-19	3.989E-18	3.236E-17	2.007E-16	4.034E-24	0.000E+00	0.000E+00
Am-243+D	Pa-231	2.720E-03	3.656E-25	5.428E-24	6.162E-23	1.470E-21	2.561E-20	2.565E-25	0.000E+00	0.000E+00
Am-243+D	Ac-227+D1	2.720E-03	1.629E-26	4.966E-25	1.206E-23	8.209E-22	3.814E-20	2.062E-26	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		3.126E-05	3.085E-05	3.005E-05	2.736E-05	2.046E-05	1.638E-13	0.000E+00	0.000E+00
Am-243+D	Am-243+D	1.375E-02	1.580E-04	1.560E-04	1.519E-04	1.383E-04	1.034E-04	8.259E-13	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	1.375E-02	2.175E-10	6.434E-10	1.455E-09	3.894E-09	7.854E-09	2.330E-15	0.000E+00	0.000E+00
Am-243+D	U-235+D	1.375E-02	5.663E-19	3.918E-18	2.016E-17	1.636E-16	1.015E-15	2.039E-23	0.000E+00	0.000E+00
Am-243+D	Pa-231	1.375E-02	1.848E-24	2.744E-23	3.115E-22	7.430E-21	1.295E-19	1.297E-24	0.000E+00	0.000E+00
Am-243+D	Ac-227+D2	1.375E-02	7.448E-26	2.270E-24	5.511E-23	3.750E-21	1.740E-19	1.027E-25	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		1.580E-04	1.560E-04	1.519E-04	1.383E-04	1.034E-04	8.282E-13	0.000E+00	0.000E+00
Am-243+D	Am-243+D	3.806E-05	4.374E-07	4.317E-07	4.205E-07	3.828E-07	2.862E-07	2.286E-15	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	3.806E-05	6.019E-13	1.781E-12	4.027E-12	1.078E-11	2.174E-11	6.448E-18	0.000E+00	0.000E+00
Am-243+D	U-235+D	3.806E-05	1.567E-21	1.084E-20	5.581E-20	4.527E-19	2.809E-18	5.644E-26	0.000E+00	0.000E+00
Am-243+D	Pa-231	3.806E-05	5.115E-27	7.595E-26	8.622E-25	2.056E-23	3.583E-22	3.589E-27	0.000E+00	0.000E+00
Am-243+D	Ac-227+D3	3.806E-05	2.076E-28	6.329E-27	1.536E-25	1.046E-23	4.852E-22	2.846E-28	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		4.374E-07	4.317E-07	4.205E-07	3.828E-07	2.862E-07	2.292E-15	0.000E+00	0.000E+00
Am-243+D	Am-243+D	8.252E-07	9.482E-09	9.359E-09	9.117E-09	8.299E-09	6.205E-09	4.956E-17	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	8.252E-07	1.305E-14	3.860E-14	8.731E-14	2.336E-13	4.713E-13	1.398E-19	0.000E+00	0.000E+00
Am-243+D	U-235+D	8.252E-07	3.398E-23	2.351E-22	1.210E-21	9.816E-21	6.090E-20	1.224E-27	0.000E+00	0.000E+00
Am-243+D	Pa-231	8.252E-07	1.109E-28	1.647E-27	1.869E-26	4.458E-25	7.768E-24	7.782E-29	0.000E+00	0.000E+00
Am-243+D	Ac-227+D4	8.252E-07	3.199E-30	9.745E-29	2.362E-27	1.599E-25	7.285E-24	5.654E-30	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		9.482E-09	9.359E-09	9.117E-09	8.299E-09	6.205E-09	4.969E-17	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Am-243+D	Am-243+D	2.284E-09	2.624E-11	2.590E-11	2.523E-11	2.297E-11	1.717E-11	1.372E-19	0.000E+00	0.000E+00
Am-243+D	Pu-239+D	2.284E-09	3.611E-17	1.068E-16	2.416E-16	6.466E-16	1.304E-15	3.869E-22	0.000E+00	0.000E+00
Am-243+D	U-235+D	2.284E-09	9.404E-26	6.506E-25	3.349E-24	2.717E-23	1.685E-22	3.387E-30	0.000E+00	0.000E+00
Am-243+D	Pa-231	2.284E-09	3.069E-31	4.557E-30	5.173E-29	1.234E-27	2.150E-26	2.154E-31	0.000E+00	0.000E+00
Am-243+D	Ac-227+D5	2.284E-09	8.943E-33	2.724E-31	6.604E-30	4.471E-28	2.038E-26	1.566E-32	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		2.624E-11	2.590E-11	2.523E-11	2.297E-11	1.717E-11	1.375E-19	0.000E+00	0.000E+00
Am-243+D	Am-243+D	5.901E-04	6.780E-06	6.693E-06	6.519E-06	5.934E-06	4.437E-06	3.544E-14	0.000E+00	0.000E+00
Am-243+D	Pu-239	5.901E-04	9.331E-12	2.760E-11	6.243E-11	1.671E-10	3.370E-10	9.996E-17	0.000E+00	0.000E+00
Am-243+D	U-235+D	5.901E-04	2.430E-20	1.681E-19	8.652E-19	7.019E-18	4.355E-17	8.750E-25	0.000E+00	0.000E+00
Am-243+D	Pa-231	5.901E-04	7.930E-26	1.177E-24	1.337E-23	3.188E-22	5.554E-21	5.565E-26	0.000E+00	0.000E+00
Am-243+D	Ac-227+D	5.901E-04	3.515E-27	1.071E-25	2.599E-24	1.769E-22	8.218E-21	4.563E-27	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		6.780E-06	6.693E-06	6.519E-06	5.934E-06	4.437E-06	3.554E-14	0.000E+00	0.000E+00
Am-243+D	Am-243+D	1.633E-06	1.877E-08	1.852E-08	1.804E-08	1.642E-08	1.228E-08	9.807E-17	0.000E+00	0.000E+00
Am-243+D	Pu-239	1.633E-06	2.582E-14	7.640E-14	1.728E-13	4.624E-13	9.326E-13	2.767E-19	0.000E+00	0.000E+00
Am-243+D	U-235+D	1.633E-06	6.724E-23	4.652E-22	2.395E-21	1.943E-20	1.205E-19	2.422E-27	0.000E+00	0.000E+00
Am-243+D	Pa-231	1.633E-06	2.195E-28	3.259E-27	3.699E-26	8.823E-25	1.537E-23	1.540E-28	0.000E+00	0.000E+00
Am-243+D	Ac-227+D1	1.633E-06	9.780E-30	2.982E-28	7.238E-27	4.928E-25	2.290E-23	1.238E-29	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		1.877E-08	1.852E-08	1.804E-08	1.642E-08	1.228E-08	9.835E-17	0.000E+00	0.000E+00
Am-243+D	Am-243+D	8.257E-06	9.487E-08	9.364E-08	9.121E-08	8.303E-08	6.208E-08	4.958E-16	0.000E+00	0.000E+00
Am-243+D	Pu-239	8.257E-06	1.306E-13	3.862E-13	8.735E-13	2.338E-12	4.715E-12	1.399E-18	0.000E+00	0.000E+00
Am-243+D	U-235+D	8.257E-06	3.400E-22	2.352E-21	1.211E-20	9.821E-20	6.093E-19	1.224E-26	0.000E+00	0.000E+00
Am-243+D	Pa-231	8.257E-06	1.110E-27	1.648E-26	1.870E-25	4.461E-24	7.772E-23	7.786E-28	0.000E+00	0.000E+00
Am-243+D	Ac-227+D2	8.257E-06	4.471E-29	1.363E-27	3.308E-26	2.252E-24	1.045E-22	6.168E-29	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		9.487E-08	9.364E-08	9.122E-08	8.304E-08	6.209E-08	4.972E-16	0.000E+00	0.000E+00
Am-243+D	Am-243+D	2.285E-08	2.626E-10	2.592E-10	2.524E-10	2.298E-10	1.718E-10	1.372E-18	0.000E+00	0.000E+00
Am-243+D	Pu-239	2.285E-08	3.613E-16	1.069E-15	2.418E-15	6.470E-15	1.305E-14	3.871E-21	0.000E+00	0.000E+00
Am-243+D	U-235+D	2.285E-08	9.409E-25	6.510E-24	3.351E-23	2.718E-22	1.686E-21	3.388E-29	0.000E+00	0.000E+00
Am-243+D	Pa-231	2.285E-08	3.071E-30	4.560E-29	5.176E-28	1.235E-26	2.151E-25	2.155E-30	0.000E+00	0.000E+00
Am-243+D	Ac-227+D3	2.285E-08	1.246E-31	3.800E-30	9.223E-29	6.277E-27	2.913E-25	1.709E-31	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		2.626E-10	2.592E-10	2.525E-10	2.298E-10	1.718E-10	1.376E-18	0.000E+00	0.000E+00
Am-243+D	Am-243+D	4.954E-10	5.693E-12	5.619E-12	5.473E-12	4.982E-12	3.725E-12	2.975E-20	0.000E+00	0.000E+00
Am-243+D	Pu-239	4.954E-10	7.834E-18	2.318E-17	5.241E-17	1.403E-16	2.829E-16	8.393E-23	0.000E+00	0.000E+00
Am-243+D	U-235+D	4.954E-10	2.040E-26	1.411E-25	7.264E-25	5.893E-24	3.656E-23	7.346E-31	0.000E+00	0.000E+00
Am-243+D	Pa-231	4.954E-10	6.658E-32	9.886E-31	1.122E-29	2.677E-28	4.663E-27	4.672E-32	0.000E+00	0.000E+00
Am-243+D	Ac-227+D4	4.954E-10	1.920E-33	5.851E-32	1.418E-30	9.599E-29	4.373E-27	3.394E-33	0.000E+00	0.000E+00
Am-243+D	ΣDSR(j)		5.693E-12	5.619E-12	5.473E-12	4.982E-12	3.725E-12	2.983E-20	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Am-243+D	Am-243+D	1.371E-12	1.576E-14	1.555E-14	1.515E-14	1.379E-14	1.031E-14	8.234E-23	0.000E+00	0.000E+00
Am-243+D	Pu-239	1.371E-12	2.168E-20	6.414E-20	1.451E-19	3.882E-19	7.830E-19	2.323E-25	0.000E+00	0.000E+00
Am-243+D	U-235+D	1.371E-12	5.646E-29	3.906E-28	2.010E-27	1.631E-26	1.012E-25	2.033E-33	0.000E+00	0.000E+00
Am-243+D	Pa-231	1.371E-12	1.843E-34	2.736E-33	3.106E-32	7.408E-31	1.291E-29	1.293E-34	0.000E+00	0.000E+00
Am-243+D	Ac-227+D5	1.371E-12	5.369E-36	1.636E-34	3.965E-33	2.684E-31	1.223E-29	9.404E-36	0.000E+00	0.000E+00
Am-243+D	∑DSR(j)		1.576E-14	1.555E-14	1.515E-14	1.379E-14	1.031E-14	8.257E-23	0.000E+00	0.000E+00
C-14	C-14	1.000E+00	1.651E-07	3.927E-17	3.674E-37	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cm-243	Cm-243	2.359E-03	1.688E-05	1.636E-05	1.536E-05	1.230E-05	6.340E-06	1.660E-14	0.000E+00	0.000E+00
Cm-243	Am-243+D	2.359E-03	1.264E-09	3.720E-09	8.315E-09	2.138E-08	3.936E-08	6.262E-16	0.000E+00	0.000E+00
Cm-243	Pu-239+D	2.359E-03	1.162E-15	7.985E-15	4.044E-14	3.093E-13	1.610E-12	1.097E-18	0.000E+00	0.000E+00
Cm-243	U-235+D	2.359E-03	2.274E-24	3.359E-23	3.786E-22	8.838E-21	1.464E-19	7.441E-27	0.000E+00	0.000E+00
Cm-243	Pa-231	2.359E-03	5.936E-30	1.816E-28	4.424E-27	3.034E-25	1.429E-23	3.760E-28	0.000E+00	0.000E+00
Cm-243	Ac-227+D	2.359E-03	2.198E-31	1.358E-29	6.963E-28	1.369E-25	1.763E-23	2.753E-29	0.000E+00	0.000E+00
Cm-243	∑DSR(j)		1.688E-05	1.636E-05	1.537E-05	1.232E-05	6.380E-06	1.723E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	6.529E-06	4.672E-08	4.528E-08	4.252E-08	3.404E-08	1.755E-08	4.594E-17	0.000E+00	0.000E+00
Cm-243	Am-243+D	6.529E-06	3.500E-12	1.030E-11	2.301E-11	5.918E-11	1.089E-10	1.733E-18	0.000E+00	0.000E+00
Cm-243	Pu-239+D	6.529E-06	3.217E-18	2.210E-17	1.119E-16	8.559E-16	4.456E-15	3.037E-21	0.000E+00	0.000E+00
Cm-243	U-235+D	6.529E-06	6.294E-27	9.297E-26	1.048E-24	2.446E-23	4.051E-22	2.059E-29	0.000E+00	0.000E+00
Cm-243	Pa-231	6.529E-06	1.643E-32	5.027E-31	1.224E-29	8.397E-28	3.954E-26	1.041E-30	0.000E+00	0.000E+00
Cm-243	Ac-227+D1	6.529E-06	6.114E-34	3.780E-32	1.939E-30	3.814E-28	4.913E-26	7.452E-32	0.000E+00	0.000E+00
Cm-243	∑DSR(j)		4.672E-08	4.529E-08	4.254E-08	3.410E-08	1.766E-08	4.768E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	3.301E-05	2.362E-07	2.289E-07	2.150E-07	1.721E-07	8.871E-08	2.323E-16	0.000E+00	0.000E+00
Cm-243	Am-243+D	3.301E-05	1.769E-11	5.206E-11	1.163E-10	2.992E-10	5.507E-10	8.763E-18	0.000E+00	0.000E+00
Cm-243	Pu-239+D	3.301E-05	1.626E-17	1.117E-16	5.658E-16	4.327E-15	2.253E-14	1.535E-20	0.000E+00	0.000E+00
Cm-243	U-235+D	3.301E-05	3.182E-26	4.700E-25	5.297E-24	1.237E-22	2.048E-21	1.041E-28	0.000E+00	0.000E+00
Cm-243	Pa-231	3.301E-05	8.305E-32	2.541E-30	6.190E-29	4.245E-27	1.999E-25	5.261E-30	0.000E+00	0.000E+00
Cm-243	Ac-227+D2	3.301E-05	2.795E-33	1.728E-31	8.864E-30	1.742E-27	2.241E-25	3.712E-31	0.000E+00	0.000E+00
Cm-243	∑DSR(j)		2.362E-07	2.290E-07	2.151E-07	1.724E-07	8.926E-08	2.410E-16	0.000E+00	0.000E+00
Cm-243	Cm-243	9.135E-08	6.537E-10	6.335E-10	5.949E-10	4.763E-10	2.455E-10	6.428E-19	0.000E+00	0.000E+00
Cm-243	Am-243+D	9.135E-08	4.897E-14	1.441E-13	3.220E-13	8.281E-13	1.524E-12	2.425E-20	0.000E+00	0.000E+00
Cm-243	Pu-239+D	9.135E-08	4.501E-20	3.092E-19	1.566E-18	1.198E-17	6.236E-17	4.249E-23	0.000E+00	0.000E+00
Cm-243	U-235+D	9.135E-08	8.807E-29	1.301E-27	1.466E-26	3.422E-25	5.668E-24	2.882E-31	0.000E+00	0.000E+00
Cm-243	Pa-231	9.135E-08	2.299E-34	7.033E-33	1.713E-31	1.175E-29	5.532E-28	1.456E-32	0.000E+00	0.000E+00
Cm-243	Ac-227+D3	9.135E-08	7.793E-36	4.818E-34	2.471E-32	4.858E-30	6.250E-28	1.028E-33	0.000E+00	0.000E+00
Cm-243	∑DSR(j)		6.537E-10	6.337E-10	5.952E-10	4.771E-10	2.471E-10	6.671E-19	0.000E+00	0.000E+00

Summary : RESRAD Default

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Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cm-243	Cm-243	1.981E-09	1.417E-11	1.373E-11	1.290E-11	1.033E-11	5.323E-12	1.394E-20	0.000E+00	0.000E+00
Cm-243	Am-243+D	1.981E-09	1.062E-15	3.124E-15	6.981E-15	1.795E-14	3.304E-14	5.258E-22	0.000E+00	0.000E+00
Cm-243	Pu-239+D	1.981E-09	9.759E-22	6.704E-21	3.395E-20	2.596E-19	1.352E-18	9.212E-25	0.000E+00	0.000E+00
Cm-243	U-235+D	1.981E-09	1.909E-30	2.820E-29	3.178E-28	7.420E-27	1.229E-25	6.247E-33	0.000E+00	0.000E+00
Cm-243	Pa-231	1.981E-09	4.984E-36	1.525E-34	3.714E-33	2.547E-31	1.199E-29	3.157E-34	0.000E+00	0.000E+00
Cm-243	Ac-227+D4	1.981E-09	1.201E-37	7.417E-36	3.799E-34	7.428E-32	9.382E-30	2.043E-35	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.417E-11	1.374E-11	1.291E-11	1.034E-11	5.356E-12	1.446E-20	0.000E+00	0.000E+00
Cm-243	Cm-243	5.481E-12	3.922E-14	3.801E-14	3.570E-14	2.858E-14	1.473E-14	3.857E-23	0.000E+00	0.000E+00
Cm-243	Am-243+D	5.481E-12	2.938E-18	8.645E-18	1.932E-17	4.969E-17	9.145E-17	1.455E-24	0.000E+00	0.000E+00
Cm-243	Pu-239+D	5.481E-12	2.701E-24	1.855E-23	9.396E-23	7.186E-22	3.742E-21	2.550E-27	0.000E+00	0.000E+00
Cm-243	U-235+D	5.481E-12	5.284E-33	7.806E-32	8.797E-31	2.054E-29	3.401E-28	1.729E-35	0.000E+00	0.000E+00
Cm-243	Pa-231	5.481E-12	1.379E-38	4.220E-37	1.028E-35	7.050E-34	3.319E-32	8.736E-37	0.000E+00	0.000E+00
Cm-243	Ac-227+D5	5.481E-12	3.356E-40	2.074E-38	1.062E-36	2.077E-34	2.625E-32	5.660E-38	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		3.923E-14	3.802E-14	3.572E-14	2.863E-14	1.482E-14	4.003E-23	0.000E+00	0.000E+00
Cm-243	Cm-243	1.416E-06	1.013E-08	9.821E-09	9.223E-09	7.384E-09	3.806E-09	9.966E-18	0.000E+00	0.000E+00
Cm-243	Am-243+D	1.416E-06	7.591E-13	2.234E-12	4.992E-12	1.284E-11	2.363E-11	3.760E-19	0.000E+00	0.000E+00
Cm-243	Pu-239	1.416E-06	6.970E-19	4.791E-18	2.427E-17	1.857E-16	9.667E-16	6.584E-22	0.000E+00	0.000E+00
Cm-243	U-235+D	1.416E-06	1.365E-27	2.017E-26	2.273E-25	5.306E-24	8.788E-23	4.467E-30	0.000E+00	0.000E+00
Cm-243	Pa-231	1.416E-06	3.564E-33	1.090E-31	2.656E-30	1.821E-28	8.576E-27	2.257E-31	0.000E+00	0.000E+00
Cm-243	Ac-227+D	1.416E-06	1.320E-34	8.153E-33	4.180E-31	8.219E-29	1.058E-26	1.653E-32	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.013E-08	9.824E-09	9.228E-09	7.397E-09	3.830E-09	1.034E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	3.920E-09	2.805E-11	2.718E-11	2.553E-11	2.044E-11	1.053E-11	2.758E-20	0.000E+00	0.000E+00
Cm-243	Am-243+D	3.920E-09	2.101E-15	6.182E-15	1.382E-14	3.553E-14	6.539E-14	1.041E-21	0.000E+00	0.000E+00
Cm-243	Pu-239	3.920E-09	1.929E-21	1.326E-20	6.717E-20	5.138E-19	2.675E-18	1.822E-24	0.000E+00	0.000E+00
Cm-243	U-235+D	3.920E-09	3.779E-30	5.582E-29	6.290E-28	1.468E-26	2.432E-25	1.236E-32	0.000E+00	0.000E+00
Cm-243	Pa-231	3.920E-09	9.863E-36	3.018E-34	7.350E-33	5.041E-31	2.374E-29	6.247E-34	0.000E+00	0.000E+00
Cm-243	Ac-227+D1	3.920E-09	3.671E-37	2.269E-35	1.164E-33	2.290E-31	2.949E-29	4.474E-35	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		2.805E-11	2.719E-11	2.554E-11	2.047E-11	1.060E-11	2.862E-20	0.000E+00	0.000E+00
Cm-243	Cm-243	1.982E-08	1.418E-10	1.374E-10	1.291E-10	1.033E-10	5.326E-11	1.394E-19	0.000E+00	0.000E+00
Cm-243	Am-243+D	1.982E-08	1.062E-14	3.125E-14	6.985E-14	1.796E-13	3.306E-13	5.261E-21	0.000E+00	0.000E+00
Cm-243	Pu-239	1.982E-08	9.752E-21	6.704E-20	3.396E-19	2.598E-18	1.353E-17	9.212E-24	0.000E+00	0.000E+00
Cm-243	U-235+D	1.982E-08	1.910E-29	2.822E-28	3.180E-27	7.424E-26	1.230E-24	6.251E-32	0.000E+00	0.000E+00
Cm-243	Pa-231	1.982E-08	4.986E-35	1.526E-33	3.716E-32	2.549E-30	1.200E-28	3.158E-33	0.000E+00	0.000E+00
Cm-243	Ac-227+D2	1.982E-08	1.678E-36	1.038E-34	5.321E-33	1.046E-30	1.346E-28	2.229E-34	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.418E-10	1.375E-10	1.291E-10	1.035E-10	5.359E-11	1.447E-19	0.000E+00	0.000E+00
Cm-243	Cm-243	5.484E-11	3.924E-13	3.803E-13	3.572E-13	2.859E-13	1.474E-13	3.859E-22	0.000E+00	0.000E+00
Cm-243	Am-243+D	5.484E-11	2.940E-17	8.650E-17	1.933E-16	4.972E-16	9.150E-16	1.456E-23	0.000E+00	0.000E+00
Cm-243	Pu-239	5.484E-11	2.699E-23	1.855E-22	9.399E-22	7.189E-21	3.744E-20	2.550E-26	0.000E+00	0.000E+00
Cm-243	U-235+D	5.484E-11	5.287E-32	7.810E-31	8.802E-30	2.055E-28	3.403E-27	1.730E-34	0.000E+00	0.000E+00
Cm-243	Pa-231	5.484E-11	1.380E-37	4.223E-36	1.028E-34	7.054E-33	3.321E-31	8.741E-36	0.000E+00	0.000E+00
Cm-243	Ac-227+D3	5.484E-11	4.678E-39	2.892E-37	1.483E-35	2.916E-33	3.752E-31	6.174E-37	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		3.925E-13	3.804E-13	3.574E-13	2.864E-13	1.483E-13	4.005E-22	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cm-243	Cm-243	1.189E-12	8.508E-15	8.246E-15	7.743E-15	6.199E-15	3.196E-15	8.367E-24	0.000E+00	0.000E+00
Cm-243	Am-243+D	1.189E-12	6.373E-19	1.875E-18	4.191E-18	1.078E-17	1.984E-17	3.157E-25	0.000E+00	0.000E+00
Cm-243	Pu-239	1.189E-12	5.852E-25	4.023E-24	2.038E-23	1.559E-22	8.116E-22	5.528E-28	0.000E+00	0.000E+00
Cm-243	U-235+D	1.189E-12	1.146E-33	1.693E-32	1.908E-31	4.455E-30	7.378E-29	3.751E-36	0.000E+00	0.000E+00
Cm-243	Pa-231	1.189E-12	2.992E-39	9.155E-38	2.230E-36	1.529E-34	7.200E-33	1.895E-37	0.000E+00	0.000E+00
Cm-243	Ac-227+D4	1.189E-12	7.207E-41	4.453E-39	2.281E-37	4.459E-35	5.633E-33	1.227E-38	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		8.509E-15	8.248E-15	7.748E-15	6.210E-15	3.216E-15	8.683E-24	0.000E+00	0.000E+00
Cm-243	Cm-243	3.291E-15	2.355E-17	2.282E-17	2.143E-17	1.716E-17	8.845E-18	2.316E-26	0.000E+00	0.000E+00
Cm-243	Am-243+D	3.291E-15	1.764E-21	5.190E-21	1.160E-20	2.983E-20	5.490E-20	8.736E-28	0.000E+00	0.000E+00
Cm-243	Pu-239	3.291E-15	1.620E-27	1.113E-26	5.640E-26	4.314E-25	2.246E-24	1.530E-30	0.000E+00	0.000E+00
Cm-243	U-235+D	3.291E-15	3.173E-36	4.686E-35	5.281E-34	1.233E-32	2.042E-31	1.038E-38	0.000E+00	0.000E+00
Cm-243	Pa-231	3.291E-15	8.280E-42	2.534E-40	6.171E-39	4.233E-37	1.993E-35	5.245E-40	0.000E+00	0.000E+00
Cm-243	Ac-227+D5	3.291E-15	2.004E-43	1.245E-41	6.377E-40	1.247E-37	1.576E-35	3.398E-41	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		2.355E-17	2.283E-17	2.144E-17	1.719E-17	8.900E-18	2.403E-26	0.000E+00	0.000E+00
Cm-243	Cm-243	9.805E-01	7.016E-03	6.800E-03	6.386E-03	5.112E-03	2.635E-03	6.900E-12	0.000E+00	0.000E+00
Cm-243	Pu-239+D	9.805E-01	1.541E-08	4.525E-08	1.006E-07	2.535E-07	4.345E-07	8.065E-14	0.000E+00	0.000E+00
Cm-243	U-235+D	9.805E-01	4.019E-17	2.767E-16	1.408E-15	1.097E-14	6.096E-14	8.744E-22	0.000E+00	0.000E+00
Cm-243	Pa-231	9.805E-01	1.313E-22	1.942E-21	2.187E-20	5.061E-19	8.117E-18	6.318E-23	0.000E+00	0.000E+00
Cm-243	Ac-227+D	9.805E-01	5.824E-24	1.769E-22	4.264E-21	2.833E-19	1.228E-17	5.438E-24	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		7.016E-03	6.800E-03	6.386E-03	5.113E-03	2.636E-03	6.980E-12	0.000E+00	0.000E+00
Cm-243	Cm-243	2.714E-03	1.942E-05	1.882E-05	1.767E-05	1.415E-05	7.294E-06	1.910E-14	0.000E+00	0.000E+00
Cm-243	Pu-239+D	2.714E-03	4.266E-11	1.252E-10	2.784E-10	7.016E-10	1.203E-09	2.232E-16	0.000E+00	0.000E+00
Cm-243	U-235+D	2.714E-03	1.112E-19	7.658E-19	3.897E-18	3.037E-17	1.687E-16	2.420E-24	0.000E+00	0.000E+00
Cm-243	Pa-231	2.714E-03	3.634E-25	5.376E-24	6.052E-23	1.401E-21	2.246E-20	1.749E-25	0.000E+00	0.000E+00
Cm-243	Ac-227+D1	2.714E-03	1.620E-26	4.925E-25	1.188E-23	7.892E-22	3.422E-20	1.477E-26	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.942E-05	1.882E-05	1.767E-05	1.415E-05	7.295E-06	1.932E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	1.372E-02	9.817E-05	9.515E-05	8.935E-05	7.153E-05	3.688E-05	9.654E-14	0.000E+00	0.000E+00
Cm-243	Pu-239+D	1.372E-02	2.157E-10	6.331E-10	1.407E-09	3.547E-09	6.080E-09	1.128E-15	0.000E+00	0.000E+00
Cm-243	U-235+D	1.372E-02	5.624E-19	3.872E-18	1.970E-17	1.536E-16	8.529E-16	1.223E-23	0.000E+00	0.000E+00
Cm-243	Pa-231	1.372E-02	1.837E-24	2.718E-23	3.059E-22	7.082E-21	1.136E-19	8.841E-25	0.000E+00	0.000E+00
Cm-243	Ac-227+D2	1.372E-02	7.408E-26	2.252E-24	5.428E-23	3.606E-21	1.561E-19	7.358E-26	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		9.817E-05	9.515E-05	8.935E-05	7.154E-05	3.688E-05	9.767E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	3.797E-05	2.717E-07	2.633E-07	2.473E-07	1.980E-07	1.021E-07	2.672E-16	0.000E+00	0.000E+00
Cm-243	Pu-239+D	3.797E-05	5.969E-13	1.752E-12	3.895E-12	9.818E-12	1.683E-11	3.123E-18	0.000E+00	0.000E+00
Cm-243	U-235+D	3.797E-05	1.557E-21	1.072E-20	5.453E-20	4.250E-19	2.361E-18	3.386E-26	0.000E+00	0.000E+00
Cm-243	Pa-231	3.797E-05	5.085E-27	7.522E-26	8.468E-25	1.960E-23	3.143E-22	2.447E-27	0.000E+00	0.000E+00
Cm-243	Ac-227+D3	3.797E-05	2.065E-28	6.277E-27	1.513E-25	1.005E-23	4.354E-22	2.038E-28	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		2.717E-07	2.633E-07	2.473E-07	1.980E-07	1.021E-07	2.703E-16	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cm-243	Cm-243	8.232E-07	5.891E-09	5.709E-09	5.361E-09	4.292E-09	2.213E-09	5.793E-18	0.000E+00	0.000E+00
Cm-243	Pu-239+D	8.232E-07	1.294E-14	3.799E-14	8.445E-14	2.128E-13	3.648E-13	6.771E-20	0.000E+00	0.000E+00
Cm-243	U-235+D	8.232E-07	3.375E-23	2.323E-22	1.182E-21	9.214E-21	5.118E-20	7.341E-28	0.000E+00	0.000E+00
Cm-243	Pa-231	8.232E-07	1.102E-28	1.631E-27	1.836E-26	4.249E-25	6.815E-24	5.305E-29	0.000E+00	0.000E+00
Cm-243	Ac-227+D4	8.232E-07	3.182E-30	9.664E-29	2.327E-27	1.537E-25	6.537E-24	4.049E-30	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		5.891E-09	5.709E-09	5.361E-09	4.292E-09	2.213E-09	5.861E-18	0.000E+00	0.000E+00
Cm-243	Cm-243	2.278E-09	1.630E-11	1.580E-11	1.484E-11	1.188E-11	6.124E-12	1.603E-20	0.000E+00	0.000E+00
Cm-243	Pu-239+D	2.278E-09	3.582E-17	1.051E-16	2.337E-16	5.891E-16	1.010E-15	1.874E-22	0.000E+00	0.000E+00
Cm-243	U-235+D	2.278E-09	9.340E-26	6.430E-25	3.272E-24	2.550E-23	1.416E-22	2.032E-30	0.000E+00	0.000E+00
Cm-243	Pa-231	2.278E-09	3.051E-31	4.514E-30	5.081E-29	1.176E-27	1.886E-26	1.468E-31	0.000E+00	0.000E+00
Cm-243	Ac-227+D5	2.278E-09	8.895E-33	2.702E-31	6.505E-30	4.298E-28	1.829E-26	1.122E-32	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.630E-11	1.580E-11	1.484E-11	1.188E-11	6.125E-12	1.622E-20	0.000E+00	0.000E+00
Cm-243	Cm-243	5.887E-04	4.212E-06	4.082E-06	3.834E-06	3.069E-06	1.582E-06	4.142E-15	0.000E+00	0.000E+00
Cm-243	Pu-239	5.887E-04	9.254E-12	2.716E-11	6.039E-11	1.522E-10	2.609E-10	4.842E-17	0.000E+00	0.000E+00
Cm-243	U-235+D	5.887E-04	2.413E-20	1.661E-19	8.454E-19	6.589E-18	3.660E-17	5.250E-25	0.000E+00	0.000E+00
Cm-243	Pa-231	5.887E-04	7.884E-26	1.166E-24	1.313E-23	3.039E-22	4.873E-21	3.793E-26	0.000E+00	0.000E+00
Cm-243	Ac-227+D	5.887E-04	3.497E-27	1.062E-25	2.560E-24	1.701E-22	7.374E-21	3.265E-27	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		4.212E-06	4.082E-06	3.834E-06	3.069E-06	1.582E-06	4.191E-15	0.000E+00	0.000E+00
Cm-243	Cm-243	1.629E-06	1.166E-08	1.130E-08	1.061E-08	8.494E-09	4.379E-09	1.146E-17	0.000E+00	0.000E+00
Cm-243	Pu-239	1.629E-06	2.561E-14	7.518E-14	1.671E-13	4.212E-13	7.220E-13	1.340E-19	0.000E+00	0.000E+00
Cm-243	U-235+D	1.629E-06	6.679E-23	4.598E-22	2.340E-21	1.824E-20	1.013E-19	1.453E-27	0.000E+00	0.000E+00
Cm-243	Pa-231	1.629E-06	2.182E-28	3.228E-27	3.633E-26	8.410E-25	1.349E-23	1.050E-28	0.000E+00	0.000E+00
Cm-243	Ac-227+D1	1.629E-06	9.728E-30	2.957E-28	7.130E-27	4.738E-25	2.055E-23	8.867E-30	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.166E-08	1.130E-08	1.061E-08	8.495E-09	4.380E-09	1.160E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	8.237E-06	5.894E-08	5.712E-08	5.364E-08	4.294E-08	2.214E-08	5.796E-17	0.000E+00	0.000E+00
Cm-243	Pu-239	8.237E-06	1.295E-13	3.801E-13	8.450E-13	2.130E-12	3.650E-12	6.775E-19	0.000E+00	0.000E+00
Cm-243	U-235+D	8.237E-06	3.377E-22	2.324E-21	1.183E-20	9.219E-20	5.121E-19	7.345E-27	0.000E+00	0.000E+00
Cm-243	Pa-231	8.237E-06	1.103E-27	1.632E-26	1.837E-25	4.252E-24	6.818E-23	5.308E-28	0.000E+00	0.000E+00
Cm-243	Ac-227+D2	8.237E-06	4.448E-29	1.352E-27	3.259E-26	2.165E-24	9.374E-23	4.417E-29	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		5.894E-08	5.712E-08	5.364E-08	4.295E-08	2.214E-08	5.864E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	2.280E-08	1.631E-10	1.581E-10	1.485E-10	1.189E-10	6.127E-11	1.604E-19	0.000E+00	0.000E+00
Cm-243	Pu-239	2.280E-08	3.584E-16	1.052E-15	2.339E-15	5.894E-15	1.010E-14	1.875E-21	0.000E+00	0.000E+00
Cm-243	U-235+D	2.280E-08	9.345E-25	6.433E-24	3.274E-23	2.552E-22	1.417E-21	2.033E-29	0.000E+00	0.000E+00
Cm-243	Pa-231	2.280E-08	3.053E-30	4.516E-29	5.084E-28	1.177E-26	1.887E-25	1.469E-30	0.000E+00	0.000E+00
Cm-243	Ac-227+D3	2.280E-08	1.240E-31	3.768E-30	9.085E-29	6.035E-27	2.614E-25	1.224E-31	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		1.631E-10	1.581E-10	1.485E-10	1.189E-10	6.128E-11	1.623E-19	0.000E+00	0.000E+00

Summary : RESRAD Default

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Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cm-243	Cm-243	4.942E-10	3.537E-12	3.428E-12	3.219E-12	2.577E-12	1.328E-12	3.478E-21	0.000E+00	0.000E+00
Cm-243	Pu-239	4.942E-10	7.770E-18	2.281E-17	5.070E-17	1.278E-16	2.190E-16	4.065E-23	0.000E+00	0.000E+00
Cm-243	U-235+D	4.942E-10	2.026E-26	1.395E-25	7.098E-25	5.532E-24	3.073E-23	4.407E-31	0.000E+00	0.000E+00
Cm-243	Pa-231	4.942E-10	6.619E-32	9.791E-31	1.102E-29	2.551E-28	4.091E-27	3.185E-32	0.000E+00	0.000E+00
Cm-243	Ac-227+D4	4.942E-10	1.910E-33	5.802E-32	1.397E-30	9.228E-29	3.924E-27	2.431E-33	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		3.537E-12	3.428E-12	3.219E-12	2.577E-12	1.329E-12	3.518E-21	0.000E+00	0.000E+00
Cm-243	Cm-243	1.368E-12	9.788E-15	9.486E-15	8.908E-15	7.132E-15	3.676E-15	9.625E-24	0.000E+00	0.000E+00
Cm-243	Pu-239	1.368E-12	2.150E-20	6.312E-20	1.403E-19	3.537E-19	6.062E-19	1.125E-25	0.000E+00	0.000E+00
Cm-243	U-235+D	1.368E-12	5.607E-29	3.860E-28	1.964E-27	1.531E-26	8.504E-26	1.220E-33	0.000E+00	0.000E+00
Cm-243	Pa-231	1.368E-12	1.832E-34	2.710E-33	3.050E-32	7.061E-31	1.132E-29	8.814E-35	0.000E+00	0.000E+00
Cm-243	Ac-227+D5	1.368E-12	5.340E-36	1.622E-34	3.905E-33	2.580E-31	1.098E-29	6.735E-36	0.000E+00	0.000E+00
Cm-243	ΣDSR(j)		9.788E-15	9.486E-15	8.908E-15	7.132E-15	3.677E-15	9.738E-24	0.000E+00	0.000E+00
Cm-244	Cm-244	1.371E-06	8.600E-10	8.189E-10	7.423E-10	5.245E-10	1.873E-10	1.656E-18	0.000E+00	0.000E+00
Cm-244	Cm-244	5.750E-08	3.607E-11	3.434E-11	3.113E-11	2.200E-11	7.857E-12	6.945E-20	0.000E+00	0.000E+00
Cm-244	Pu-240	5.750E-08	3.301E-15	9.629E-15	2.111E-14	5.073E-14	7.720E-14	1.123E-20	0.000E+00	0.000E+00
Cm-244	ΣDSR(j)		3.607E-11	3.435E-11	3.115E-11	2.205E-11	7.935E-12	8.068E-20	0.000E+00	0.000E+00
Cm-244	Cm-244	1.000E+00	6.273E-04	5.973E-04	5.414E-04	3.826E-04	1.367E-04	1.208E-12	0.000E+00	0.000E+00
Cm-244	Pu-240	1.000E+00	5.741E-08	1.675E-07	3.671E-07	8.822E-07	1.343E-06	1.954E-13	0.000E+00	0.000E+00
Cm-244	U-236	1.000E+00	1.631E-16	1.115E-15	5.588E-15	4.116E-14	1.943E-13	3.327E-20	0.000E+00	0.000E+00
Cm-244	Th-232	1.000E+00	2.613E-26	3.842E-25	4.286E-24	9.640E-23	1.431E-21	3.873E-28	0.000E+00	0.000E+00
Cm-244	Ra-228+D	1.000E+00	7.872E-27	2.355E-25	5.489E-24	3.247E-22	1.075E-20	7.791E-27	0.000E+00	0.000E+00
Cm-244	Th-228+D	1.000E+00	7.147E-28	4.149E-26	1.867E-24	2.401E-22	1.266E-20	7.234E-28	0.000E+00	0.000E+00
Cm-244	ΣDSR(j)		6.273E-04	5.975E-04	5.418E-04	3.835E-04	1.380E-04	1.403E-12	0.000E+00	0.000E+00
Co-60	Co-60	1.000E+00	1.284E-01	1.117E-01	8.442E-02	3.161E-02	1.848E-03	5.177E-16	0.000E+00	0.000E+00
Cs-134	Cs-134	1.000E+00	7.426E-02	5.263E-02	2.642E-02	2.363E-03	2.313E-06	9.906E-25	0.000E+00	0.000E+00
Cs-137+D	Cs-137+D	1.000E+00	3.120E-02	3.023E-02	2.837E-02	2.266E-02	1.156E-02	2.371E-11	0.000E+00	0.000E+00
Eu-152	Eu-152	7.210E-01	4.325E-02	4.029E-02	3.497E-02	2.123E-02	4.940E-03	8.590E-14	0.000E+00	0.000E+00
Eu-152	Eu-152	2.790E-01	1.674E-02	1.559E-02	1.353E-02	8.213E-03	1.912E-03	3.324E-14	0.000E+00	0.000E+00
Eu-152	Gd-152	2.790E-01	5.325E-19	1.539E-18	3.305E-18	7.443E-18	9.953E-18	1.452E-25	0.000E+00	0.000E+00
Eu-152	Sm-148	2.790E-01	5.363E-36	3.653E-35	1.815E-34	1.304E-33	5.933E-33	1.132E-39	0.000E+00	0.000E+00
Eu-152	Nd-144	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Eu-152	ΣDSR(j)		1.674E-02	1.559E-02	1.353E-02	8.213E-03	1.912E-03	3.324E-14	0.000E+00	0.000E+00
Eu-154	Eu-154	1.000E+00	6.382E-02	5.774E-02	4.724E-02	2.334E-02	3.018E-03	6.549E-15	0.000E+00	0.000E+00
Eu-155	Eu-155	1.000E+00	2.193E-03	1.863E-03	1.344E-03	4.285E-04	1.609E-05	5.853E-19	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Fe-55	Fe-55	1.000E+00	2.145E-08	1.648E-08	9.718E-09	1.527E-09	7.424E-12	3.526E-25	0.000E+00	0.000E+00
H-3	H-3	1.000E+00	1.519E-07	5.986E-07	5.349E-28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Nb-94	Nb-94	1.000E+00	8.665E-02	8.381E-02	7.837E-02	6.179E-02	3.039E-02	6.581E-12	0.000E+00	0.000E+00
Ni-59	Ni-59	1.000E+00	8.398E-08	8.157E-08	7.692E-08	6.240E-08	3.306E-08	2.540E-13	0.000E+00	4.770E-08
Ni-63	Ni-63	1.000E+00	2.272E-07	2.191E-07	2.038E-07	1.575E-07	7.267E-08	3.494E-13	0.000E+00	1.293E-10
Np-237+D	Np-237+D	1.000E+00	1.135E-02	8.240E-03	4.344E-03	4.607E-04	7.370E-07	6.174E-08	0.000E+00	0.000E+00
Np-237+D	U-233	1.000E+00	6.984E-10	1.811E-09	3.131E-09	3.995E-09	2.694E-09	6.597E-10	6.595E-10	6.575E-10
Np-237+D	Th-229+D	1.000E+00	1.367E-12	8.718E-12	3.778E-11	1.872E-10	5.216E-10	3.926E-12	7.542E-12	1.964E-11
Np-237+D	ΣDSR(j)		1.135E-02	8.240E-03	4.344E-03	4.607E-04	7.402E-07	6.241E-08	6.671E-10	6.771E-10
Pm-147	Pm-147	1.000E+00	7.040E-07	5.314E-07	3.027E-07	4.221E-08	1.500E-10	7.620E-26	0.000E+00	0.000E+00
Pm-147	Sm-147	1.000E+00	5.622E-16	1.487E-15	2.667E-15	3.746E-15	2.993E-15	1.312E-22	0.000E+00	0.000E+00
Pm-147	ΣDSR(j)		7.040E-07	5.314E-07	3.027E-07	4.221E-08	1.500E-10	1.313E-22	0.000E+00	0.000E+00
Pu-238	Pu-238	1.850E-09	1.857E-12	1.816E-12	1.736E-12	1.477E-12	8.970E-13	5.041E-20	0.000E+00	0.000E+00
Pu-238	Pu-238	9.996E-01	1.003E-03	9.811E-04	9.378E-04	7.980E-04	4.847E-04	2.724E-11	0.000E+00	0.000E+00
Pu-238	U-234	9.996E-01	4.729E-10	1.393E-09	3.118E-09	8.048E-09	1.465E-08	9.790E-16	0.000E+00	0.000E+00
Pu-238	Th-230	9.996E-01	3.577E-15	2.467E-14	1.261E-13	9.953E-13	5.664E-12	6.139E-19	0.000E+00	0.000E+00
Pu-238	Ra-226+D	9.996E-01	4.425E-17	6.567E-16	7.474E-15	1.807E-13	3.290E-12	1.186E-18	0.000E+00	0.000E+00
Pu-238	Pb-210+D	9.996E-01	7.399E-22	1.980E-20	4.426E-19	2.879E-17	1.362E-15	2.035E-19	0.000E+00	0.000E+00
Pu-238	Po-210	9.996E-01	3.423E-23	1.605E-21	5.641E-20	5.160E-18	2.608E-16	2.464E-20	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		1.003E-03	9.811E-04	9.378E-04	7.980E-04	4.847E-04	2.724E-11	0.000E+00	0.000E+00
Pu-238	Pu-238	1.319E-06	1.324E-09	1.295E-09	1.238E-09	1.053E-09	6.397E-10	3.595E-17	0.000E+00	0.000E+00
Pu-238	U-234	1.319E-06	6.242E-16	1.838E-15	4.115E-15	1.062E-14	1.934E-14	1.292E-21	0.000E+00	0.000E+00
Pu-238	Th-230	1.319E-06	4.722E-21	3.256E-20	1.664E-19	1.314E-18	7.477E-18	8.104E-25	0.000E+00	0.000E+00
Pu-238	Ra-226+D	1.319E-06	5.842E-23	8.668E-22	9.866E-21	2.386E-19	4.343E-18	1.566E-24	0.000E+00	0.000E+00
Pu-238	Pb-210+D1	1.319E-06	9.800E-28	3.039E-26	7.463E-25	5.173E-23	2.523E-21	2.618E-25	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		1.324E-09	1.295E-09	1.238E-09	1.053E-09	6.398E-10	3.595E-17	0.000E+00	0.000E+00
Pu-238	Pu-238	1.899E-08	1.906E-11	1.864E-11	1.782E-11	1.516E-11	9.208E-12	5.175E-19	0.000E+00	0.000E+00
Pu-238	U-234	1.899E-08	8.985E-18	2.646E-17	5.923E-17	1.529E-16	2.784E-16	1.860E-23	0.000E+00	0.000E+00
Pu-238	Th-230	1.899E-08	6.797E-23	4.687E-22	2.395E-21	1.891E-20	1.076E-19	1.166E-26	0.000E+00	0.000E+00
Pu-238	Ra-226+D	1.899E-08	8.408E-25	1.248E-23	1.420E-22	3.434E-21	6.251E-20	2.254E-26	0.000E+00	0.000E+00
Pu-238	Pb-210+D2	1.899E-08	1.203E-29	3.740E-28	9.196E-27	6.375E-25	3.105E-23	3.763E-27	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		1.906E-11	1.864E-11	1.782E-11	1.516E-11	9.209E-12	5.175E-19	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
 Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-238	Pu-238	2.100E-04	2.107E-07	2.061E-07	1.970E-07	1.676E-07	1.018E-07	5.721E-15	0.000E+00	0.000E+00
Pu-238	U-234	2.100E-04	9.932E-14	2.925E-13	6.548E-13	1.690E-12	3.078E-12	2.056E-19	0.000E+00	0.000E+00
Pu-238	Th-230	2.100E-04	7.514E-19	5.182E-18	2.648E-17	2.091E-16	1.190E-15	1.290E-22	0.000E+00	0.000E+00
Pu-238	Ra-226+D1	2.100E-04	9.295E-21	1.379E-19	1.570E-18	3.796E-17	6.910E-16	2.491E-22	0.000E+00	0.000E+00
Pu-238	Pb-210+D	2.100E-04	1.554E-25	4.160E-24	9.297E-23	6.047E-21	2.860E-19	4.275E-23	0.000E+00	0.000E+00
Pu-238	Po-210	2.100E-04	7.191E-27	3.372E-25	1.185E-23	1.084E-21	5.479E-20	5.176E-24	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.107E-07	2.061E-07	1.970E-07	1.676E-07	1.018E-07	5.721E-15	0.000E+00	0.000E+00
Pu-238	Pu-238	2.771E-10	2.782E-13	2.720E-13	2.600E-13	2.213E-13	1.344E-13	7.552E-21	0.000E+00	0.000E+00
Pu-238	U-234	2.771E-10	1.311E-19	3.861E-19	8.644E-19	2.231E-18	4.063E-18	2.714E-25	0.000E+00	0.000E+00
Pu-238	Th-230	2.771E-10	9.918E-25	6.840E-24	3.495E-23	2.760E-22	1.570E-21	1.702E-28	0.000E+00	0.000E+00
Pu-238	Ra-226+D1	2.771E-10	1.227E-26	1.821E-25	2.072E-24	5.011E-23	9.121E-22	3.288E-28	0.000E+00	0.000E+00
Pu-238	Pb-210+D1	2.771E-10	2.058E-31	6.383E-30	1.568E-28	1.087E-26	5.300E-25	5.498E-29	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.782E-13	2.720E-13	2.600E-13	2.213E-13	1.344E-13	7.552E-21	0.000E+00	0.000E+00
Pu-238	Pu-238	3.989E-12	4.004E-15	3.915E-15	3.743E-15	3.185E-15	1.934E-15	1.087E-22	0.000E+00	0.000E+00
Pu-238	U-234	3.989E-12	1.887E-21	5.557E-21	1.244E-20	3.212E-20	5.848E-20	3.907E-27	0.000E+00	0.000E+00
Pu-238	Th-230	3.989E-12	1.428E-26	9.846E-26	5.031E-25	3.972E-24	2.260E-23	2.450E-30	0.000E+00	0.000E+00
Pu-238	Ra-226+D1	3.989E-12	1.766E-28	2.620E-27	2.983E-26	7.212E-25	1.313E-23	4.733E-30	0.000E+00	0.000E+00
Pu-238	Pb-210+D2	3.989E-12	2.527E-33	7.856E-32	1.932E-30	1.339E-28	6.522E-27	7.904E-31	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		4.004E-15	3.915E-15	3.743E-15	3.185E-15	1.934E-15	1.087E-22	0.000E+00	0.000E+00
Pu-238	Pu-238	1.998E-04	2.005E-07	1.961E-07	1.874E-07	1.595E-07	9.685E-08	5.443E-15	0.000E+00	0.000E+00
Pu-238	U-234	1.998E-04	9.450E-14	2.783E-13	6.230E-13	1.608E-12	2.929E-12	1.956E-19	0.000E+00	0.000E+00
Pu-238	Th-230	1.998E-04	7.149E-19	4.930E-18	2.519E-17	1.989E-16	1.132E-15	1.227E-22	0.000E+00	0.000E+00
Pu-238	Ra-226+D2	1.998E-04	7.588E-21	1.126E-19	1.281E-18	3.096E-17	5.623E-16	2.331E-22	0.000E+00	0.000E+00
Pu-238	Pb-210+D	1.998E-04	1.479E-25	3.958E-24	8.846E-23	5.753E-21	2.721E-19	4.067E-23	0.000E+00	0.000E+00
Pu-238	Po-210	1.998E-04	6.841E-27	3.208E-25	1.127E-23	1.031E-21	5.212E-20	4.924E-24	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.005E-07	1.961E-07	1.874E-07	1.595E-07	9.686E-08	5.443E-15	0.000E+00	0.000E+00
Pu-238	Pu-238	2.637E-10	2.647E-13	2.588E-13	2.474E-13	2.105E-13	1.278E-13	7.185E-21	0.000E+00	0.000E+00
Pu-238	U-234	2.637E-10	1.247E-19	3.673E-19	8.224E-19	2.123E-18	3.866E-18	2.583E-25	0.000E+00	0.000E+00
Pu-238	Th-230	2.637E-10	9.437E-25	6.508E-24	3.325E-23	2.626E-22	1.494E-21	1.619E-28	0.000E+00	0.000E+00
Pu-238	Ra-226+D2	2.637E-10	1.002E-26	1.486E-25	1.691E-24	4.087E-23	7.423E-22	3.077E-28	0.000E+00	0.000E+00
Pu-238	Pb-210+D1	2.637E-10	1.958E-31	6.073E-30	1.491E-28	1.034E-26	5.043E-25	5.231E-29	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.647E-13	2.588E-13	2.474E-13	2.105E-13	1.279E-13	7.185E-21	0.000E+00	0.000E+00
Pu-238	Pu-238	3.795E-12	3.809E-15	3.725E-15	3.561E-15	3.030E-15	1.840E-15	1.034E-22	0.000E+00	0.000E+00
Pu-238	U-234	3.795E-12	1.795E-21	5.287E-21	1.184E-20	3.056E-20	5.564E-20	3.717E-27	0.000E+00	0.000E+00
Pu-238	Th-230	3.795E-12	1.358E-26	9.367E-26	4.786E-25	3.779E-24	2.151E-23	2.331E-30	0.000E+00	0.000E+00
Pu-238	Ra-226+D2	3.795E-12	1.442E-28	2.139E-27	2.434E-26	5.883E-25	1.068E-23	4.429E-30	0.000E+00	0.000E+00
Pu-238	Pb-210+D2	3.795E-12	2.404E-33	7.474E-32	1.838E-30	1.274E-28	6.205E-27	7.520E-31	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		3.809E-15	3.725E-15	3.561E-15	3.030E-15	1.840E-15	1.034E-22	0.000E+00	0.000E+00

Summary : RESRAD Default

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Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-238	Pu-238	4.196E-08	4.211E-11	4.118E-11	3.936E-11	3.350E-11	2.034E-11	1.143E-18	0.000E+00	0.000E+00
Pu-238	U-234	4.196E-08	1.985E-17	5.845E-17	1.309E-16	3.378E-16	6.151E-16	4.109E-23	0.000E+00	0.000E+00
Pu-238	Th-230	4.196E-08	1.502E-22	1.036E-21	5.291E-21	4.178E-20	2.378E-19	2.577E-26	0.000E+00	0.000E+00
Pu-238	Ra-226+D3	4.196E-08	1.594E-24	2.365E-23	2.691E-22	6.503E-21	1.181E-19	4.897E-26	0.000E+00	0.000E+00
Pu-238	Pb-210+D	4.196E-08	3.106E-29	8.313E-28	1.858E-26	1.208E-24	5.715E-23	8.543E-27	0.000E+00	0.000E+00
Pu-238	Po-210	4.196E-08	1.437E-30	6.739E-29	2.368E-27	2.166E-25	1.095E-23	1.034E-27	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		4.211E-11	4.118E-11	3.936E-11	3.350E-11	2.034E-11	1.143E-18	0.000E+00	0.000E+00
Pu-238	Pu-238	5.538E-14	5.559E-17	5.436E-17	5.196E-17	4.422E-17	2.685E-17	1.509E-24	0.000E+00	0.000E+00
Pu-238	U-234	5.538E-14	2.620E-23	7.716E-23	1.727E-22	4.459E-22	8.120E-22	5.424E-29	0.000E+00	0.000E+00
Pu-238	Th-230	5.538E-14	1.982E-28	1.367E-27	6.984E-27	5.515E-26	3.138E-25	3.402E-32	0.000E+00	0.000E+00
Pu-238	Ra-226+D3	5.538E-14	2.104E-30	3.121E-29	3.552E-28	8.584E-27	1.559E-25	6.464E-32	0.000E+00	0.000E+00
Pu-238	Pb-210+D1	5.538E-14	4.114E-35	1.276E-33	3.133E-32	2.171E-30	1.059E-28	1.099E-32	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		5.559E-17	5.436E-17	5.196E-17	4.422E-17	2.685E-17	1.509E-24	0.000E+00	0.000E+00
Pu-238	Pu-238	7.972E-16	8.001E-19	7.824E-19	7.479E-19	6.364E-19	3.865E-19	2.172E-26	0.000E+00	0.000E+00
Pu-238	U-234	7.972E-16	3.771E-25	1.111E-24	2.486E-24	6.418E-24	1.169E-23	7.808E-31	0.000E+00	0.000E+00
Pu-238	Th-230	7.972E-16	2.853E-30	1.968E-29	1.005E-28	7.938E-28	4.517E-27	4.896E-34	0.000E+00	0.000E+00
Pu-238	Ra-226+D3	7.972E-16	3.028E-32	4.493E-31	5.113E-30	1.236E-28	2.244E-27	9.304E-34	0.000E+00	0.000E+00
Pu-238	Pb-210+D2	7.972E-16	5.050E-37	1.570E-35	3.860E-34	2.676E-32	1.303E-30	1.579E-34	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		8.001E-19	7.824E-19	7.479E-19	6.364E-19	3.865E-19	2.172E-26	0.000E+00	0.000E+00
Pu-238	Pu-238	2.000E-07	2.007E-10	1.963E-10	1.876E-10	1.597E-10	9.697E-11	5.450E-18	0.000E+00	0.000E+00
Pu-238	U-234	2.000E-07	9.461E-17	2.786E-16	6.238E-16	1.610E-15	2.932E-15	1.959E-22	0.000E+00	0.000E+00
Pu-238	Th-230	2.000E-07	7.158E-22	4.936E-21	2.522E-20	1.991E-19	1.133E-18	1.228E-25	0.000E+00	0.000E+00
Pu-238	Ra-226+D4	2.000E-07	6.079E-26	9.140E-25	1.048E-23	2.549E-22	4.717E-21	2.136E-25	0.000E+00	0.000E+00
Pu-238	Pb-210+D	2.000E-07	1.480E-28	3.962E-27	8.856E-26	5.760E-24	2.724E-22	4.072E-26	0.000E+00	0.000E+00
Pu-238	Po-210	2.000E-07	6.850E-30	3.212E-28	1.129E-26	1.032E-24	5.219E-23	4.930E-27	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.007E-10	1.963E-10	1.876E-10	1.597E-10	9.697E-11	5.450E-18	0.000E+00	0.000E+00
Pu-238	Pu-238	2.640E-13	2.650E-16	2.591E-16	2.477E-16	2.108E-16	1.280E-16	7.193E-24	0.000E+00	0.000E+00
Pu-238	U-234	2.640E-13	1.249E-22	3.678E-22	8.234E-22	2.125E-21	3.870E-21	2.586E-28	0.000E+00	0.000E+00
Pu-238	Th-230	2.640E-13	9.448E-28	6.516E-27	3.329E-26	2.629E-25	1.496E-24	1.621E-31	0.000E+00	0.000E+00
Pu-238	Ra-226+D4	2.640E-13	8.024E-32	1.206E-30	1.383E-29	3.365E-28	6.226E-27	2.820E-31	0.000E+00	0.000E+00
Pu-238	Pb-210+D1	2.640E-13	1.961E-34	6.080E-33	1.493E-31	1.035E-29	5.049E-28	5.238E-32	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		2.650E-16	2.591E-16	2.477E-16	2.108E-16	1.280E-16	7.194E-24	0.000E+00	0.000E+00
Pu-238	Pu-238	3.800E-15	3.814E-18	3.730E-18	3.565E-18	3.034E-18	1.842E-18	1.035E-25	0.000E+00	0.000E+00
Pu-238	U-234	3.800E-15	1.798E-24	5.294E-24	1.185E-23	3.059E-23	5.571E-23	3.722E-30	0.000E+00	0.000E+00
Pu-238	Th-230	3.800E-15	1.360E-29	9.379E-29	4.792E-28	3.784E-27	2.153E-26	2.334E-33	0.000E+00	0.000E+00
Pu-238	Ra-226+D4	3.800E-15	1.155E-33	1.737E-32	1.991E-31	4.844E-30	8.962E-29	4.059E-33	0.000E+00	0.000E+00
Pu-238	Pb-210+D2	3.800E-15	2.407E-36	7.483E-35	1.840E-33	1.275E-31	6.213E-30	7.529E-34	0.000E+00	0.000E+00
Pu-238	ΣDSR(j)		3.814E-18	3.730E-18	3.565E-18	3.034E-18	1.843E-18	1.035E-25	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-239	Pu-239	5.901E-04	6.512E-07	6.418E-07	6.232E-07	5.603E-07	3.982E-07	3.900E-14	0.000E+00	0.000E+00
Pu-239	U-235+D	5.901E-04	2.538E-15	7.522E-15	1.708E-14	4.645E-14	9.922E-14	6.090E-22	0.000E+00	0.000E+00
Pu-239	Pa-231	5.901E-04	1.106E-20	7.659E-20	3.939E-19	3.174E-18	1.917E-17	5.994E-23	0.000E+00	0.000E+00
Pu-239	Ac-227+D	5.901E-04	6.111E-22	9.001E-21	1.009E-19	2.312E-18	3.633E-17	5.862E-24	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		6.512E-07	6.418E-07	6.232E-07	5.603E-07	3.982E-07	3.900E-14	0.000E+00	0.000E+00
Pu-239	Pu-239	1.633E-06	1.802E-09	1.776E-09	1.725E-09	1.551E-09	1.102E-09	1.079E-16	0.000E+00	0.000E+00
Pu-239	U-235+D	1.633E-06	7.025E-18	2.082E-17	4.728E-17	1.286E-16	2.746E-16	1.685E-24	0.000E+00	0.000E+00
Pu-239	Pa-231	1.633E-06	3.060E-23	2.120E-22	1.090E-21	8.784E-21	5.306E-20	1.659E-25	0.000E+00	0.000E+00
Pu-239	Ac-227+D1	1.633E-06	1.700E-24	2.506E-23	2.810E-22	6.441E-21	1.012E-19	1.596E-26	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		1.802E-09	1.776E-09	1.725E-09	1.551E-09	1.102E-09	1.079E-16	0.000E+00	0.000E+00
Pu-239	Pu-239	8.257E-06	9.112E-09	8.980E-09	8.720E-09	7.840E-09	5.572E-09	5.457E-16	0.000E+00	0.000E+00
Pu-239	U-235+D	8.257E-06	3.551E-17	1.053E-16	2.390E-16	6.500E-16	1.388E-15	8.521E-24	0.000E+00	0.000E+00
Pu-239	Pa-231	8.257E-06	1.547E-22	1.072E-21	5.511E-21	4.441E-20	2.682E-19	8.386E-25	0.000E+00	0.000E+00
Pu-239	Ac-227+D2	8.257E-06	7.775E-24	1.146E-22	1.285E-21	2.943E-20	4.618E-19	7.950E-26	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		9.112E-09	8.980E-09	8.720E-09	7.840E-09	5.572E-09	5.457E-16	0.000E+00	0.000E+00
Pu-239	Pu-239	2.285E-08	2.522E-11	2.485E-11	2.413E-11	2.170E-11	1.542E-11	1.510E-18	0.000E+00	0.000E+00
Pu-239	U-235+D	2.285E-08	9.829E-20	2.913E-19	6.616E-19	1.799E-18	3.843E-18	2.358E-26	0.000E+00	0.000E+00
Pu-239	Pa-231	2.285E-08	4.282E-25	2.966E-24	1.525E-23	1.229E-22	7.424E-22	2.321E-27	0.000E+00	0.000E+00
Pu-239	Ac-227+D3	2.285E-08	2.167E-26	3.194E-25	3.581E-24	8.204E-23	1.288E-21	2.202E-28	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		2.522E-11	2.485E-11	2.413E-11	2.170E-11	1.542E-11	1.510E-18	0.000E+00	0.000E+00
Pu-239	Pu-239	4.954E-10	5.467E-13	5.388E-13	5.232E-13	4.704E-13	3.343E-13	3.274E-20	0.000E+00	0.000E+00
Pu-239	U-235+D	4.954E-10	2.131E-21	6.316E-21	1.434E-20	3.900E-20	8.331E-20	5.113E-28	0.000E+00	0.000E+00
Pu-239	Pa-231	4.954E-10	9.283E-27	6.431E-26	3.307E-25	2.665E-24	1.610E-23	5.032E-29	0.000E+00	0.000E+00
Pu-239	Ac-227+D4	4.954E-10	3.339E-28	4.918E-27	5.506E-26	1.255E-24	1.933E-23	4.376E-30	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		5.467E-13	5.388E-13	5.232E-13	4.704E-13	3.343E-13	3.274E-20	0.000E+00	0.000E+00
Pu-239	Pu-239	1.371E-12	1.513E-15	1.491E-15	1.448E-15	1.302E-15	9.253E-16	9.062E-23	0.000E+00	0.000E+00
Pu-239	U-235+D	1.371E-12	5.898E-24	1.748E-23	3.970E-23	1.079E-22	2.306E-22	1.415E-30	0.000E+00	0.000E+00
Pu-239	Pa-231	1.371E-12	2.569E-29	1.780E-28	9.152E-28	7.375E-27	4.455E-26	1.393E-31	0.000E+00	0.000E+00
Pu-239	Ac-227+D5	1.371E-12	9.335E-31	1.375E-29	1.539E-28	3.508E-27	5.408E-26	1.212E-32	0.000E+00	0.000E+00
Pu-239	ΣDSR(j)		1.513E-15	1.491E-15	1.448E-15	1.302E-15	9.253E-16	9.062E-23	0.000E+00	0.000E+00
Pu-239+D	Pu-239+D	9.829E-01	1.085E-03	1.069E-03	1.038E-03	9.333E-04	6.633E-04	6.496E-11	0.000E+00	0.000E+00
Pu-239+D	U-235+D	9.829E-01	4.228E-12	1.253E-11	2.846E-11	7.738E-11	1.653E-10	1.014E-18	0.000E+00	0.000E+00
Pu-239+D	Pa-231	9.829E-01	1.842E-17	1.276E-16	6.560E-16	5.287E-15	3.193E-14	9.983E-20	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D	9.829E-01	1.018E-18	1.499E-17	1.681E-16	3.851E-15	6.051E-14	9.764E-21	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		1.085E-03	1.069E-03	1.038E-03	9.333E-04	6.633E-04	6.496E-11	0.000E+00	0.000E+00
Pu-239+D	Pu-239+D	2.720E-03	3.002E-06	2.959E-06	2.873E-06	2.583E-06	1.836E-06	1.798E-13	0.000E+00	0.000E+00
Pu-239+D	U-235+D	2.720E-03	1.170E-14	3.468E-14	7.876E-14	2.141E-13	4.574E-13	2.807E-21	0.000E+00	0.000E+00
Pu-239+D	Pa-231	2.720E-03	5.097E-20	3.531E-19	1.816E-18	1.463E-17	8.838E-17	2.763E-22	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D1	2.720E-03	2.832E-21	4.175E-20	4.681E-19	1.073E-17	1.686E-16	2.658E-23	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		3.002E-06	2.959E-06	2.873E-06	2.583E-06	1.836E-06	1.798E-13	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-239+D	Pu-239+D	1.375E-02	1.518E-05	1.496E-05	1.452E-05	1.306E-05	9.281E-06	9.089E-13	0.000E+00	0.000E+00
Pu-239+D	U-235+D	1.375E-02	5.915E-14	1.753E-13	3.982E-13	1.083E-12	2.313E-12	1.419E-20	0.000E+00	0.000E+00
Pu-239+D	Pa-231	1.375E-02	2.577E-19	1.785E-18	9.179E-18	7.397E-17	4.468E-16	1.397E-21	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D2	1.375E-02	1.295E-20	1.909E-19	2.140E-18	4.902E-17	7.693E-16	1.324E-22	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		1.518E-05	1.496E-05	1.452E-05	1.306E-05	9.281E-06	9.089E-13	0.000E+00	0.000E+00
Pu-239+D	Pu-239+D	3.806E-05	4.200E-08	4.140E-08	4.020E-08	3.614E-08	2.569E-08	2.515E-15	0.000E+00	0.000E+00
Pu-239+D	U-235+D	3.806E-05	1.637E-16	4.852E-16	1.102E-15	2.996E-15	6.400E-15	3.928E-23	0.000E+00	0.000E+00
Pu-239+D	Pa-231	3.806E-05	7.132E-22	4.940E-21	2.540E-20	2.047E-19	1.237E-18	3.866E-24	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D3	3.806E-05	3.610E-23	5.321E-22	5.965E-21	1.367E-19	2.145E-18	3.668E-25	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		4.200E-08	4.140E-08	4.020E-08	3.614E-08	2.569E-08	2.515E-15	0.000E+00	0.000E+00
Pu-239+D	Pu-239+D	8.252E-07	9.107E-10	8.975E-10	8.715E-10	7.836E-10	5.569E-10	5.454E-17	0.000E+00	0.000E+00
Pu-239+D	U-235+D	8.252E-07	3.549E-18	1.052E-17	2.389E-17	6.496E-17	1.388E-16	8.517E-25	0.000E+00	0.000E+00
Pu-239+D	Pa-231	8.252E-07	1.546E-23	1.071E-22	5.508E-22	4.438E-21	2.681E-20	8.382E-26	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D4	8.252E-07	5.562E-25	8.192E-24	9.171E-23	2.090E-21	3.220E-20	7.288E-27	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		9.107E-10	8.975E-10	8.715E-10	7.836E-10	5.569E-10	5.454E-17	0.000E+00	0.000E+00
Pu-239+D	Pu-239+D	2.284E-09	2.520E-12	2.484E-12	2.412E-12	2.169E-12	1.541E-12	1.509E-19	0.000E+00	0.000E+00
Pu-239+D	U-235+D	2.284E-09	9.824E-21	2.912E-20	6.612E-20	1.798E-19	3.840E-19	2.357E-27	0.000E+00	0.000E+00
Pu-239+D	Pa-231	2.284E-09	4.280E-26	2.964E-25	1.524E-24	1.228E-23	7.420E-23	2.320E-28	0.000E+00	0.000E+00
Pu-239+D	Ac-227+D5	2.284E-09	1.555E-27	2.290E-26	2.564E-25	5.843E-24	9.008E-23	2.019E-29	0.000E+00	0.000E+00
Pu-239+D	ΣDSR(j)		2.520E-12	2.484E-12	2.412E-12	2.169E-12	1.541E-12	1.509E-19	0.000E+00	0.000E+00
Pu-240	Pu-240	5.750E-08	6.340E-11	6.248E-11	6.066E-11	5.451E-11	3.869E-11	3.777E-18	0.000E+00	0.000E+00
Pu-240	Pu-240	1.000E+00	1.103E-03	1.087E-03	1.055E-03	9.480E-04	6.728E-04	6.568E-11	0.000E+00	0.000E+00
Pu-240	U-236	1.000E+00	4.679E-12	1.383E-11	3.119E-11	8.274E-11	1.629E-10	1.443E-17	0.000E+00	0.000E+00
Pu-240	Th-232	1.000E+00	9.974E-22	6.893E-21	3.539E-20	2.843E-19	1.697E-18	2.169E-25	0.000E+00	0.000E+00
Pu-240	Ra-228+D	1.000E+00	3.736E-22	5.416E-21	5.856E-20	1.192E-18	1.459E-17	4.530E-24	0.000E+00	0.000E+00
Pu-240	Th-228+D	1.000E+00	4.037E-23	1.145E-21	2.390E-20	1.010E-18	1.838E-17	4.261E-25	0.000E+00	0.000E+00
Pu-240	ΣDSR(j)		1.103E-03	1.087E-03	1.055E-03	9.480E-04	6.728E-04	6.568E-11	0.000E+00	0.000E+00
Pu-241	Pu-241	1.000E+00	2.073E-05	1.947E-05	1.716E-05	1.101E-05	2.978E-06	1.022E-14	0.000E+00	0.000E+00
Pu-241	Am-241	1.000E+00	1.392E-06	4.039E-06	8.758E-06	2.033E-05	2.909E-05	1.695E-12	0.000E+00	6.082E-14
Pu-241	Np-237+D	1.000E+00	1.038E-12	6.530E-12	2.732E-11	1.176E-10	2.145E-10	4.331E-10	1.429E-10	4.536E-11
Pu-241	U-233	1.000E+00	3.110E-20	4.268E-19	4.121E-18	5.939E-17	3.687E-16	1.184E-16	4.903E-16	1.010E-15
Pu-241	Th-229+D	1.000E+00	3.599E-23	1.040E-21	2.258E-20	1.081E-18	2.497E-17	4.021E-18	8.065E-18	2.287E-17
Pu-241	ΣDSR(j)		2.212E-05	2.350E-05	2.592E-05	3.134E-05	3.207E-05	4.349E-10	1.429E-10	4.542E-11
Pu-241+D	Pu-241+D	2.450E-05	1.453E-07	1.370E-07	1.218E-07	8.051E-08	2.411E-08	1.263E-18	0.000E+00	0.000E+00
Pu-241+D	Np-237+D	2.450E-05	4.635E-14	1.182E-13	1.952E-13	2.010E-13	6.295E-14	6.623E-14	2.558E-19	0.000E+00
Pu-241+D	U-233	2.450E-05	1.868E-21	1.168E-20	4.849E-20	2.033E-19	3.393E-19	7.839E-20	8.675E-20	8.647E-20
Pu-241+D	Th-229+D	2.450E-05	2.720E-24	3.755E-23	3.663E-22	5.471E-21	3.830E-20	4.492E-22	9.541E-22	2.548E-21
Pu-241+D	ΣDSR(j)		1.453E-07	1.370E-07	1.218E-07	8.051E-08	2.411E-08	6.623E-14	3.435E-19	8.902E-20

Summary : RESRAD Default

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Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g)							
			0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Sb-125	Sb-125	7.686E-01	1.526E-02	1.100E-02	5.709E-03	5.742E-04	7.873E-07	2.524E-25	0.000E+00	0.000E+00
Sb-125	Sb-125	2.314E-01	4.593E-03	3.310E-03	1.718E-03	1.728E-04	2.370E-07	7.597E-26	0.000E+00	0.000E+00
Sb-125	Te-125m	2.314E-01	6.890E-06	7.101E-06	3.952E-06	5.326E-07	2.619E-09	1.052E-16	2.491E-41	0.000E+00
Sb-125	∑DSR(j)		4.599E-03	3.317E-03	1.722E-03	1.734E-04	2.396E-07	1.052E-16	2.491E-41	0.000E+00
Sr-90+D	Sr-90+D	1.000E+00	3.657E-04	2.135E-04	7.253E-05	1.653E-06	3.258E-11	6.232E-19	0.000E+00	0.000E+00
Tc-99	Tc-99	1.000E+00	3.096E-06	2.368E-05	9.871E-13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

The DSR includes contributions from associated (half-life ≤ 30 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g

Basic Radiation Dose Limit = 2.500E+01 mrem/yr

Nuclide (i)	t=	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ag-108m	2.783E+02	2.870E+02	3.054E+02	3.806E+02	7.358E+02	2.950E+12	*7.853E+12	*7.853E+12	
Am-241	1.416E+04	1.438E+04	1.483E+04	1.654E+04	2.302E+04	1.609E+09	5.397E+09	1.700E+10	
Am-243	2.176E+03	2.204E+03	2.263E+03	2.486E+03	3.325E+03	*1.996E+11	*1.996E+11	*1.996E+11	
C-14	1.514E+08	*4.479E+12	*4.479E+12	*4.479E+12	*4.479E+12	*4.479E+12	*4.479E+12	*4.479E+12	
Cm-243	3.494E+03	3.605E+03	3.839E+03	4.795E+03	9.300E+03	3.512E+12	*5.054E+13	*5.054E+13	
Cm-244	3.985E+04	4.184E+04	4.614E+04	6.519E+04	1.812E+05	1.782E+13	*8.092E+13	*8.092E+13	
Co-60	1.947E+02	2.239E+02	2.961E+02	7.910E+02	1.353E+04	*1.113E+15	*1.113E+15	*1.113E+15	
Cs-134	3.366E+02	4.750E+02	9.462E+02	1.058E+04	1.081E+07	*1.283E+15	*1.283E+15	*1.283E+15	
Cs-137	8.012E+02	8.269E+02	8.811E+02	1.103E+03	2.162E+03	1.055E+12	*8.593E+13	*8.593E+13	
Eu-152	4.168E+02	4.473E+02	5.155E+02	8.492E+02	3.649E+03	*1.727E+14	*1.727E+14	*1.727E+14	
Eu-154	3.917E+02	4.330E+02	5.292E+02	1.071E+03	8.283E+03	*2.685E+14	*2.685E+14	*2.685E+14	
Eu-155	1.140E+04	1.342E+04	1.860E+04	5.835E+04	1.554E+06	*4.815E+14	*4.815E+14	*4.815E+14	
Fe-55	1.166E+09	1.517E+09	2.572E+09	1.638E+10	3.368E+12	*2.335E+15	*2.335E+15	*2.335E+15	
H-3	1.646E+08	4.177E+07	*9.621E+15	*9.621E+15	*9.621E+15	*9.621E+15	*9.621E+15	*9.621E+15	
Nb-94	2.885E+02	2.983E+02	3.190E+02	4.046E+02	8.228E+02	*1.856E+11	*1.856E+11	*1.856E+11	
Ni-59	2.977E+08	3.065E+08	3.250E+08	4.006E+08	7.562E+08	*5.906E+10	*5.906E+10	5.241E+08	
Ni-63	1.101E+08	1.141E+08	1.227E+08	1.587E+08	3.440E+08	*5.586E+13	*5.586E+13	1.933E+11	
Np-237	2.203E+03	3.034E+03	5.756E+03	5.426E+04	3.378E+07	4.006E+08	*7.034E+08	*7.034E+08	
Pm-147	3.551E+07	4.705E+07	8.258E+07	5.922E+08	1.667E+11	*9.212E+14	*9.212E+14	*9.212E+14	
Pu-238	2.491E+04	2.547E+04	2.665E+04	3.131E+04	5.156E+04	9.175E+11	*1.712E+13	*1.712E+13	
Pu-239	2.265E+04	2.299E+04	2.367E+04	2.633E+04	3.705E+04	*6.202E+10	*6.202E+10	*6.202E+10	
Pu-240	2.268E+04	2.301E+04	2.370E+04	2.637E+04	3.716E+04	*2.269E+11	*2.269E+11	*2.269E+11	
Pu-241	1.123E+06	1.057E+06	9.600E+05	7.958E+05	7.790E+05	5.748E+10	1.750E+11	5.504E+11	
Sb-125	1.259E+03	1.747E+03	3.364E+03	3.344E+04	2.435E+07	*1.029E+15	*1.029E+15	*1.029E+15	
Sr-90	6.837E+04	1.171E+05	3.447E+05	1.513E+07	7.673E+11	*1.366E+14	*1.366E+14	*1.366E+14	
Tc-99	8.075E+06	1.056E+06	*1.695E+10	*1.695E+10	*1.695E+10	*1.695E+10	*1.695E+10	*1.695E+10	

*At specific activity limit

Summary : RESRAD Default

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Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
 and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
 at tmin = time of minimum single radionuclide soil guideline
 and at tmax = time of maximum total dose = 0.000E+00 years

Nuclide (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Ag-108m	1.000E+00	0.000E+00	8.984E-02	2.783E+02	8.984E-02	2.783E+02
Am-241	1.000E+00	0.000E+00	1.766E-03	1.416E+04	1.766E-03	1.416E+04
Am-243	1.000E+00	0.000E+00	1.149E-02	2.176E+03	1.149E-02	2.176E+03
C-14	1.000E+00	20.43 ± 0.04	1.481E-06	1.689E+07	1.651E-07	1.514E+08
Cm-243	1.000E+00	0.000E+00	7.156E-03	3.494E+03	7.156E-03	3.494E+03
Cm-244	1.000E+00	0.000E+00	6.273E-04	3.985E+04	6.273E-04	3.985E+04
Co-60	1.000E+00	0.000E+00	1.284E-01	1.947E+02	1.284E-01	1.947E+02
Cs-134	1.000E+00	0.000E+00	7.426E-02	3.366E+02	7.426E-02	3.366E+02
Cs-137	1.000E+00	0.000E+00	3.120E-02	8.012E+02	3.120E-02	8.012E+02
Eu-152	1.000E+00	0.000E+00	5.999E-02	4.168E+02	5.999E-02	4.168E+02
Eu-154	1.000E+00	0.000E+00	6.382E-02	3.917E+02	6.382E-02	3.917E+02
Eu-155	1.000E+00	0.000E+00	2.193E-03	1.140E+04	2.193E-03	1.140E+04
Fe-55	1.000E+00	0.000E+00	2.145E-08	1.166E+09	2.145E-08	1.166E+09
H-3	1.000E+00	1.019 ± 0.002	6.306E-07	3.965E+07	1.519E-07	1.646E+08
Nb-94	1.000E+00	0.000E+00	8.665E-02	2.885E+02	8.665E-02	2.885E+02
Ni-59	1.000E+00	0.000E+00	8.398E-08	2.977E+08	8.398E-08	2.977E+08
Ni-63	1.000E+00	0.000E+00	2.272E-07	1.101E+08	2.272E-07	1.101E+08
Np-237	1.000E+00	61.1 ± 0.1	1.971E-02	1.268E+03	1.135E-02	2.203E+03
Pm-147	1.000E+00	0.000E+00	7.040E-07	3.551E+07	7.040E-07	3.551E+07
Pu-238	1.000E+00	0.000E+00	1.004E-03	2.491E+04	1.004E-03	2.491E+04
Pu-239	1.000E+00	0.000E+00	1.104E-03	2.265E+04	1.104E-03	2.265E+04
Pu-240	1.000E+00	0.000E+00	1.103E-03	2.268E+04	1.103E-03	2.268E+04
Pu-241	1.000E+00	19.78 ± 0.04	3.355E-05	7.451E+05	2.226E-05	1.123E+06
Sb-125	1.000E+00	0.000E+00	1.986E-02	1.259E+03	1.986E-02	1.259E+03
Sr-90	1.000E+00	37.67 ± 0.08	4.030E-04	6.204E+04	3.657E-04	6.837E+04
Tc-99	1.000E+00	1.466 ± 0.003	2.687E-05	9.305E+05	3.096E-06	8.075E+06

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF (i)	DOSE (j, t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ag-108m	Ag-108m	1.000E+00	8.984E-02	8.711E-02	8.186E-02	6.569E-02	3.398E-02	8.474E-12	0.000E+00	0.000E+00
Am-241	Am-241	1.000E+00	1.766E-03	1.739E-03	1.686E-03	1.511E-03	1.086E-03	4.751E-11	0.000E+00	0.000E+00
Am-241	Pu-241	1.000E+00	1.392E-06	4.039E-06	8.758E-06	2.033E-05	2.909E-05	1.695E-12	0.000E+00	6.082E-14
Am-241	ΣDOSE (j)		1.767E-03	1.743E-03	1.695E-03	1.531E-03	1.115E-03	4.921E-11	0.000E+00	6.082E-14
Np-237	Am-241	1.000E+00	1.920E-09	5.006E-09	8.725E-09	1.146E-08	8.511E-09	1.549E-08	4.632E-09	1.471E-09
Np-237	Np-237	1.000E+00	1.135E-02	8.240E-03	4.344E-03	4.607E-04	7.370E-07	6.174E-08	0.000E+00	0.000E+00
Np-237	Pu-241	1.000E+00	1.038E-12	6.530E-12	2.732E-11	1.176E-10	2.145E-10	4.331E-10	1.429E-10	4.536E-11
Np-237	Pu-241	2.450E-05	4.635E-14	1.182E-13	1.952E-13	2.010E-13	6.295E-14	6.623E-14	2.558E-19	0.000E+00
Np-237	ΣDOSE (j)		1.135E-02	8.240E-03	4.344E-03	4.607E-04	7.457E-07	7.767E-08	4.775E-09	1.516E-09
U-233	Am-241	1.000E+00	7.712E-17	4.887E-16	2.094E-15	9.941E-15	2.406E-14	6.736E-15	1.876E-14	3.559E-14
U-233	Np-237	1.000E+00	6.984E-10	1.811E-09	3.131E-09	3.995E-09	2.694E-09	6.597E-10	6.595E-10	6.575E-10
U-233	Pu-241	1.000E+00	3.110E-20	4.268E-19	4.121E-18	5.939E-17	3.687E-16	1.184E-16	4.903E-16	1.010E-15
U-233	Pu-241	2.450E-05	1.868E-21	1.168E-20	4.849E-20	2.033E-19	3.393E-19	7.839E-20	8.675E-20	8.647E-20
U-233	ΣDOSE (j)		6.984E-10	1.811E-09	3.131E-09	3.995E-09	2.694E-09	6.598E-10	6.596E-10	6.575E-10
Th-229	Am-241	1.000E+00	1.120E-19	1.561E-18	1.557E-17	2.533E-16	2.255E-15	1.540E-16	2.934E-16	8.259E-16
Th-229	Np-237	1.000E+00	1.367E-12	8.718E-12	3.778E-11	1.872E-10	5.216E-10	3.926E-12	7.542E-12	1.964E-11
Th-229	Pu-241	1.000E+00	3.599E-23	1.040E-21	2.258E-20	1.081E-18	2.497E-17	4.021E-18	8.065E-18	2.287E-17
Th-229	Pu-241	2.450E-05	2.720E-24	3.755E-23	3.663E-22	5.471E-21	3.830E-20	4.492E-22	9.541E-22	2.548E-21
Th-229	ΣDOSE (j)		1.367E-12	8.718E-12	3.778E-11	1.872E-10	5.216E-10	3.926E-12	7.542E-12	1.964E-11
Am-243	Am-243	9.829E-01	1.129E-02	1.115E-02	1.086E-02	9.885E-03	7.390E-03	5.902E-11	0.000E+00	0.000E+00
Am-243	Am-243	2.720E-03	3.126E-05	3.085E-05	3.005E-05	2.736E-05	2.045E-05	1.634E-13	0.000E+00	0.000E+00
Am-243	Cm-243	2.359E-03	1.264E-09	3.720E-09	8.315E-09	2.138E-08	3.936E-08	6.262E-16	0.000E+00	0.000E+00
Am-243	Cm-243	6.529E-06	3.500E-12	1.030E-11	2.301E-11	5.918E-11	1.089E-10	1.733E-18	0.000E+00	0.000E+00
Am-243	Cm-243	3.301E-05	1.769E-11	5.206E-11	1.163E-10	2.992E-10	5.507E-10	8.763E-18	0.000E+00	0.000E+00
Am-243	Cm-243	9.135E-08	4.897E-14	1.441E-13	3.220E-13	8.281E-13	1.524E-12	2.425E-20	0.000E+00	0.000E+00
Am-243	Cm-243	1.981E-09	1.062E-15	3.124E-15	6.981E-15	1.795E-14	3.304E-14	5.258E-22	0.000E+00	0.000E+00
Am-243	Cm-243	5.481E-12	2.938E-18	8.645E-18	1.932E-17	4.969E-17	9.145E-17	1.455E-24	0.000E+00	0.000E+00
Am-243	Cm-243	1.416E-06	7.591E-13	2.234E-12	4.992E-12	1.284E-11	2.363E-11	3.760E-19	0.000E+00	0.000E+00
Am-243	Cm-243	3.920E-09	2.101E-15	6.182E-15	1.382E-14	3.553E-14	6.539E-14	1.041E-21	0.000E+00	0.000E+00
Am-243	Cm-243	1.982E-08	1.062E-14	3.125E-14	6.985E-14	1.796E-13	3.306E-13	5.261E-21	0.000E+00	0.000E+00
Am-243	Cm-243	5.484E-11	2.940E-17	8.650E-17	1.933E-16	4.972E-16	9.150E-16	1.456E-23	0.000E+00	0.000E+00
Am-243	Cm-243	1.189E-12	6.373E-19	1.875E-18	4.191E-18	1.078E-17	1.984E-17	3.157E-25	0.000E+00	0.000E+00
Am-243	Cm-243	3.291E-15	1.764E-21	5.190E-21	1.160E-20	2.983E-20	5.490E-20	8.732E-28	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		1.133E-02	1.118E-02	1.089E-02	9.912E-03	7.411E-03	5.919E-11	0.000E+00	0.000E+00
Pu-239	Am-243	9.829E-01	1.554E-08	4.598E-08	1.040E-07	2.783E-07	5.613E-07	1.665E-13	0.000E+00	0.000E+00
Pu-239	Am-243	2.720E-03	4.301E-11	1.273E-10	2.878E-10	7.701E-10	1.553E-09	4.608E-16	0.000E+00	0.000E+00
Pu-239	Am-243	1.375E-02	2.175E-10	6.434E-10	1.455E-09	3.894E-09	7.854E-09	2.330E-15	0.000E+00	0.000E+00
Pu-239	Am-243	3.806E-05	6.019E-13	1.781E-12	4.027E-12	1.078E-11	2.174E-11	6.448E-18	0.000E+00	0.000E+00
Pu-239	Am-243	8.252E-07	1.305E-14	3.860E-14	8.731E-14	2.336E-13	4.713E-13	1.398E-19	0.000E+00	0.000E+00
Pu-239	Am-243	2.284E-09	3.611E-17	1.068E-16	2.416E-16	6.466E-16	1.304E-15	3.869E-22	0.000E+00	0.000E+00
Pu-239	Cm-243	2.359E-03	1.162E-15	7.985E-15	4.044E-14	3.093E-13	1.610E-12	1.097E-18	0.000E+00	0.000E+00
Pu-239	Cm-243	6.529E-06	3.217E-18	2.210E-17	1.119E-16	8.559E-16	4.456E-15	3.037E-21	0.000E+00	0.000E+00
Pu-239	Cm-243	3.301E-05	1.626E-17	1.117E-16	5.658E-16	4.327E-15	2.253E-14	1.535E-20	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-239	Cm-243	9.135E-08	4.501E-20	3.092E-19	1.566E-18	1.198E-17	6.236E-17	4.249E-23	0.000E+00	0.000E+00
Pu-239	Cm-243	1.981E-09	9.759E-22	6.704E-21	3.395E-20	2.596E-19	1.352E-18	9.212E-25	0.000E+00	0.000E+00
Pu-239	Cm-243	5.481E-12	2.701E-24	1.855E-23	9.396E-23	7.186E-22	3.742E-21	2.549E-27	0.000E+00	0.000E+00
Pu-239	Cm-243	9.805E-01	1.541E-08	4.525E-08	1.006E-07	2.535E-07	4.345E-07	8.065E-14	0.000E+00	0.000E+00
Pu-239	Cm-243	2.714E-03	4.266E-11	1.252E-10	2.784E-10	7.016E-10	1.203E-09	2.232E-16	0.000E+00	0.000E+00
Pu-239	Cm-243	1.372E-02	2.157E-10	6.331E-10	1.407E-09	3.547E-09	6.080E-09	1.128E-15	0.000E+00	0.000E+00
Pu-239	Cm-243	3.797E-05	5.969E-13	1.752E-12	3.895E-12	9.818E-12	1.683E-11	3.123E-18	0.000E+00	0.000E+00
Pu-239	Cm-243	8.232E-07	1.294E-14	3.799E-14	8.445E-14	2.128E-13	3.648E-13	6.771E-20	0.000E+00	0.000E+00
Pu-239	Cm-243	2.278E-09	3.582E-17	1.051E-16	2.337E-16	5.891E-16	1.010E-15	1.874E-22	0.000E+00	0.000E+00
Pu-239	Pu-239	9.829E-01	1.085E-03	1.069E-03	1.038E-03	9.333E-04	6.633E-04	6.496E-11	0.000E+00	0.000E+00
Pu-239	ΣDOSE(j)		1.085E-03	1.069E-03	1.038E-03	9.339E-04	6.643E-04	6.521E-11	0.000E+00	0.000E+00
U-235	Am-243	9.829E-01	4.047E-17	2.800E-16	1.441E-15	1.169E-14	7.253E-14	1.457E-21	0.000E+00	0.000E+00
U-235	Am-243	2.720E-03	1.120E-19	7.749E-19	3.989E-18	3.236E-17	2.007E-16	4.034E-24	0.000E+00	0.000E+00
U-235	Am-243	1.375E-02	5.663E-19	3.918E-18	2.016E-17	1.636E-16	1.015E-15	2.039E-23	0.000E+00	0.000E+00
U-235	Am-243	3.806E-05	1.567E-21	1.084E-20	5.581E-20	4.527E-19	2.809E-18	5.644E-26	0.000E+00	0.000E+00
U-235	Am-243	8.252E-07	3.398E-23	2.351E-22	1.210E-21	9.816E-21	6.090E-20	1.224E-27	0.000E+00	0.000E+00
U-235	Am-243	2.284E-09	9.404E-26	6.506E-25	3.349E-24	2.717E-23	1.685E-22	3.237E-30	0.000E+00	0.000E+00
U-235	Am-243	5.901E-04	2.430E-20	1.681E-19	8.652E-19	7.019E-18	4.355E-17	8.750E-25	0.000E+00	0.000E+00
U-235	Am-243	1.633E-06	6.724E-23	4.652E-22	2.395E-21	1.943E-20	1.205E-19	2.422E-27	0.000E+00	0.000E+00
U-235	Am-243	8.257E-06	3.400E-22	2.352E-21	1.211E-20	9.821E-20	6.093E-19	1.224E-26	0.000E+00	0.000E+00
U-235	Am-243	2.285E-08	9.409E-25	6.510E-24	3.351E-23	2.718E-22	1.686E-21	3.239E-29	0.000E+00	0.000E+00
U-235	Am-243	4.954E-10	2.040E-26	1.411E-25	7.264E-25	5.893E-24	3.656E-23	0.000E+00	0.000E+00	0.000E+00
U-235	Am-243	1.371E-12	5.644E-29	3.905E-28	2.010E-27	1.631E-26	1.012E-25	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	2.359E-03	2.274E-24	3.359E-23	3.786E-22	8.838E-21	1.464E-19	7.441E-27	0.000E+00	0.000E+00
U-235	Cm-243	6.529E-06	6.292E-27	9.297E-26	1.048E-24	2.446E-23	4.051E-22	1.969E-29	0.000E+00	0.000E+00
U-235	Cm-243	3.301E-05	3.182E-26	4.700E-25	5.297E-24	1.237E-22	2.048E-21	1.033E-28	0.000E+00	0.000E+00
U-235	Cm-243	9.135E-08	8.804E-29	1.300E-27	1.466E-26	3.422E-25	5.668E-24	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	1.981E-09	1.842E-30	2.721E-29	3.177E-28	7.419E-27	1.229E-25	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	5.481E-12	0.000E+00	0.000E+00	0.000E+00	1.984E-29	3.400E-28	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	1.416E-06	1.365E-27	2.017E-26	2.273E-25	5.306E-24	8.788E-23	4.271E-30	0.000E+00	0.000E+00
U-235	Cm-243	3.920E-09	3.645E-30	5.580E-29	6.288E-28	1.468E-26	2.432E-25	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	1.982E-08	1.843E-29	2.821E-28	3.179E-27	7.424E-26	1.230E-24	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	5.484E-11	0.000E+00	0.000E+00	8.494E-30	2.054E-28	3.402E-27	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	1.189E-12	0.000E+00	0.000E+00	0.000E+00	4.303E-30	7.376E-29	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	3.291E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	9.805E-01	4.019E-17	2.767E-16	1.408E-15	1.097E-14	6.096E-14	8.744E-22	0.000E+00	0.000E+00
U-235	Cm-243	2.714E-03	1.112E-19	7.658E-19	3.897E-18	3.037E-17	1.687E-16	2.420E-24	0.000E+00	0.000E+00
U-235	Cm-243	1.372E-02	5.624E-19	3.872E-18	1.970E-17	1.536E-16	8.529E-16	1.223E-23	0.000E+00	0.000E+00
U-235	Cm-243	3.797E-05	1.557E-21	1.072E-20	5.453E-20	4.250E-19	2.361E-18	3.386E-26	0.000E+00	0.000E+00
U-235	Cm-243	8.232E-07	3.375E-23	2.323E-22	1.182E-21	9.214E-21	5.118E-20	7.341E-28	0.000E+00	0.000E+00
U-235	Cm-243	2.278E-09	9.340E-26	6.430E-25	3.272E-24	2.550E-23	1.416E-22	1.104E-30	0.000E+00	0.000E+00
U-235	Cm-243	5.887E-04	2.413E-20	1.661E-19	8.454E-19	6.589E-18	3.660E-17	5.250E-25	0.000E+00	0.000E+00
U-235	Cm-243	1.629E-06	6.679E-23	4.598E-22	2.340E-21	1.824E-20	1.013E-19	1.453E-27	0.000E+00	0.000E+00
U-235	Cm-243	8.237E-06	3.377E-22	2.324E-21	1.183E-20	9.219E-20	5.121E-19	7.345E-27	0.000E+00	0.000E+00
U-235	Cm-243	2.280E-08	9.345E-25	6.433E-24	3.274E-23	2.552E-22	1.417E-21	1.943E-29	0.000E+00	0.000E+00
U-235	Cm-243	4.942E-10	2.026E-26	1.395E-25	7.098E-25	5.532E-24	3.073E-23	0.000E+00	0.000E+00	0.000E+00
U-235	Cm-243	1.368E-12	5.606E-29	3.859E-28	1.964E-27	1.531E-26	8.504E-26	0.000E+00	0.000E+00	0.000E+00
U-235	Pu-239	5.901E-04	2.538E-15	7.522E-15	1.708E-14	4.645E-14	9.922E-14	6.090E-22	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-235	Pu-239	1.633E-06	7.025E-18	2.082E-17	4.728E-17	1.286E-16	2.746E-16	1.685E-24	0.000E+00	0.000E+00
U-235	Pu-239	8.257E-06	3.551E-17	1.053E-16	2.390E-16	6.500E-16	1.388E-15	8.521E-24	0.000E+00	0.000E+00
U-235	Pu-239	2.285E-08	9.829E-20	2.913E-19	6.616E-19	1.799E-18	3.843E-18	2.358E-26	0.000E+00	0.000E+00
U-235	Pu-239	4.954E-10	2.131E-21	6.316E-21	1.434E-20	3.900E-20	8.331E-20	5.113E-28	0.000E+00	0.000E+00
U-235	Pu-239	1.371E-12	5.898E-24	1.748E-23	3.970E-23	1.079E-22	2.306E-22	0.000E+00	0.000E+00	0.000E+00
U-235	Pu-239	9.829E-01	4.228E-12	1.253E-11	2.846E-11	7.738E-11	1.653E-10	1.014E-18	0.000E+00	0.000E+00
U-235	Pu-239	2.720E-03	1.170E-14	3.468E-14	7.876E-14	2.141E-13	4.574E-13	2.807E-21	0.000E+00	0.000E+00
U-235	Pu-239	1.375E-02	5.915E-14	1.753E-13	3.982E-13	1.083E-12	2.313E-12	1.419E-20	0.000E+00	0.000E+00
U-235	Pu-239	3.806E-05	1.637E-16	4.852E-16	1.102E-15	2.996E-15	6.400E-15	3.928E-23	0.000E+00	0.000E+00
U-235	Pu-239	8.252E-07	3.549E-18	1.052E-17	2.389E-17	6.496E-17	1.388E-16	8.517E-25	0.000E+00	0.000E+00
U-235	Pu-239	2.284E-09	9.824E-21	2.912E-20	6.612E-20	1.798E-19	3.840E-19	2.357E-27	0.000E+00	0.000E+00
U-235	ΣDOSE(j)		4.301E-12	1.275E-11	2.895E-11	7.875E-11	1.683E-10	1.034E-18	0.000E+00	0.000E+00
Pa-231	Am-243	9.829E-01	1.321E-22	1.961E-21	2.226E-20	5.310E-19	9.252E-18	9.269E-23	0.000E+00	0.000E+00
Pa-231	Am-243	2.720E-03	3.656E-25	5.428E-24	6.162E-23	1.470E-21	2.561E-20	2.565E-25	0.000E+00	0.000E+00
Pa-231	Am-243	1.375E-02	1.848E-24	2.744E-23	3.115E-22	7.430E-21	1.295E-19	1.297E-24	0.000E+00	0.000E+00
Pa-231	Am-243	3.806E-05	5.115E-27	7.595E-26	8.622E-25	2.056E-23	3.583E-22	3.589E-27	0.000E+00	0.000E+00
Pa-231	Am-243	8.252E-07	1.100E-28	1.647E-27	1.869E-26	4.458E-25	7.768E-24	7.747E-29	0.000E+00	0.000E+00
Pa-231	Am-243	2.284E-09	0.000E+00	4.313E-30	5.131E-29	1.234E-27	2.150E-26	0.000E+00	0.000E+00	0.000E+00
Pa-231	Am-243	5.901E-04	7.930E-26	1.177E-24	1.337E-23	3.188E-22	5.554E-21	5.564E-26	0.000E+00	0.000E+00
Pa-231	Am-243	1.633E-06	2.195E-28	3.259E-27	3.699E-26	8.823E-25	1.537E-23	1.533E-28	0.000E+00	0.000E+00
Pa-231	Am-243	8.257E-06	1.110E-27	1.647E-26	1.870E-25	4.461E-24	7.772E-23	7.770E-28	0.000E+00	0.000E+00
Pa-231	Am-243	2.285E-08	2.913E-30	4.522E-29	5.176E-28	1.235E-26	2.151E-25	2.145E-30	0.000E+00	0.000E+00
Pa-231	Am-243	4.954E-10	0.000E+00	0.000E+00	1.061E-29	2.677E-28	4.663E-27	0.000E+00	0.000E+00	0.000E+00
Pa-231	Am-243	1.371E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.222E-29	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	2.359E-03	5.636E-30	1.816E-28	4.424E-27	3.034E-25	1.429E-23	3.743E-28	0.000E+00	0.000E+00
Pa-231	Cm-243	6.529E-06	0.000E+00	0.000E+00	1.158E-29	8.397E-28	3.953E-26	1.036E-30	0.000E+00	0.000E+00
Pa-231	Cm-243	3.301E-05	0.000E+00	1.493E-30	6.139E-29	4.245E-27	1.999E-25	5.237E-30	0.000E+00	0.000E+00
Pa-231	Cm-243	9.135E-08	0.000E+00	0.000E+00	0.000E+00	1.111E-29	5.532E-28	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	1.981E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.135E-29	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	5.481E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	1.416E-06	0.000E+00	0.000E+00	1.554E-30	1.821E-28	8.576E-27	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	3.920E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.355E-29	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	1.982E-08	0.000E+00	0.000E+00	0.000E+00	1.476E-30	1.191E-28	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	5.484E-11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	1.189E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	3.291E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	9.805E-01	1.313E-22	1.942E-21	2.187E-20	5.061E-19	8.117E-18	6.318E-23	0.000E+00	0.000E+00
Pa-231	Cm-243	2.714E-03	3.634E-25	5.376E-24	6.052E-23	1.401E-21	2.246E-20	1.749E-25	0.000E+00	0.000E+00
Pa-231	Cm-243	1.372E-02	1.837E-24	2.718E-23	3.059E-22	7.082E-21	1.136E-19	8.841E-25	0.000E+00	0.000E+00
Pa-231	Cm-243	3.797E-05	5.085E-27	7.522E-26	8.468E-25	1.960E-23	3.143E-22	2.447E-27	0.000E+00	0.000E+00
Pa-231	Cm-243	8.232E-07	1.093E-28	1.631E-27	1.836E-26	4.249E-25	6.815E-24	5.281E-29	0.000E+00	0.000E+00
Pa-231	Cm-243	2.278E-09	0.000E+00	4.271E-30	5.039E-29	1.176E-27	1.886E-26	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	5.887E-04	7.884E-26	1.166E-24	1.313E-23	3.039E-22	4.873E-21	3.793E-26	0.000E+00	0.000E+00
Pa-231	Cm-243	1.629E-06	2.182E-28	3.227E-27	3.633E-26	8.410E-25	1.349E-23	1.045E-28	0.000E+00	0.000E+00
Pa-231	Cm-243	8.237E-06	1.103E-27	1.632E-26	1.837E-25	4.252E-24	6.818E-23	5.297E-28	0.000E+00	0.000E+00
Pa-231	Cm-243	2.280E-08	2.896E-30	4.479E-29	5.083E-28	1.177E-26	1.887E-25	1.462E-30	0.000E+00	0.000E+00
Pa-231	Cm-243	4.942E-10	0.000E+00	0.000E+00	1.042E-29	2.551E-28	4.091E-27	0.000E+00	0.000E+00	0.000E+00
Pa-231	Cm-243	1.368E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.072E-29	0.000E+00	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF (i)	DOSE (j, t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pa-231	Pu-239	5.901E-04	1.106E-20	7.659E-20	3.939E-19	3.174E-18	1.917E-17	5.994E-23	0.000E+00	0.000E+00
Pa-231	Pu-239	1.633E-06	3.060E-23	2.120E-22	1.090E-21	8.784E-21	5.306E-20	1.659E-25	0.000E+00	0.000E+00
Pa-231	Pu-239	8.257E-06	1.547E-22	1.072E-21	5.511E-21	4.441E-20	2.682E-19	8.386E-25	0.000E+00	0.000E+00
Pa-231	Pu-239	2.285E-08	4.282E-25	2.966E-24	1.525E-23	1.229E-22	7.424E-22	2.321E-27	0.000E+00	0.000E+00
Pa-231	Pu-239	4.954E-10	9.283E-27	6.430E-26	3.307E-25	2.665E-24	1.610E-23	5.009E-29	0.000E+00	0.000E+00
Pa-231	Pu-239	1.371E-12	2.548E-29	1.780E-28	9.152E-28	7.375E-27	4.455E-26	0.000E+00	0.000E+00	0.000E+00
Pa-231	Pu-239	9.829E-01	1.842E-17	1.276E-16	6.560E-16	5.287E-15	3.193E-14	9.983E-20	0.000E+00	0.000E+00
Pa-231	Pu-239	2.720E-03	5.097E-20	3.531E-19	1.816E-18	1.463E-17	8.838E-17	2.763E-22	0.000E+00	0.000E+00
Pa-231	Pu-239	1.375E-02	2.577E-19	1.785E-18	9.179E-18	7.397E-17	4.468E-16	1.397E-21	0.000E+00	0.000E+00
Pa-231	Pu-239	3.806E-05	7.132E-22	4.940E-21	2.540E-20	2.047E-19	1.237E-18	3.866E-24	0.000E+00	0.000E+00
Pa-231	Pu-239	8.252E-07	1.546E-23	1.071E-22	5.508E-22	4.438E-21	2.681E-20	8.382E-26	0.000E+00	0.000E+00
Pa-231	Pu-239	2.284E-09	4.280E-26	2.964E-25	1.524E-24	1.228E-23	7.420E-23	2.309E-28	0.000E+00	0.000E+00
Pa-231	ΣDOSE (j)		1.874E-17	1.298E-16	6.675E-16	5.380E-15	3.251E-14	1.017E-19	0.000E+00	0.000E+00
Ac-227	Am-243	9.829E-01	5.855E-24	1.784E-22	4.329E-21	2.947E-19	1.369E-17	7.601E-24	0.000E+00	0.000E+00
Ac-227	Am-243	5.901E-04	3.515E-27	1.071E-25	2.599E-24	1.769E-22	8.218E-21	4.562E-27	0.000E+00	0.000E+00
Ac-227	Cm-243	2.359E-03	0.000E+00	1.353E-29	6.954E-28	1.369E-25	1.763E-23	2.751E-29	0.000E+00	0.000E+00
Ac-227	Cm-243	1.416E-06	0.000E+00	0.000E+00	0.000E+00	8.197E-29	1.058E-26	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	9.805E-01	5.824E-24	1.769E-22	4.264E-21	2.833E-19	1.228E-17	5.438E-24	0.000E+00	0.000E+00
Ac-227	Cm-243	5.887E-04	3.497E-27	1.062E-25	2.560E-24	1.701E-22	7.374E-21	3.264E-27	0.000E+00	0.000E+00
Ac-227	Pu-239	5.901E-04	6.111E-22	9.001E-21	1.009E-19	2.312E-18	3.633E-17	5.862E-24	0.000E+00	0.000E+00
Ac-227	Pu-239	9.829E-01	1.018E-18	1.499E-17	1.681E-16	3.851E-15	6.051E-14	9.764E-21	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		1.018E-18	1.500E-17	1.682E-16	3.854E-15	6.057E-14	9.783E-21	0.000E+00	0.000E+00
Ac-227	Am-243	2.720E-03	1.629E-26	4.966E-25	1.206E-23	8.209E-22	3.814E-20	2.062E-26	0.000E+00	0.000E+00
Ac-227	Am-243	1.375E-02	7.448E-26	2.270E-24	5.511E-23	3.750E-21	1.740E-19	1.027E-25	0.000E+00	0.000E+00
Ac-227	Am-243	1.633E-06	9.756E-30	2.974E-28	7.238E-27	4.928E-25	2.290E-23	1.187E-29	0.000E+00	0.000E+00
Ac-227	Cm-243	6.529E-06	0.000E+00	0.000E+00	1.086E-30	3.804E-28	4.913E-26	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	3.920E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.942E-29	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	2.714E-03	1.620E-26	4.925E-25	1.188E-23	7.892E-22	3.422E-20	1.477E-26	0.000E+00	0.000E+00
Ac-227	Cm-243	1.629E-06	9.704E-30	2.949E-28	7.129E-27	4.738E-25	2.055E-23	7.681E-30	0.000E+00	0.000E+00
Ac-227	Pu-239	1.633E-06	1.700E-24	2.506E-23	2.810E-22	6.441E-21	1.012E-19	1.596E-26	0.000E+00	0.000E+00
Ac-227	Pu-239	2.720E-03	2.832E-21	4.175E-20	4.681E-19	1.073E-17	1.686E-16	2.658E-23	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		2.834E-21	4.177E-20	4.685E-19	1.074E-17	1.690E-16	2.674E-23	0.000E+00	0.000E+00
Am-243	Am-243	1.375E-02	1.580E-04	1.560E-04	1.519E-04	1.383E-04	1.034E-04	8.259E-13	0.000E+00	0.000E+00
Am-243	Am-243	3.806E-05	4.374E-07	4.317E-07	4.205E-07	3.828E-07	2.862E-07	2.286E-15	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		1.585E-04	1.564E-04	1.524E-04	1.387E-04	1.037E-04	8.282E-13	0.000E+00	0.000E+00
Ac-227	Am-243	3.806E-05	2.071E-28	6.329E-27	1.536E-25	1.046E-23	4.852E-22	2.843E-28	0.000E+00	0.000E+00
Ac-227	Am-243	8.252E-07	3.187E-30	9.709E-29	2.362E-27	1.599E-25	7.285E-24	5.167E-30	0.000E+00	0.000E+00
Ac-227	Am-243	2.285E-08	0.000E+00	3.789E-30	9.197E-29	6.277E-27	2.913E-25	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	9.135E-08	0.000E+00	0.000E+00	0.000E+00	4.844E-30	6.243E-28	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	5.484E-11	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	3.797E-05	2.060E-28	6.277E-27	1.513E-25	1.005E-23	4.354E-22	2.036E-28	0.000E+00	0.000E+00
Ac-227	Cm-243	2.280E-08	0.000E+00	3.758E-30	9.060E-29	6.035E-27	2.614E-25	0.000E+00	0.000E+00	0.000E+00
Ac-227	Pu-239	2.285E-08	2.167E-26	3.194E-25	3.581E-24	8.204E-23	1.288E-21	2.200E-28	0.000E+00	0.000E+00
Ac-227	Pu-239	3.806E-05	3.610E-23	5.321E-22	5.965E-21	1.367E-19	2.145E-18	3.668E-25	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		3.612E-23	5.324E-22	5.969E-21	1.368E-19	2.147E-18	3.676E-25	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Am-243	Am-243	8.252E-07	9.482E-09	9.359E-09	9.117E-09	8.299E-09	6.205E-09	4.956E-17	0.000E+00	0.000E+00
Am-243	Am-243	2.284E-09	2.624E-11	2.590E-11	2.523E-11	2.297E-11	1.717E-11	1.372E-19	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		9.509E-09	9.385E-09	9.142E-09	8.322E-09	6.222E-09	4.969E-17	0.000E+00	0.000E+00
Ac-227	Am-243	2.284E-09	0.000E+00	0.000E+00	6.579E-30	4.465E-28	2.038E-26	0.000E+00	0.000E+00	0.000E+00
Ac-227	Am-243	1.371E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.219E-29	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	5.481E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	3.291E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	2.278E-09	0.000E+00	0.000E+00	6.481E-30	4.292E-28	1.829E-26	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	1.368E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.094E-29	0.000E+00	0.000E+00	0.000E+00
Ac-227	Pu-239	1.371E-12	0.000E+00	1.370E-29	1.534E-28	3.508E-27	5.408E-26	0.000E+00	0.000E+00	0.000E+00
Ac-227	Pu-239	2.284E-09	1.555E-27	2.290E-26	2.564E-25	5.843E-24	9.008E-23	1.843E-29	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		1.555E-27	2.292E-26	2.566E-25	5.847E-24	9.018E-23	1.843E-29	0.000E+00	0.000E+00
Am-243	Am-243	5.901E-04	6.780E-06	6.693E-06	6.519E-06	5.934E-06	4.437E-06	3.544E-14	0.000E+00	0.000E+00
Am-243	Am-243	1.633E-06	1.877E-08	1.852E-08	1.804E-08	1.642E-08	1.228E-08	9.807E-17	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		6.799E-06	6.711E-06	6.537E-06	5.951E-06	4.449E-06	3.553E-14	0.000E+00	0.000E+00
Pu-239	Am-243	5.901E-04	9.331E-12	2.760E-11	6.243E-11	1.671E-10	3.370E-10	9.996E-17	0.000E+00	0.000E+00
Pu-239	Am-243	1.633E-06	2.582E-14	7.640E-14	1.728E-13	4.624E-13	9.326E-13	2.767E-19	0.000E+00	0.000E+00
Pu-239	Am-243	8.257E-06	1.306E-13	3.862E-13	8.735E-13	2.338E-12	4.715E-12	1.399E-18	0.000E+00	0.000E+00
Pu-239	Am-243	2.285E-08	3.613E-16	1.069E-15	2.418E-15	6.470E-15	1.305E-14	3.871E-21	0.000E+00	0.000E+00
Pu-239	Am-243	4.954E-10	7.834E-18	2.318E-17	5.241E-17	1.403E-16	2.829E-16	8.393E-23	0.000E+00	0.000E+00
Pu-239	Am-243	1.371E-12	2.168E-20	6.414E-20	1.451E-19	3.882E-19	7.830E-19	2.323E-25	0.000E+00	0.000E+00
Pu-239	Cm-243	1.416E-06	6.970E-19	4.791E-18	2.427E-17	1.857E-16	9.667E-16	6.584E-22	0.000E+00	0.000E+00
Pu-239	Cm-243	3.920E-09	1.929E-21	1.326E-20	6.717E-20	5.138E-19	2.675E-18	1.822E-24	0.000E+00	0.000E+00
Pu-239	Cm-243	1.982E-08	9.752E-21	6.704E-20	3.396E-19	2.598E-18	1.353E-17	9.212E-24	0.000E+00	0.000E+00
Pu-239	Cm-243	5.484E-11	2.699E-23	1.855E-22	9.399E-22	7.189E-21	3.744E-20	2.550E-26	0.000E+00	0.000E+00
Pu-239	Cm-243	1.189E-12	5.852E-25	4.023E-24	2.038E-23	1.559E-22	8.116E-22	5.522E-28	0.000E+00	0.000E+00
Pu-239	Cm-243	3.291E-15	1.619E-27	1.113E-26	5.640E-26	4.314E-25	2.246E-24	1.514E-30	0.000E+00	0.000E+00
Pu-239	Cm-243	5.887E-04	9.254E-12	2.716E-11	6.039E-11	1.522E-10	2.609E-10	4.842E-17	0.000E+00	0.000E+00
Pu-239	Cm-243	1.629E-06	2.561E-14	7.518E-14	1.671E-13	4.212E-13	7.220E-13	1.340E-19	0.000E+00	0.000E+00
Pu-239	Cm-243	8.237E-06	1.295E-13	3.801E-13	8.450E-13	2.130E-12	3.650E-12	6.775E-19	0.000E+00	0.000E+00
Pu-239	Cm-243	2.280E-08	3.584E-16	1.052E-15	2.339E-15	5.894E-15	1.010E-14	1.875E-21	0.000E+00	0.000E+00
Pu-239	Cm-243	4.942E-10	7.770E-18	2.281E-17	5.070E-17	1.278E-16	2.190E-16	4.065E-23	0.000E+00	0.000E+00
Pu-239	Cm-243	1.368E-12	2.150E-20	6.312E-20	1.403E-19	3.537E-19	6.062E-19	1.125E-25	0.000E+00	0.000E+00
Pu-239	Pu-239	5.901E-04	6.512E-07	6.418E-07	6.232E-07	5.603E-07	3.982E-07	3.900E-14	0.000E+00	0.000E+00
Pu-239	ΣDOSE (j)		6.512E-07	6.419E-07	6.233E-07	5.606E-07	3.988E-07	3.915E-14	0.000E+00	0.000E+00
Am-243	Am-243	8.257E-06	9.487E-08	9.364E-08	9.121E-08	8.303E-08	6.208E-08	4.958E-16	0.000E+00	0.000E+00
Am-243	Am-243	2.285E-08	2.626E-10	2.592E-10	2.524E-10	2.298E-10	1.718E-10	1.372E-18	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		9.514E-08	9.390E-08	9.147E-08	8.326E-08	6.225E-08	4.972E-16	0.000E+00	0.000E+00
Ac-227	Am-243	8.257E-06	4.459E-29	1.363E-27	3.308E-26	2.252E-24	1.045E-22	6.162E-29	0.000E+00	0.000E+00
Ac-227	Cm-243	3.301E-05	0.000E+00	0.000E+00	8.839E-30	1.742E-27	2.241E-25	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	1.982E-08	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.342E-28	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	1.372E-02	7.408E-26	2.252E-24	5.428E-23	3.606E-21	1.561E-19	7.358E-26	0.000E+00	0.000E+00
Ac-227	Cm-243	8.237E-06	4.436E-29	1.352E-27	3.259E-26	2.165E-24	9.374E-23	4.413E-29	0.000E+00	0.000E+00
Ac-227	Pu-239	8.257E-06	7.775E-24	1.146E-22	1.285E-21	2.943E-20	4.618E-19	7.950E-26	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j, t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Pu-239	1.375E-02	1.295E-20	1.909E-19	2.140E-18	4.902E-17	7.693E-16	1.324E-22	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		1.296E-20	1.910E-19	2.141E-18	4.905E-17	7.699E-16	1.326E-22	0.000E+00	0.000E+00
Am-243	Am-243	4.954E-10	5.693E-12	5.619E-12	5.473E-12	4.982E-12	3.725E-12	2.975E-20	0.000E+00	0.000E+00
Am-243	Am-243	1.371E-12	1.576E-14	1.555E-14	1.515E-14	1.379E-14	1.031E-14	8.234E-23	0.000E+00	0.000E+00
Am-243	ΣDOSE (j)		5.709E-12	5.635E-12	5.488E-12	4.996E-12	3.735E-12	2.983E-20	0.000E+00	0.000E+00
Ac-227	Am-243	4.954E-10	0.000E+00	0.000E+00	0.000E+00	9.563E-29	4.373E-27	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	1.981E-09	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.348E-30	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	1.189E-12	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ac-227	Cm-243	8.232E-07	3.170E-30	9.628E-29	2.327E-27	1.537E-25	6.537E-24	3.701E-30	0.000E+00	0.000E+00
Ac-227	Cm-243	4.942E-10	0.000E+00	0.000E+00	0.000E+00	9.194E-29	3.924E-27	0.000E+00	0.000E+00	0.000E+00
Ac-227	Pu-239	4.954E-10	3.327E-28	4.918E-27	5.506E-26	1.255E-24	1.933E-23	3.999E-30	0.000E+00	0.000E+00
Ac-227	Pu-239	8.252E-07	5.562E-25	8.192E-24	9.171E-23	2.090E-21	3.220E-20	7.288E-27	0.000E+00	0.000E+00
Ac-227	ΣDOSE (j)		5.565E-25	8.197E-24	9.177E-23	2.091E-21	3.223E-20	7.296E-27	0.000E+00	0.000E+00
C-14	C-14	1.000E+00	1.651E-07	3.927E-17	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cm-243	Cm-243	2.359E-03	1.688E-05	1.636E-05	1.536E-05	1.230E-05	6.340E-06	1.660E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	6.529E-06	4.672E-08	4.528E-08	4.252E-08	3.404E-08	1.755E-08	4.594E-17	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		1.693E-05	1.640E-05	1.540E-05	1.233E-05	6.358E-06	1.665E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	3.301E-05	2.362E-07	2.289E-07	2.150E-07	1.721E-07	8.871E-08	2.323E-16	0.000E+00	0.000E+00
Cm-243	Cm-243	9.135E-08	6.537E-10	6.335E-10	5.949E-10	4.763E-10	2.455E-10	6.428E-19	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		2.368E-07	2.295E-07	2.155E-07	1.726E-07	8.896E-08	2.329E-16	0.000E+00	0.000E+00
Cm-243	Cm-243	1.981E-09	1.417E-11	1.373E-11	1.290E-11	1.033E-11	5.323E-12	1.394E-20	0.000E+00	0.000E+00
Cm-243	Cm-243	5.481E-12	3.922E-14	3.801E-14	3.570E-14	2.858E-14	1.473E-14	3.857E-23	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		1.421E-11	1.377E-11	1.293E-11	1.035E-11	5.338E-12	1.398E-20	0.000E+00	0.000E+00
Cm-243	Cm-243	1.416E-06	1.013E-08	9.821E-09	9.223E-09	7.384E-09	3.806E-09	9.966E-18	0.000E+00	0.000E+00
Cm-243	Cm-243	3.920E-09	2.805E-11	2.718E-11	2.553E-11	2.044E-11	1.053E-11	2.758E-20	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		1.016E-08	9.849E-09	9.249E-09	7.404E-09	3.817E-09	9.993E-18	0.000E+00	0.000E+00
Cm-243	Cm-243	1.982E-08	1.418E-10	1.374E-10	1.291E-10	1.033E-10	5.326E-11	1.394E-19	0.000E+00	0.000E+00
Cm-243	Cm-243	5.484E-11	3.924E-13	3.803E-13	3.572E-13	2.859E-13	1.474E-13	3.859E-22	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		1.422E-10	1.378E-10	1.294E-10	1.036E-10	5.341E-11	1.398E-19	0.000E+00	0.000E+00
Cm-243	Cm-243	1.189E-12	8.508E-15	8.246E-15	7.743E-15	6.199E-15	3.196E-15	8.367E-24	0.000E+00	0.000E+00
Cm-243	Cm-243	3.291E-15	2.355E-17	2.282E-17	2.143E-17	1.716E-17	8.845E-18	2.316E-26	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		8.532E-15	8.269E-15	7.765E-15	6.216E-15	3.205E-15	8.390E-24	0.000E+00	0.000E+00
Cm-243	Cm-243	9.805E-01	7.016E-03	6.800E-03	6.386E-03	5.112E-03	2.635E-03	6.900E-12	0.000E+00	0.000E+00
Cm-243	Cm-243	2.714E-03	1.942E-05	1.882E-05	1.767E-05	1.415E-05	7.294E-06	1.910E-14	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		7.036E-03	6.819E-03	6.403E-03	5.126E-03	2.643E-03	6.919E-12	0.000E+00	0.000E+00
Cm-243	Cm-243	1.372E-02	9.817E-05	9.515E-05	8.935E-05	7.153E-05	3.688E-05	9.654E-14	0.000E+00	0.000E+00
Cm-243	Cm-243	3.797E-05	2.717E-07	2.633E-07	2.473E-07	1.980E-07	1.021E-07	2.672E-16	0.000E+00	0.000E+00
Cm-243	ΣDOSE (j)		9.845E-05	9.541E-05	8.960E-05	7.173E-05	3.698E-05	9.681E-14	0.000E+00	0.000E+00

Summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\RESRAD INPUT FILE\ZION SOIL ROC SCREENING AF.RAD

Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cm-243	Cm-243	8.232E-07	5.891E-09	5.709E-09	5.361E-09	4.292E-09	2.213E-09	5.793E-18	0.000E+00	0.000E+00
Cm-243	Cm-243	2.278E-09	1.630E-11	1.580E-11	1.484E-11	1.188E-11	6.124E-12	1.603E-20	0.000E+00	0.000E+00
Cm-243	ΣDOSE(j)		5.907E-09	5.725E-09	5.376E-09	4.304E-09	2.219E-09	5.809E-18	0.000E+00	0.000E+00
Cm-243	Cm-243	5.887E-04	4.212E-06	4.082E-06	3.834E-06	3.069E-06	1.582E-06	4.142E-15	0.000E+00	0.000E+00
Cm-243	Cm-243	1.629E-06	1.166E-08	1.130E-08	1.061E-08	8.494E-09	4.379E-09	1.146E-17	0.000E+00	0.000E+00
Cm-243	ΣDOSE(j)		4.224E-06	4.094E-06	3.844E-06	3.078E-06	1.587E-06	4.154E-15	0.000E+00	0.000E+00
Cm-243	Cm-243	8.237E-06	5.894E-08	5.712E-08	5.364E-08	4.294E-08	2.214E-08	5.796E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	2.280E-08	1.631E-10	1.581E-10	1.485E-10	1.189E-10	6.127E-11	1.604E-19	0.000E+00	0.000E+00
Cm-243	ΣDOSE(j)		5.910E-08	5.728E-08	5.379E-08	4.306E-08	2.220E-08	5.812E-17	0.000E+00	0.000E+00
Cm-243	Cm-243	4.942E-10	3.537E-12	3.428E-12	3.219E-12	2.577E-12	1.328E-12	3.478E-21	0.000E+00	0.000E+00
Cm-243	Cm-243	1.368E-12	9.788E-15	9.486E-15	8.908E-15	7.132E-15	3.676E-15	9.625E-24	0.000E+00	0.000E+00
Cm-243	ΣDOSE(j)		3.546E-12	3.437E-12	3.228E-12	2.584E-12	1.332E-12	3.487E-21	0.000E+00	0.000E+00
Cm-244	Cm-244	1.371E-06	8.600E-10	8.189E-10	7.423E-10	5.245E-10	1.873E-10	1.656E-18	0.000E+00	0.000E+00
Cm-244	Cm-244	5.750E-08	3.607E-11	3.434E-11	3.113E-11	2.200E-11	7.857E-12	6.945E-20	0.000E+00	0.000E+00
Cm-244	ΣDOSE(j)		8.960E-10	8.532E-10	7.734E-10	5.465E-10	1.952E-10	1.725E-18	0.000E+00	0.000E+00
Pu-240	Cm-244	5.750E-08	3.301E-15	9.629E-15	2.111E-14	5.073E-14	7.720E-14	1.123E-20	0.000E+00	0.000E+00
Pu-240	Pu-240	5.750E-08	6.340E-11	6.248E-11	6.066E-11	5.451E-11	3.869E-11	3.777E-18	0.000E+00	0.000E+00
Pu-240	ΣDOSE(j)		6.340E-11	6.249E-11	6.068E-11	5.456E-11	3.876E-11	3.788E-18	0.000E+00	0.000E+00
Cm-244	Cm-244	1.000E+00	6.273E-04	5.973E-04	5.414E-04	3.826E-04	1.367E-04	1.208E-12	0.000E+00	0.000E+00
Pu-240	Cm-244	1.000E+00	5.741E-08	1.675E-07	3.671E-07	8.822E-07	1.343E-06	1.954E-13	0.000E+00	0.000E+00
U-236	Cm-244	1.000E+00	1.631E-16	1.115E-15	5.588E-15	4.116E-14	1.943E-13	3.327E-20	0.000E+00	0.000E+00
U-236	Pu-240	1.000E+00	4.679E-12	1.383E-11	3.119E-11	8.274E-11	1.629E-10	1.443E-17	0.000E+00	0.000E+00
U-236	ΣDOSE(j)		4.680E-12	1.383E-11	3.120E-11	8.278E-11	1.631E-10	1.446E-17	0.000E+00	0.000E+00
Th-232	Cm-244	1.000E+00	2.613E-26	3.842E-25	4.286E-24	9.640E-23	1.431E-21	3.869E-28	0.000E+00	0.000E+00
Th-232	Pu-240	1.000E+00	9.974E-22	6.893E-21	3.539E-20	2.843E-19	1.697E-18	2.169E-25	0.000E+00	0.000E+00
Th-232	ΣDOSE(j)		9.974E-22	6.893E-21	3.539E-20	2.844E-19	1.699E-18	2.173E-25	0.000E+00	0.000E+00
Ra-228	Cm-244	1.000E+00	7.871E-27	2.355E-25	5.489E-24	3.247E-22	1.075E-20	7.791E-27	0.000E+00	0.000E+00
Ra-228	Pu-240	1.000E+00	3.736E-22	5.416E-21	5.856E-20	1.192E-18	1.459E-17	4.530E-24	0.000E+00	0.000E+00
Ra-228	ΣDOSE(j)		3.736E-22	5.416E-21	5.857E-20	1.192E-18	1.460E-17	4.538E-24	0.000E+00	0.000E+00
Th-228	Cm-244	1.000E+00	7.145E-28	4.149E-26	1.867E-24	2.401E-22	1.266E-20	7.222E-28	0.000E+00	0.000E+00
Th-228	Pu-240	1.000E+00	4.037E-23	1.145E-21	2.390E-20	1.010E-18	1.838E-17	4.261E-25	0.000E+00	0.000E+00
Th-228	ΣDOSE(j)		4.037E-23	1.145E-21	2.390E-20	1.010E-18	1.839E-17	4.268E-25	0.000E+00	0.000E+00
Co-60	Co-60	1.000E+00	1.284E-01	1.117E-01	8.442E-02	3.161E-02	1.848E-03	5.177E-16	0.000E+00	0.000E+00
Cs-134	Cs-134	1.000E+00	7.426E-02	5.263E-02	2.642E-02	2.363E-03	2.313E-06	9.906E-25	0.000E+00	0.000E+00
Cs-137	Cs-137	1.000E+00	3.120E-02	3.023E-02	2.837E-02	2.266E-02	1.156E-02	2.371E-11	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Eu-152	Eu-152	7.210E-01	4.325E-02	4.029E-02	3.497E-02	2.123E-02	4.940E-03	8.590E-14	0.000E+00	0.000E+00
Eu-152	Eu-152	2.790E-01	1.674E-02	1.559E-02	1.353E-02	8.213E-03	1.912E-03	3.324E-14	0.000E+00	0.000E+00
Eu-152	ΣDOSE (j)		5.999E-02	5.589E-02	4.850E-02	2.944E-02	6.852E-03	1.191E-13	0.000E+00	0.000E+00
Gd-152	Eu-152	2.790E-01	5.325E-19	1.539E-18	3.305E-18	7.443E-18	9.953E-18	1.452E-25	0.000E+00	0.000E+00
Sm-148	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Nd-144	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Eu-154	Eu-154	1.000E+00	6.382E-02	5.774E-02	4.724E-02	2.334E-02	3.018E-03	6.549E-15	0.000E+00	0.000E+00
Eu-155	Eu-155	1.000E+00	2.193E-03	1.863E-03	1.344E-03	4.285E-04	1.609E-05	5.853E-19	0.000E+00	0.000E+00
Fe-55	Fe-55	1.000E+00	2.145E-08	1.648E-08	9.718E-09	1.527E-09	7.424E-12	3.526E-25	0.000E+00	0.000E+00
H-3	H-3	1.000E+00	1.519E-07	5.986E-07	5.348E-28	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Nb-94	Nb-94	1.000E+00	8.665E-02	8.381E-02	7.837E-02	6.179E-02	3.039E-02	6.581E-12	0.000E+00	0.000E+00
Ni-59	Ni-59	1.000E+00	8.398E-08	8.157E-08	7.692E-08	6.240E-08	3.306E-08	2.540E-13	0.000E+00	4.770E-08
Ni-63	Ni-63	1.000E+00	2.272E-07	2.191E-07	2.038E-07	1.575E-07	7.267E-08	3.494E-13	0.000E+00	1.293E-10
Pm-147	Pm-147	1.000E+00	7.040E-07	5.314E-07	3.027E-07	4.221E-08	1.500E-10	7.620E-26	0.000E+00	0.000E+00
Sm-147	Pm-147	1.000E+00	5.622E-16	1.487E-15	2.667E-15	3.746E-15	2.993E-15	1.312E-22	0.000E+00	0.000E+00
Pu-238	Pu-238	1.850E-09	1.857E-12	1.816E-12	1.736E-12	1.477E-12	8.970E-13	5.041E-20	0.000E+00	0.000E+00
Pu-238	Pu-238	9.996E-01	1.003E-03	9.811E-04	9.378E-04	7.980E-04	4.847E-04	2.724E-11	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		1.003E-03	9.811E-04	9.378E-04	7.980E-04	4.847E-04	2.724E-11	0.000E+00	0.000E+00
U-234	Pu-238	9.996E-01	4.729E-10	1.393E-09	3.118E-09	8.048E-09	1.465E-08	9.790E-16	0.000E+00	0.000E+00
U-234	Pu-238	1.899E-08	8.985E-18	2.646E-17	5.923E-17	1.529E-16	2.784E-16	1.860E-23	0.000E+00	0.000E+00
U-234	Pu-238	2.100E-04	9.932E-14	2.925E-13	6.548E-13	1.690E-12	3.078E-12	2.056E-19	0.000E+00	0.000E+00
U-234	Pu-238	2.771E-10	1.311E-19	3.861E-19	8.644E-19	2.231E-18	4.063E-18	2.714E-25	0.000E+00	0.000E+00
U-234	Pu-238	3.989E-12	1.887E-21	5.557E-21	1.244E-20	3.212E-20	5.848E-20	3.907E-27	0.000E+00	0.000E+00
U-234	Pu-238	1.998E-04	9.450E-14	2.783E-13	6.230E-13	1.608E-12	2.929E-12	1.956E-19	0.000E+00	0.000E+00
U-234	Pu-238	2.637E-10	1.247E-19	3.673E-19	8.224E-19	2.123E-18	3.866E-18	2.583E-25	0.000E+00	0.000E+00
U-234	Pu-238	3.795E-12	1.795E-21	5.287E-21	1.184E-20	3.056E-20	5.564E-20	3.717E-27	0.000E+00	0.000E+00
U-234	Pu-238	4.196E-08	1.985E-17	5.845E-17	1.309E-16	3.378E-16	6.151E-16	4.109E-23	0.000E+00	0.000E+00
U-234	Pu-238	5.538E-14	2.620E-23	7.716E-23	1.727E-22	4.459E-22	8.120E-22	5.335E-29	0.000E+00	0.000E+00
U-234	Pu-238	7.972E-16	3.771E-25	1.111E-24	2.486E-24	6.418E-24	1.169E-23	0.000E+00	0.000E+00	0.000E+00
U-234	Pu-238	2.000E-07	9.461E-17	2.786E-16	6.238E-16	1.610E-15	2.932E-15	1.959E-22	0.000E+00	0.000E+00
U-234	Pu-238	2.640E-13	1.249E-22	3.678E-22	8.234E-22	2.125E-21	3.870E-21	2.585E-28	0.000E+00	0.000E+00
U-234	Pu-238	3.800E-15	1.798E-24	5.294E-24	1.185E-23	3.059E-23	5.571E-23	3.293E-30	0.000E+00	0.000E+00
U-234	ΣDOSE (j)		4.731E-10	1.393E-09	3.119E-09	8.051E-09	1.466E-08	9.794E-16	0.000E+00	0.000E+00
Th-230	Pu-238	9.996E-01	3.577E-15	2.467E-14	1.261E-13	9.953E-13	5.664E-12	6.139E-19	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-230	Pu-238	1.899E-08	6.797E-23	4.687E-22	2.395E-21	1.891E-20	1.076E-19	1.166E-26	0.000E+00	0.000E+00
Th-230	Pu-238	2.100E-04	7.514E-19	5.182E-18	2.648E-17	2.091E-16	1.190E-15	1.290E-22	0.000E+00	0.000E+00
Th-230	Pu-238	2.771E-10	9.918E-25	6.840E-24	3.495E-23	2.760E-22	1.570E-21	1.696E-28	0.000E+00	0.000E+00
Th-230	Pu-238	3.989E-12	1.428E-26	9.845E-26	5.031E-25	3.972E-24	2.260E-23	2.266E-30	0.000E+00	0.000E+00
Th-230	Pu-238	1.998E-04	7.149E-19	4.930E-18	2.519E-17	1.989E-16	1.132E-15	1.227E-22	0.000E+00	0.000E+00
Th-230	Pu-238	2.637E-10	9.437E-25	6.508E-24	3.325E-23	2.626E-22	1.494E-21	1.613E-28	0.000E+00	0.000E+00
Th-230	Pu-238	3.795E-12	1.358E-26	9.367E-26	4.786E-25	3.779E-24	2.151E-23	2.156E-30	0.000E+00	0.000E+00
Th-230	Pu-238	4.196E-08	1.502E-22	1.036E-21	5.291E-21	4.178E-20	2.378E-19	2.577E-26	0.000E+00	0.000E+00
Th-230	Pu-238	5.538E-14	1.973E-28	1.367E-27	6.984E-27	5.515E-26	3.138E-25	0.000E+00	0.000E+00	0.000E+00
Th-230	Pu-238	7.972E-16	2.787E-30	1.922E-29	1.001E-28	7.938E-28	4.517E-27	0.000E+00	0.000E+00	0.000E+00
Th-230	Pu-238	2.000E-07	7.158E-22	4.936E-21	2.522E-20	1.991E-19	1.133E-18	1.228E-25	0.000E+00	0.000E+00
Th-230	Pu-238	2.640E-13	9.448E-28	6.515E-27	3.329E-26	2.629E-25	1.496E-24	0.000E+00	0.000E+00	0.000E+00
Th-230	Pu-238	3.800E-15	1.329E-29	9.336E-29	4.784E-28	3.784E-27	2.153E-26	0.000E+00	0.000E+00	0.000E+00
Th-230	ΣDOSE (j)		3.579E-15	2.468E-14	1.261E-13	9.957E-13	5.666E-12	6.142E-19	0.000E+00	0.000E+00
Ra-226	Pu-238	9.996E-01	4.425E-17	6.567E-16	7.474E-15	1.807E-13	3.290E-12	1.186E-18	0.000E+00	0.000E+00
Ra-226	Pu-238	1.899E-08	8.408E-25	1.248E-23	1.420E-22	3.434E-21	6.251E-20	2.254E-26	0.000E+00	0.000E+00
Ra-226	ΣDOSE (j)		4.425E-17	6.567E-16	7.474E-15	1.807E-13	3.290E-12	1.186E-18	0.000E+00	0.000E+00
Pb-210	Pu-238	9.996E-01	7.399E-22	1.980E-20	4.426E-19	2.879E-17	1.362E-15	2.035E-19	0.000E+00	0.000E+00
Pb-210	Pu-238	1.319E-06	9.800E-28	3.039E-26	7.463E-25	5.173E-23	2.523E-21	2.618E-25	0.000E+00	0.000E+00
Pb-210	Pu-238	2.100E-04	1.554E-25	4.160E-24	9.297E-23	6.047E-21	2.860E-19	4.275E-23	0.000E+00	0.000E+00
Pb-210	Pu-238	1.998E-04	1.479E-25	3.958E-24	8.846E-23	5.753E-21	2.721E-19	4.067E-23	0.000E+00	0.000E+00
Pb-210	Pu-238	4.196E-08	3.033E-29	8.313E-28	1.858E-26	1.208E-24	5.715E-23	8.543E-27	0.000E+00	0.000E+00
Pb-210	Pu-238	2.000E-07	1.480E-28	3.962E-27	8.856E-26	5.760E-24	2.724E-22	4.072E-26	0.000E+00	0.000E+00
Pb-210	ΣDOSE (j)		7.402E-22	1.981E-20	4.428E-19	2.880E-17	1.362E-15	2.036E-19	0.000E+00	0.000E+00
Po-210	Pu-238	9.996E-01	3.423E-23	1.605E-21	5.641E-20	5.160E-18	2.608E-16	2.464E-20	0.000E+00	0.000E+00
Po-210	Pu-238	2.100E-04	7.191E-27	3.372E-25	1.185E-23	1.084E-21	5.479E-20	5.176E-24	0.000E+00	0.000E+00
Po-210	Pu-238	1.998E-04	6.841E-27	3.208E-25	1.127E-23	1.031E-21	5.212E-20	4.924E-24	0.000E+00	0.000E+00
Po-210	Pu-238	4.196E-08	0.000E+00	6.669E-29	2.368E-27	2.166E-25	1.095E-23	1.034E-27	0.000E+00	0.000E+00
Po-210	Pu-238	2.000E-07	5.908E-30	3.212E-28	1.129E-26	1.032E-24	5.219E-23	4.930E-27	0.000E+00	0.000E+00
Po-210	ΣDOSE (j)		3.425E-23	1.606E-21	5.643E-20	5.162E-18	2.609E-16	2.465E-20	0.000E+00	0.000E+00
Pu-238	Pu-238	1.319E-06	1.324E-09	1.295E-09	1.238E-09	1.053E-09	6.397E-10	3.595E-17	0.000E+00	0.000E+00
Pu-238	Pu-238	1.899E-08	1.906E-11	1.864E-11	1.782E-11	1.516E-11	9.208E-12	5.175E-19	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		1.343E-09	1.314E-09	1.256E-09	1.069E-09	6.490E-10	3.647E-17	0.000E+00	0.000E+00
U-234	Pu-238	1.319E-06	6.242E-16	1.838E-15	4.115E-15	1.062E-14	1.934E-14	1.292E-21	0.000E+00	0.000E+00
Th-230	Pu-238	1.319E-06	4.722E-21	3.256E-20	1.664E-19	1.314E-18	7.477E-18	8.104E-25	0.000E+00	0.000E+00
Ra-226	Pu-238	1.319E-06	5.842E-23	8.668E-22	9.866E-21	2.386E-19	4.343E-18	1.566E-24	0.000E+00	0.000E+00
Pb-210	Pu-238	1.899E-08	1.176E-29	3.740E-28	9.196E-27	6.375E-25	3.105E-23	3.762E-27	0.000E+00	0.000E+00
Pb-210	Pu-238	3.989E-12	0.000E+00	0.000E+00	0.000E+00	1.339E-28	6.522E-27	0.000E+00	0.000E+00	0.000E+00
Pb-210	Pu-238	3.795E-12	0.000E+00	0.000E+00	0.000E+00	1.274E-28	6.205E-27	0.000E+00	0.000E+00	0.000E+00
Pb-210	Pu-238	7.972E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Pb-210	Pu-238	3.800E-15	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.708E-30	0.000E+00	0.000E+00	0.000E+00
Pb-210	ΣDOSE (j)		1.176E-29	3.740E-28	9.196E-27	6.377E-25	3.106E-23	3.762E-27	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE (j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-238	Pu-238	2.100E-04	2.107E-07	2.061E-07	1.970E-07	1.676E-07	1.018E-07	5.721E-15	0.000E+00	0.000E+00
Pu-238	Pu-238	2.771E-10	2.782E-13	2.720E-13	2.600E-13	2.213E-13	1.344E-13	7.552E-21	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		2.107E-07	2.061E-07	1.970E-07	1.676E-07	1.018E-07	5.721E-15	0.000E+00	0.000E+00
Ra-226	Pu-238	2.100E-04	9.295E-21	1.379E-19	1.570E-18	3.796E-17	6.910E-16	2.491E-22	0.000E+00	0.000E+00
Ra-226	Pu-238	2.771E-10	1.227E-26	1.821E-25	2.072E-24	5.011E-23	9.121E-22	3.288E-28	0.000E+00	0.000E+00
Ra-226	Pu-238	3.989E-12	1.763E-28	2.620E-27	2.983E-26	7.212E-25	1.313E-23	3.680E-30	0.000E+00	0.000E+00
Ra-226	ΣDOSE (j)		9.295E-21	1.379E-19	1.570E-18	3.796E-17	6.910E-16	2.491E-22	0.000E+00	0.000E+00
Pb-210	Pu-238	2.771E-10	0.000E+00	4.866E-30	1.568E-28	1.087E-26	5.300E-25	5.409E-29	0.000E+00	0.000E+00
Pb-210	Pu-238	2.637E-10	0.000E+00	4.630E-30	1.491E-28	1.034E-26	5.043E-25	5.146E-29	0.000E+00	0.000E+00
Pb-210	Pu-238	5.538E-14	0.000E+00	0.000E+00	0.000E+00	1.264E-30	1.052E-28	0.000E+00	0.000E+00	0.000E+00
Pb-210	Pu-238	2.640E-13	0.000E+00	0.000E+00	0.000E+00	9.297E-30	5.049E-28	0.000E+00	0.000E+00	0.000E+00
Pb-210	ΣDOSE (j)		0.000E+00	9.496E-30	3.059E-28	2.121E-26	1.035E-24	1.056E-28	0.000E+00	0.000E+00
Pu-238	Pu-238	3.989E-12	4.004E-15	3.915E-15	3.743E-15	3.185E-15	1.934E-15	1.087E-22	0.000E+00	0.000E+00
Pu-238	Pu-238	1.998E-04	2.005E-07	1.961E-07	1.874E-07	1.595E-07	9.685E-08	5.443E-15	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		2.005E-07	1.961E-07	1.874E-07	1.595E-07	9.685E-08	5.443E-15	0.000E+00	0.000E+00
Ra-226	Pu-238	1.998E-04	7.588E-21	1.126E-19	1.281E-18	3.096E-17	5.623E-16	2.331E-22	0.000E+00	0.000E+00
Ra-226	Pu-238	3.795E-12	1.439E-28	2.138E-27	2.434E-26	5.883E-25	1.068E-23	3.500E-30	0.000E+00	0.000E+00
Ra-226	ΣDOSE (j)		7.588E-21	1.126E-19	1.281E-18	3.096E-17	5.623E-16	2.331E-22	0.000E+00	0.000E+00
Pu-238	Pu-238	2.637E-10	2.647E-13	2.588E-13	2.474E-13	2.105E-13	1.278E-13	7.185E-21	0.000E+00	0.000E+00
Pu-238	Pu-238	3.795E-12	3.809E-15	3.725E-15	3.561E-15	3.030E-15	1.840E-15	1.034E-22	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		2.685E-13	2.625E-13	2.509E-13	2.135E-13	1.297E-13	7.288E-21	0.000E+00	0.000E+00
Ra-226	Pu-238	2.637E-10	1.001E-26	1.486E-25	1.691E-24	4.087E-23	7.423E-22	3.077E-28	0.000E+00	0.000E+00
Pu-238	Pu-238	4.196E-08	4.211E-11	4.118E-11	3.936E-11	3.350E-11	2.034E-11	1.143E-18	0.000E+00	0.000E+00
Pu-238	Pu-238	5.538E-14	5.559E-17	5.436E-17	5.196E-17	4.422E-17	2.685E-17	1.509E-24	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		4.211E-11	4.118E-11	3.936E-11	3.350E-11	2.034E-11	1.143E-18	0.000E+00	0.000E+00
Ra-226	Pu-238	4.196E-08	1.594E-24	2.365E-23	2.691E-22	6.503E-21	1.181E-19	4.897E-26	0.000E+00	0.000E+00
Ra-226	Pu-238	5.538E-14	2.100E-30	3.116E-29	3.545E-28	8.583E-27	1.559E-25	0.000E+00	0.000E+00	0.000E+00
Ra-226	Pu-238	7.972E-16	0.000E+00	0.000E+00	5.103E-30	1.233E-28	2.243E-27	0.000E+00	0.000E+00	0.000E+00
Ra-226	ΣDOSE (j)		1.594E-24	2.365E-23	2.691E-22	6.503E-21	1.181E-19	4.897E-26	0.000E+00	0.000E+00
Pu-238	Pu-238	7.972E-16	8.001E-19	7.824E-19	7.479E-19	6.364E-19	3.865E-19	2.172E-26	0.000E+00	0.000E+00
Pu-238	Pu-238	2.000E-07	2.007E-10	1.963E-10	1.876E-10	1.597E-10	9.697E-11	5.450E-18	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		2.007E-10	1.963E-10	1.876E-10	1.597E-10	9.697E-11	5.450E-18	0.000E+00	0.000E+00
Ra-226	Pu-238	2.000E-07	6.079E-26	9.140E-25	1.048E-23	2.549E-22	4.717E-21	2.136E-25	0.000E+00	0.000E+00
Ra-226	Pu-238	3.800E-15	0.000E+00	0.000E+00	0.000E+00	3.725E-30	8.842E-29	0.000E+00	0.000E+00	0.000E+00
Ra-226	ΣDOSE (j)		6.079E-26	9.140E-25	1.048E-23	2.549E-22	4.717E-21	2.136E-25	0.000E+00	0.000E+00
Pu-238	Pu-238	2.640E-13	2.650E-16	2.591E-16	2.477E-16	2.108E-16	1.280E-16	7.193E-24	0.000E+00	0.000E+00
Pu-238	Pu-238	3.800E-15	3.814E-18	3.730E-18	3.565E-18	3.034E-18	1.842E-18	1.035E-25	0.000E+00	0.000E+00
Pu-238	ΣDOSE (j)		2.688E-16	2.628E-16	2.512E-16	2.138E-16	1.298E-16	7.297E-24	0.000E+00	0.000E+00

Summary : RESRAD Default

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Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ra-226	Pu-238	2.640E-13	0.000E+00	0.000E+00	1.318E-29	3.361E-28	6.226E-27	0.000E+00	0.000E+00	0.000E+00
Pu-239	Pu-239	1.633E-06	1.802E-09	1.776E-09	1.725E-09	1.551E-09	1.102E-09	1.079E-16	0.000E+00	0.000E+00
Pu-239	Pu-239	8.257E-06	9.112E-09	8.980E-09	8.720E-09	7.840E-09	5.572E-09	5.457E-16	0.000E+00	0.000E+00
Pu-239	ΣDOSE(j)		1.091E-08	1.076E-08	1.044E-08	9.391E-09	6.674E-09	6.536E-16	0.000E+00	0.000E+00
Pu-239	Pu-239	2.285E-08	2.522E-11	2.485E-11	2.413E-11	2.170E-11	1.542E-11	1.510E-18	0.000E+00	0.000E+00
Pu-239	Pu-239	4.954E-10	5.467E-13	5.388E-13	5.232E-13	4.704E-13	3.343E-13	3.274E-20	0.000E+00	0.000E+00
Pu-239	ΣDOSE(j)		2.576E-11	2.539E-11	2.466E-11	2.217E-11	1.575E-11	1.543E-18	0.000E+00	0.000E+00
Pu-239	Pu-239	1.371E-12	1.513E-15	1.491E-15	1.448E-15	1.302E-15	9.253E-16	9.062E-23	0.000E+00	0.000E+00
Pu-239	Pu-239	2.720E-03	3.002E-06	2.959E-06	2.873E-06	2.583E-06	1.836E-06	1.798E-13	0.000E+00	0.000E+00
Pu-239	Pu-239	1.375E-02	1.518E-05	1.496E-05	1.452E-05	1.306E-05	9.281E-06	9.089E-13	0.000E+00	0.000E+00
Pu-239	ΣDOSE(j)		1.818E-05	1.792E-05	1.740E-05	1.564E-05	1.112E-05	1.089E-12	0.000E+00	0.000E+00
Pu-239	Pu-239	3.806E-05	4.200E-08	4.140E-08	4.020E-08	3.614E-08	2.569E-08	2.515E-15	0.000E+00	0.000E+00
Pu-239	Pu-239	8.252E-07	9.107E-10	8.975E-10	8.715E-10	7.836E-10	5.569E-10	5.454E-17	0.000E+00	0.000E+00
Pu-239	ΣDOSE(j)		4.292E-08	4.230E-08	4.107E-08	3.693E-08	2.624E-08	2.570E-15	0.000E+00	0.000E+00
Pu-239	Pu-239	2.284E-09	2.520E-12	2.484E-12	2.412E-12	2.169E-12	1.541E-12	1.509E-19	0.000E+00	0.000E+00
Pu-240	Pu-240	1.000E+00	1.103E-03	1.087E-03	1.055E-03	9.480E-04	6.728E-04	6.568E-11	0.000E+00	0.000E+00
Pu-241	Pu-241	1.000E+00	2.073E-05	1.947E-05	1.716E-05	1.101E-05	2.978E-06	1.022E-14	0.000E+00	0.000E+00
Pu-241	Pu-241	2.450E-05	1.453E-07	1.370E-07	1.218E-07	8.051E-08	2.411E-08	1.263E-18	0.000E+00	0.000E+00
Pu-241	ΣDOSE(j)		2.087E-05	1.960E-05	1.728E-05	1.109E-05	3.002E-06	1.022E-14	0.000E+00	0.000E+00
Sb-125	Sb-125	7.686E-01	1.526E-02	1.100E-02	5.709E-03	5.742E-04	7.873E-07	2.524E-25	0.000E+00	0.000E+00
Sb-125	Sb-125	2.314E-01	4.593E-03	3.310E-03	1.718E-03	1.728E-04	2.370E-07	7.597E-26	0.000E+00	0.000E+00
Sb-125	ΣDOSE(j)		1.985E-02	1.431E-02	7.427E-03	7.471E-04	1.024E-06	3.284E-25	0.000E+00	0.000E+00
Te-125m	Sb-125	2.314E-01	6.890E-06	7.101E-06	3.952E-06	5.326E-07	2.619E-09	1.052E-16	0.000E+00	0.000E+00
Sr-90	Sr-90	1.000E+00	3.657E-04	2.135E-04	7.253E-05	1.653E-06	3.258E-11	6.232E-19	0.000E+00	0.000E+00
Tc-99	Tc-99	1.000E+00	3.096E-06	2.368E-05	9.871E-13	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

THF(i) is the thread fraction of the parent nuclide.

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ag-108m	Ag-108m	1.000E+00	1.000E+00	9.761E-01	9.300E-01	7.851E-01	4.840E-01	8.899E-02	7.048E-04	3.115E-11
Am-241	Am-241	1.000E+00	1.000E+00	9.917E-01	9.754E-01	9.203E-01	7.795E-01	4.359E-01	8.282E-02	2.476E-04
Am-241	Pu-241	1.000E+00	0.000E+00	1.556E-03	4.394E-03	1.192E-02	2.072E-02	1.555E-02	2.990E-03	8.939E-06
Am-241	ΣS(j):		1.000E+00	9.933E-01	9.798E-01	9.322E-01	8.002E-01	4.514E-01	8.581E-02	2.566E-04
Np-237	Am-241	1.000E+00	0.000E+00	2.764E-07	6.199E-07	9.295E-07	8.264E-07	4.621E-07	8.781E-08	2.625E-10
Np-237	Np-237	1.000E+00	1.000E+00	7.311E-01	3.907E-01	4.362E-02	8.297E-05	2.491E-14	1.546E-41	0.000E+00
Np-237	Pu-241	1.000E+00	0.000E+00	2.293E-10	1.637E-09	9.067E-09	2.062E-08	1.645E-08	3.170E-09	9.478E-12
Np-237	Pu-241	2.450E-05	0.000E+00	6.615E-12	1.408E-11	1.662E-11	6.249E-12	1.560E-13	4.103E-18	3.832E-34
Np-237	ΣS(j):		1.000E+00	7.311E-01	3.907E-01	4.362E-02	8.382E-05	4.786E-07	9.098E-08	2.720E-10
U-233	Am-241	1.000E+00	0.000E+00	6.319E-13	4.652E-12	2.908E-11	9.471E-11	1.845E-10	9.663E-11	6.887E-13
U-233	Np-237	1.000E+00	0.000E+00	3.720E-06	8.332E-06	1.242E-05	1.080E-05	5.589E-06	8.503E-07	1.168E-09
U-233	Pu-241	1.000E+00	0.000E+00	3.424E-16	7.724E-15	1.654E-13	1.434E-12	5.178E-12	3.259E-12	2.455E-14
U-233	Pu-241	2.450E-05	0.000E+00	1.525E-17	1.087E-16	6.003E-16	1.347E-15	1.006E-15	1.555E-16	2.135E-19
U-233	ΣS(j):		0.000E+00	3.720E-06	8.332E-06	1.242E-05	1.080E-05	5.590E-06	8.504E-07	1.168E-09
Th-229	Am-241	1.000E+00	0.000E+00	2.043E-17	4.737E-16	1.123E-14	1.314E-13	1.134E-12	3.828E-12	4.318E-12
Th-229	Np-237	1.000E+00	0.000E+00	1.851E-10	1.370E-09	8.773E-09	3.092E-08	8.199E-08	1.230E-07	1.071E-07
Th-229	Pu-241	1.000E+00	0.000E+00	8.235E-21	5.773E-19	4.562E-17	1.435E-15	2.537E-14	1.112E-13	1.320E-13
Th-229	Pu-241	2.450E-05	0.000E+00	4.949E-22	1.121E-20	2.441E-19	2.244E-18	1.057E-17	1.831E-17	1.619E-17
Th-229	ΣS(j):		0.000E+00	1.851E-10	1.370E-09	8.773E-09	3.092E-08	8.199E-08	1.230E-07	1.072E-07
Am-243	Am-243	9.829E-01	9.829E-01	9.762E-01	9.631E-01	9.183E-01	8.017E-01	4.983E-01	1.280E-01	1.101E-03
Am-243	Am-243	2.720E-03	2.720E-03	2.702E-03	2.665E-03	2.542E-03	2.219E-03	1.379E-03	3.544E-04	3.048E-06
Am-243	Cm-243	2.359E-03	0.000E+00	2.184E-07	6.352E-07	1.900E-06	4.216E-06	5.287E-06	1.632E-06	1.411E-08
Am-243	Cm-243	6.529E-06	0.000E+00	6.045E-10	1.758E-09	5.260E-09	1.167E-08	1.463E-08	4.516E-09	3.905E-11
Am-243	Cm-243	3.301E-05	0.000E+00	3.056E-09	8.888E-09	2.659E-08	5.900E-08	7.397E-08	2.283E-08	1.974E-10
Am-243	Cm-243	9.135E-08	0.000E+00	8.459E-12	2.460E-11	7.360E-11	1.633E-10	2.047E-10	6.319E-11	5.464E-13
Am-243	Cm-243	1.981E-09	0.000E+00	1.834E-13	5.333E-13	1.596E-12	3.540E-12	4.439E-12	1.370E-12	1.185E-14
Am-243	Cm-243	5.481E-12	0.000E+00	5.075E-16	1.476E-15	4.416E-15	9.797E-15	1.228E-14	3.792E-15	3.278E-17
Am-243	Cm-243	1.416E-06	0.000E+00	1.311E-10	3.814E-10	1.141E-09	2.531E-09	3.174E-09	9.797E-10	8.470E-12
Am-243	Cm-243	3.920E-09	0.000E+00	3.629E-13	1.055E-12	3.158E-12	7.006E-12	8.784E-12	2.711E-12	2.344E-14
Am-243	Cm-243	1.982E-08	0.000E+00	1.835E-12	5.336E-12	1.596E-11	3.542E-11	4.441E-11	1.371E-11	1.185E-13
Am-243	Cm-243	5.484E-11	0.000E+00	5.078E-15	1.477E-14	4.418E-14	9.803E-14	1.229E-13	3.794E-14	3.280E-16
Am-243	Cm-243	1.189E-12	0.000E+00	1.101E-16	3.202E-16	9.579E-16	2.125E-15	2.665E-15	8.225E-16	7.112E-18
Am-243	Cm-243	3.291E-15	0.000E+00	3.047E-19	8.861E-19	2.651E-18	5.882E-18	7.375E-18	2.276E-18	1.968E-20
Am-243	ΣS(j):		9.856E-01	9.789E-01	9.657E-01	9.209E-01	8.039E-01	4.996E-01	1.284E-01	1.105E-03
Pu-239	Am-243	9.829E-01	0.000E+00	2.810E-05	8.335E-05	2.671E-04	7.163E-04	1.614E-03	1.601E-03	1.269E-04
Pu-239	Am-243	2.720E-03	0.000E+00	7.777E-08	2.307E-07	7.393E-07	1.982E-06	4.467E-06	4.431E-06	3.513E-07
Pu-239	Am-243	1.375E-02	0.000E+00	3.932E-07	1.166E-06	3.738E-06	1.002E-05	2.258E-05	2.240E-05	1.776E-06
Pu-239	Am-243	3.806E-05	0.000E+00	1.088E-09	3.228E-09	1.034E-08	2.774E-08	6.250E-08	6.200E-08	4.916E-09
Pu-239	Am-243	8.252E-07	0.000E+00	2.359E-11	6.998E-11	2.243E-10	6.014E-10	1.355E-09	1.344E-09	1.066E-10
Pu-239	Am-243	2.284E-09	0.000E+00	6.529E-14	1.937E-13	6.207E-13	1.664E-12	3.750E-12	3.720E-12	2.950E-13
Pu-239	Cm-243	2.359E-03	0.000E+00	3.151E-12	2.770E-11	2.834E-10	2.027E-09	1.064E-08	1.575E-08	1.415E-09
Pu-239	Cm-243	6.529E-06	0.000E+00	8.722E-15	7.666E-14	7.845E-13	5.609E-12	2.944E-11	4.360E-11	3.917E-12
Pu-239	Cm-243	3.301E-05	0.000E+00	4.410E-14	3.876E-13	3.966E-12	2.836E-11	1.488E-10	2.204E-10	1.980E-11

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pu-239	Cm-243	9.135E-08	0.000E+00	1.220E-16	1.073E-15	1.098E-14	7.849E-14	4.119E-13	6.101E-13	5.480E-14
Pu-239	Cm-243	1.981E-09	0.000E+00	2.646E-18	2.326E-17	2.380E-16	1.702E-15	8.930E-15	1.323E-14	1.188E-15
Pu-239	Cm-243	5.481E-12	0.000E+00	7.323E-21	6.436E-20	6.586E-19	4.710E-18	2.471E-17	3.661E-17	3.288E-18
Pu-239	Cm-243	9.805E-01	0.000E+00	2.779E-05	8.100E-05	2.444E-04	5.567E-04	7.817E-04	3.703E-04	1.643E-05
Pu-239	Cm-243	2.714E-03	0.000E+00	7.690E-08	2.242E-07	6.764E-07	1.541E-06	2.164E-06	1.025E-06	4.547E-08
Pu-239	Cm-243	1.372E-02	0.000E+00	3.888E-07	1.133E-06	3.420E-06	7.789E-06	1.094E-05	5.181E-06	2.299E-07
Pu-239	Cm-243	3.797E-05	0.000E+00	1.076E-09	3.137E-09	9.465E-09	2.156E-08	3.027E-08	1.434E-08	6.362E-10
Pu-239	Cm-243	8.232E-07	0.000E+00	2.333E-11	6.800E-11	2.052E-10	4.674E-10	6.563E-10	3.109E-10	1.379E-11
Pu-239	Cm-243	2.278E-09	0.000E+00	6.457E-14	1.882E-13	5.679E-13	1.294E-12	1.816E-12	8.604E-13	3.817E-14
Pu-239	Pu-239	9.829E-01	9.829E-01	9.785E-01	9.698E-01	9.401E-01	8.600E-01	6.296E-01	2.584E-01	1.143E-02
Pu-239	ΣS(j):		9.829E-01	9.786E-01	9.700E-01	9.406E-01	8.612E-01	6.320E-01	2.604E-01	1.158E-02
U-235	Am-243	9.829E-01	0.000E+00	1.382E-14	1.226E-13	1.299E-12	1.019E-11	7.023E-11	1.660E-10	2.299E-11
U-235	Am-243	2.720E-03	0.000E+00	3.824E-17	3.394E-16	3.594E-15	2.820E-14	1.944E-13	4.596E-13	6.362E-14
U-235	Am-243	1.375E-02	0.000E+00	1.933E-16	1.716E-15	1.817E-14	1.425E-13	9.827E-13	2.323E-12	3.216E-13
U-235	Am-243	3.806E-05	0.000E+00	5.350E-19	4.749E-18	5.029E-17	3.945E-16	2.720E-15	6.430E-15	8.902E-16
U-235	Am-243	8.252E-07	0.000E+00	1.160E-20	1.030E-19	1.090E-18	8.553E-18	5.896E-17	1.394E-16	1.930E-17
U-235	Am-243	2.284E-09	0.000E+00	3.210E-23	2.850E-22	3.017E-21	2.367E-20	1.632E-19	3.858E-19	5.341E-20
U-235	Am-243	5.901E-04	0.000E+00	8.294E-18	7.363E-17	7.796E-16	6.116E-15	4.216E-14	9.969E-14	1.380E-14
U-235	Am-243	1.633E-06	0.000E+00	2.296E-20	2.038E-19	2.158E-18	1.693E-17	1.167E-16	2.759E-16	3.820E-17
U-235	Am-243	8.257E-06	0.000E+00	1.161E-19	1.030E-18	1.091E-17	8.558E-17	5.899E-16	1.395E-15	1.931E-16
U-235	Am-243	2.285E-08	0.000E+00	3.212E-22	2.851E-21	3.019E-20	2.369E-19	1.633E-18	3.860E-18	5.344E-19
U-235	Am-243	4.954E-10	0.000E+00	6.964E-24	6.182E-23	6.546E-22	5.135E-21	3.540E-20	8.370E-20	1.159E-20
U-235	Am-243	1.371E-12	0.000E+00	1.927E-26	1.711E-25	1.812E-24	1.421E-23	9.797E-23	2.316E-22	3.207E-23
U-235	Cm-243	2.359E-03	0.000E+00	1.035E-21	2.732E-20	9.357E-19	2.026E-17	3.586E-16	1.464E-15	2.529E-16
U-235	Cm-243	6.529E-06	0.000E+00	2.864E-24	7.562E-23	2.590E-21	5.608E-20	9.924E-19	4.052E-18	7.001E-19
U-235	Cm-243	3.301E-05	0.000E+00	1.448E-23	3.823E-22	1.309E-20	2.835E-19	5.017E-18	2.049E-17	3.539E-18
U-235	Cm-243	9.135E-08	0.000E+00	4.008E-26	1.058E-24	3.623E-23	7.846E-22	1.389E-20	5.670E-20	9.795E-21
U-235	Cm-243	1.981E-09	0.000E+00	8.689E-28	2.294E-26	7.856E-25	1.701E-23	3.010E-22	1.229E-21	2.124E-22
U-235	Cm-243	5.481E-12	0.000E+00	2.405E-30	6.349E-29	2.174E-27	4.708E-26	8.332E-25	3.402E-24	5.878E-25
U-235	Cm-243	1.416E-06	0.000E+00	6.213E-25	1.640E-23	5.617E-22	1.216E-20	2.153E-19	8.790E-19	1.519E-19
U-235	Cm-243	3.920E-09	0.000E+00	1.720E-27	4.540E-26	1.555E-24	3.367E-23	5.958E-22	2.433E-21	4.203E-22
U-235	Cm-243	1.982E-08	0.000E+00	8.694E-27	2.295E-25	7.860E-24	1.702E-22	3.012E-21	1.230E-20	2.125E-21
U-235	Cm-243	5.484E-11	0.000E+00	2.406E-29	6.352E-28	2.175E-26	4.711E-25	8.336E-24	3.404E-23	5.881E-24
U-235	Cm-243	1.189E-12	0.000E+00	5.217E-31	1.377E-29	4.716E-28	1.021E-26	1.807E-25	7.380E-25	1.275E-25
U-235	Cm-243	3.291E-15	0.000E+00	1.444E-33	3.811E-32	1.305E-30	2.827E-29	5.002E-28	2.043E-27	3.529E-28
U-235	Cm-243	9.805E-01	0.000E+00	1.370E-14	1.202E-13	1.223E-12	8.585E-12	4.213E-11	5.162E-11	3.232E-12
U-235	Cm-243	2.714E-03	0.000E+00	3.792E-17	3.327E-16	3.384E-15	2.376E-14	1.166E-13	1.429E-13	8.946E-15
U-235	Cm-243	1.372E-02	0.000E+00	1.917E-16	1.682E-15	1.711E-14	1.201E-13	5.896E-13	7.223E-13	4.523E-14
U-235	Cm-243	3.797E-05	0.000E+00	5.306E-19	4.655E-18	4.735E-17	3.325E-16	1.632E-15	1.999E-15	1.252E-16
U-235	Cm-243	8.232E-07	0.000E+00	1.150E-20	1.009E-19	1.026E-18	7.208E-18	3.538E-17	4.334E-17	2.714E-18
U-235	Cm-243	2.278E-09	0.000E+00	3.184E-23	2.793E-22	2.841E-21	1.995E-20	9.791E-20	1.199E-19	7.511E-21
U-235	Cm-243	5.887E-04	0.000E+00	8.226E-18	7.217E-17	7.340E-16	5.154E-15	2.530E-14	3.099E-14	1.941E-15
U-235	Cm-243	1.629E-06	0.000E+00	2.277E-20	1.997E-19	2.031E-18	1.427E-17	7.001E-17	8.577E-17	5.371E-18
U-235	Cm-243	8.237E-06	0.000E+00	1.151E-19	1.010E-18	1.027E-17	7.212E-17	3.539E-16	4.336E-16	2.715E-17
U-235	Cm-243	2.280E-08	0.000E+00	3.186E-22	2.795E-21	2.842E-20	1.996E-19	9.796E-19	1.200E-18	7.515E-20
U-235	Cm-243	4.942E-10	0.000E+00	6.906E-24	6.060E-23	6.163E-22	4.327E-21	2.124E-20	2.602E-20	1.629E-21
U-235	Cm-243	1.368E-12	0.000E+00	1.911E-26	1.677E-25	1.706E-24	1.198E-23	5.878E-23	7.201E-23	4.509E-24
U-235	Pu-239	5.901E-04	0.000E+00	5.770E-13	1.707E-12	5.421E-12	1.417E-11	2.935E-11	2.384E-11	1.354E-12

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-235	Pu-239	1.633E-06	0.000E+00	1.597E-15	4.725E-15	1.500E-14	3.922E-14	8.122E-14	6.599E-14	3.747E-15
U-235	Pu-239	8.257E-06	0.000E+00	8.073E-15	2.389E-14	7.586E-14	1.983E-13	4.106E-13	3.336E-13	1.894E-14
U-235	Pu-239	2.285E-08	0.000E+00	2.234E-17	6.611E-17	2.099E-16	5.487E-16	1.136E-15	9.234E-16	5.243E-17
U-235	Pu-239	4.954E-10	0.000E+00	4.844E-19	1.433E-18	4.552E-18	1.190E-17	2.464E-17	2.002E-17	1.137E-18
U-235	Pu-239	1.371E-12	0.000E+00	1.341E-21	3.967E-21	1.260E-20	3.293E-20	6.819E-20	5.541E-20	3.146E-21
U-235	Pu-239	9.829E-01	0.000E+00	9.611E-10	2.843E-09	9.030E-09	2.360E-08	4.888E-08	3.972E-08	2.255E-09
U-235	Pu-239	2.720E-03	0.000E+00	2.660E-12	7.870E-12	2.499E-11	6.532E-11	1.353E-10	1.099E-10	6.241E-12
U-235	Pu-239	1.375E-02	0.000E+00	1.345E-11	3.979E-11	1.264E-10	3.303E-10	6.839E-10	5.557E-10	3.155E-11
U-235	Pu-239	3.806E-05	0.000E+00	3.722E-14	1.101E-13	3.497E-13	9.140E-13	1.893E-12	1.538E-12	8.733E-14
U-235	Pu-239	8.252E-07	0.000E+00	8.069E-16	2.387E-15	7.582E-15	1.982E-14	4.104E-14	3.335E-14	1.893E-15
U-235	Pu-239	2.284E-09	0.000E+00	2.233E-18	6.607E-18	2.098E-17	5.484E-17	1.136E-16	9.229E-17	5.240E-18
U-235	ΣS(j):		0.000E+00	9.778E-10	2.893E-09	9.190E-09	2.403E-08	4.984E-08	4.063E-08	2.321E-09
Pa-231	Am-243	9.829E-01	0.000E+00	9.753E-20	2.602E-18	9.245E-17	2.217E-15	5.442E-14	4.672E-13	4.255E-13
Pa-231	Am-243	2.720E-03	0.000E+00	2.699E-22	7.202E-21	2.559E-19	6.136E-18	1.506E-16	1.293E-15	1.178E-15
Pa-231	Am-243	1.375E-02	0.000E+00	1.365E-21	3.641E-20	1.294E-18	3.102E-17	7.615E-16	6.537E-15	5.954E-15
Pa-231	Am-243	3.806E-05	0.000E+00	3.777E-24	1.008E-22	3.580E-21	8.586E-20	2.107E-18	1.809E-17	1.648E-17
Pa-231	Am-243	8.252E-07	0.000E+00	8.188E-26	2.185E-24	7.762E-23	1.861E-21	4.569E-20	3.923E-19	3.572E-19
Pa-231	Am-243	2.284E-09	0.000E+00	2.266E-28	6.046E-27	2.148E-25	5.152E-24	1.265E-22	1.086E-21	9.887E-22
Pa-231	Am-243	5.901E-04	0.000E+00	5.855E-23	1.562E-21	5.550E-20	1.331E-18	3.267E-17	2.805E-16	2.555E-16
Pa-231	Am-243	1.633E-06	0.000E+00	1.621E-25	4.324E-24	1.536E-22	3.684E-21	9.042E-20	7.763E-19	7.070E-19
Pa-231	Am-243	8.257E-06	0.000E+00	8.193E-25	2.186E-23	7.766E-22	1.862E-20	4.571E-19	3.925E-18	3.574E-18
Pa-231	Am-243	2.285E-08	0.000E+00	2.267E-27	6.050E-26	2.149E-24	5.155E-23	1.265E-21	1.086E-20	9.893E-21
Pa-231	Am-243	4.954E-10	0.000E+00	4.916E-29	1.312E-27	4.660E-26	1.118E-24	2.743E-23	2.355E-22	2.145E-22
Pa-231	Am-243	1.371E-12	0.000E+00	1.361E-31	3.630E-30	1.290E-28	3.093E-27	7.592E-26	6.518E-25	5.936E-25
Pa-231	Cm-243	2.359E-03	0.000E+00	5.483E-27	4.357E-25	5.030E-23	3.372E-21	2.208E-19	3.501E-18	4.263E-18
Pa-231	Cm-243	6.529E-06	0.000E+00	1.518E-29	1.206E-27	1.392E-25	9.334E-24	6.111E-22	9.690E-21	1.180E-20
Pa-231	Cm-243	3.301E-05	0.000E+00	7.672E-29	6.096E-27	7.038E-25	4.719E-23	3.089E-21	4.899E-20	5.965E-20
Pa-231	Cm-243	9.135E-08	0.000E+00	2.123E-31	1.687E-29	1.948E-27	1.306E-25	8.550E-24	1.356E-22	1.651E-22
Pa-231	Cm-243	1.981E-09	0.000E+00	4.604E-33	3.658E-31	4.223E-29	2.831E-27	1.854E-25	2.940E-24	3.579E-24
Pa-231	Cm-243	5.481E-12	0.000E+00	1.274E-35	1.012E-33	1.169E-31	7.836E-30	5.131E-28	8.135E-27	9.906E-27
Pa-231	Cm-243	1.416E-06	0.000E+00	3.292E-30	2.616E-28	3.020E-26	2.025E-24	1.326E-22	2.102E-21	2.559E-21
Pa-231	Cm-243	3.920E-09	0.000E+00	9.111E-33	7.239E-31	8.358E-29	5.604E-27	3.669E-25	5.817E-24	7.084E-24
Pa-231	Cm-243	1.982E-08	0.000E+00	4.606E-32	3.660E-30	4.225E-28	2.833E-26	1.855E-24	2.941E-23	3.581E-23
Pa-231	Cm-243	5.484E-11	0.000E+00	1.275E-34	1.013E-32	1.169E-30	7.841E-29	5.133E-27	8.140E-26	9.912E-26
Pa-231	Cm-243	1.189E-12	0.000E+00	2.764E-36	2.196E-34	2.535E-32	1.700E-30	1.113E-28	1.765E-27	2.149E-27
Pa-231	Cm-243	3.291E-15	0.000E+00	7.649E-39	6.078E-37	7.017E-35	4.705E-33	3.080E-31	4.884E-30	5.947E-30
Pa-231	Cm-243	9.805E-01	0.000E+00	9.687E-20	2.562E-18	8.831E-17	1.949E-15	3.709E-14	1.934E-13	9.246E-14
Pa-231	Cm-243	2.714E-03	0.000E+00	2.681E-22	7.091E-21	2.444E-19	5.394E-18	1.027E-16	5.353E-16	2.559E-16
Pa-231	Cm-243	1.372E-02	0.000E+00	1.355E-21	3.585E-20	1.236E-18	2.727E-17	5.190E-16	2.706E-15	1.294E-15
Pa-231	Cm-243	3.797E-05	0.000E+00	3.751E-24	9.921E-23	3.420E-21	7.548E-20	1.436E-18	7.490E-18	3.580E-18
Pa-231	Cm-243	8.232E-07	0.000E+00	8.133E-26	2.151E-24	7.414E-23	1.636E-21	3.114E-20	1.624E-19	7.763E-20
Pa-231	Cm-243	2.278E-09	0.000E+00	2.251E-28	5.953E-27	2.052E-25	4.529E-24	8.619E-23	4.494E-22	2.148E-22
Pa-231	Cm-243	5.887E-04	0.000E+00	5.816E-23	1.538E-21	5.302E-20	1.170E-18	2.227E-17	1.161E-16	5.551E-17
Pa-231	Cm-243	1.629E-06	0.000E+00	1.610E-25	4.257E-24	1.467E-22	3.239E-21	6.163E-20	3.214E-19	1.536E-19
Pa-231	Cm-243	8.237E-06	0.000E+00	8.137E-25	2.152E-23	7.418E-22	1.637E-20	3.116E-19	1.625E-18	7.767E-19
Pa-231	Cm-243	2.280E-08	0.000E+00	2.252E-27	5.956E-26	2.053E-24	4.531E-23	8.624E-22	4.497E-21	2.150E-21
Pa-231	Cm-243	4.942E-10	0.000E+00	4.883E-29	1.291E-27	4.451E-26	9.824E-25	1.870E-23	9.749E-23	4.660E-23
Pa-231	Cm-243	1.368E-12	0.000E+00	1.351E-31	3.574E-30	1.232E-28	2.719E-27	5.175E-26	2.698E-25	1.290E-25

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pa-231	Pu-239	5.901E-04	0.000E+00	6.112E-18	5.439E-17	5.808E-16	4.670E-15	3.518E-14	1.090E-13	4.260E-14
Pa-231	Pu-239	1.633E-06	0.000E+00	1.691E-20	1.505E-19	1.607E-18	1.293E-17	9.736E-17	3.017E-16	1.179E-16
Pa-231	Pu-239	8.257E-06	0.000E+00	8.552E-20	7.610E-19	8.127E-18	6.535E-17	4.922E-16	1.525E-15	5.961E-16
Pa-231	Pu-239	2.285E-08	0.000E+00	2.367E-22	2.106E-21	2.249E-20	1.809E-19	1.362E-18	4.221E-18	1.650E-18
Pa-231	Pu-239	4.954E-10	0.000E+00	5.131E-24	4.566E-23	4.876E-22	3.921E-21	2.954E-20	9.151E-20	3.577E-20
Pa-231	Pu-239	1.371E-12	0.000E+00	1.420E-26	1.264E-25	1.350E-24	1.085E-23	8.175E-23	2.533E-22	9.900E-23
Pa-231	Pu-239	9.829E-01	0.000E+00	1.018E-14	9.059E-14	9.674E-13	7.779E-12	5.860E-11	1.815E-10	7.096E-11
Pa-231	Pu-239	2.720E-03	0.000E+00	2.817E-17	2.507E-16	2.678E-15	2.153E-14	1.622E-13	5.025E-13	1.964E-13
Pa-231	Pu-239	1.375E-02	0.000E+00	1.424E-16	1.268E-15	1.354E-14	1.089E-13	8.199E-13	2.540E-12	9.929E-13
Pa-231	Pu-239	3.806E-05	0.000E+00	3.942E-19	3.508E-18	3.746E-17	3.013E-16	2.269E-15	7.031E-15	2.748E-15
Pa-231	Pu-239	8.252E-07	0.000E+00	8.547E-21	7.606E-20	8.123E-19	6.531E-18	4.920E-17	1.524E-16	5.958E-17
Pa-231	Pu-239	2.284E-09	0.000E+00	2.365E-23	2.105E-22	2.248E-21	1.808E-20	1.362E-19	4.219E-19	1.649E-19
Pa-231	ΣS(j) :		0.000E+00	1.036E-14	9.217E-14	9.845E-13	7.919E-12	5.971E-11	1.854E-10	7.273E-11
Ac-227	Am-243	9.829E-01	0.000E+00	7.720E-22	6.113E-20	6.973E-18	4.531E-16	2.727E-14	3.849E-13	4.321E-13
Ac-227	Am-243	5.901E-04	0.000E+00	4.635E-25	3.670E-23	4.187E-21	2.720E-19	1.637E-17	2.311E-16	2.594E-16
Ac-227	Cm-243	2.359E-03	0.000E+00	3.478E-29	8.225E-27	3.080E-24	5.745E-22	9.858E-20	2.776E-18	4.312E-18
Ac-227	Cm-243	1.416E-06	0.000E+00	2.088E-32	4.938E-30	1.849E-27	3.449E-25	5.918E-23	1.666E-21	2.589E-21
Ac-227	Cm-243	9.805E-01	0.000E+00	7.675E-22	6.034E-20	6.717E-18	4.073E-16	1.953E-14	1.678E-13	9.519E-14
Ac-227	Cm-243	5.887E-04	0.000E+00	4.608E-25	3.623E-23	4.033E-21	2.445E-19	1.173E-17	1.007E-16	5.715E-17
Ac-227	Pu-239	5.901E-04	0.000E+00	6.441E-20	1.696E-18	5.761E-17	1.223E-15	2.110E-14	9.779E-14	4.397E-14
Ac-227	Pu-239	9.829E-01	0.000E+00	1.073E-16	2.825E-15	9.595E-14	2.038E-12	3.514E-11	1.629E-10	7.323E-11
Ac-227	ΣS(j) :		0.000E+00	1.074E-16	2.827E-15	9.602E-14	2.040E-12	3.521E-11	1.635E-10	7.380E-11
Ac-227	Am-243	2.720E-03	0.000E+00	2.137E-24	1.692E-22	1.930E-20	1.254E-18	7.548E-17	1.065E-15	1.196E-15
Ac-227	Am-243	1.375E-02	0.000E+00	1.080E-23	8.553E-22	9.757E-20	6.340E-18	3.816E-16	5.385E-15	6.046E-15
Ac-227	Am-243	1.633E-06	0.000E+00	1.283E-27	1.016E-25	1.159E-23	7.529E-22	4.532E-20	6.395E-19	7.179E-19
Ac-227	Cm-243	6.529E-06	0.000E+00	9.625E-32	2.276E-29	8.525E-27	1.590E-24	2.728E-22	7.682E-21	1.193E-20
Ac-227	Cm-243	3.920E-09	0.000E+00	5.778E-35	1.367E-32	5.118E-30	9.546E-28	1.638E-25	4.612E-24	7.165E-24
Ac-227	Cm-243	2.714E-03	0.000E+00	2.124E-24	1.670E-22	1.859E-20	1.127E-18	5.405E-17	4.644E-16	2.634E-16
Ac-227	Cm-243	1.629E-06	0.000E+00	1.275E-27	1.003E-25	1.116E-23	6.767E-22	3.245E-20	2.788E-19	1.582E-19
Ac-227	Pu-239	1.633E-06	0.000E+00	1.783E-22	4.694E-21	1.594E-19	3.386E-18	5.839E-17	2.706E-16	1.217E-16
Ac-227	Pu-239	2.720E-03	0.000E+00	2.969E-19	7.819E-18	2.656E-16	5.640E-15	9.726E-14	4.508E-13	2.027E-13
Ac-227	ΣS(j) :		0.000E+00	2.971E-19	7.825E-18	2.659E-16	5.652E-15	9.783E-14	4.580E-13	2.103E-13
Am-243	Am-243	1.375E-02	1.375E-02	1.366E-02	1.348E-02	1.285E-02	1.122E-02	6.972E-03	1.792E-03	1.541E-05
Am-243	Am-243	3.806E-05	3.806E-05	3.781E-05	3.729E-05	3.556E-05	3.104E-05	1.930E-05	4.958E-06	4.265E-08
Am-243	ΣS(j) :		1.379E-02	1.370E-02	1.351E-02	1.289E-02	1.125E-02	6.991E-03	1.797E-03	1.545E-05
Ac-227	Am-243	3.806E-05	0.000E+00	2.990E-26	2.367E-24	2.701E-22	1.755E-20	1.056E-18	1.490E-17	1.673E-17
Ac-227	Am-243	8.252E-07	0.000E+00	6.482E-28	5.132E-26	5.855E-24	3.804E-22	2.290E-20	3.231E-19	3.628E-19
Ac-227	Am-243	2.285E-08	0.000E+00	1.795E-29	1.421E-27	1.621E-25	1.053E-23	6.341E-22	8.948E-21	1.005E-20
Ac-227	Cm-243	9.135E-08	0.000E+00	1.347E-33	3.185E-31	1.193E-28	2.225E-26	3.818E-24	1.075E-22	1.670E-22
Ac-227	Cm-243	5.484E-11	0.000E+00	8.085E-37	1.912E-34	7.161E-32	1.336E-29	2.292E-27	6.453E-26	1.003E-25
Ac-227	Cm-243	3.797E-05	0.000E+00	2.972E-26	2.337E-24	2.601E-22	1.577E-20	7.563E-19	6.498E-18	3.686E-18
Ac-227	Cm-243	2.280E-08	0.000E+00	1.784E-29	1.403E-27	1.562E-25	9.469E-24	4.541E-22	3.901E-21	2.213E-21
Ac-227	Pu-239	2.285E-08	0.000E+00	2.494E-24	6.569E-23	2.231E-21	4.738E-20	8.171E-19	3.787E-18	1.703E-18
Ac-227	Pu-239	3.806E-05	0.000E+00	4.155E-21	1.094E-19	3.716E-18	7.891E-17	1.361E-15	6.308E-15	2.836E-15
Ac-227	ΣS(j) :		0.000E+00	4.157E-21	1.095E-19	3.719E-18	7.900E-17	1.364E-15	6.333E-15	2.858E-15

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Am-243	Am-243	8.252E-07	8.252E-07	8.196E-07	8.086E-07	7.710E-07	6.731E-07	4.183E-07	1.075E-07	9.248E-10
Am-243	Am-243	2.284E-09	2.284E-09	2.268E-09	2.238E-09	2.134E-09	1.863E-09	1.158E-09	2.975E-10	2.559E-12
Am-243	ΣS(j):		8.275E-07	8.219E-07	8.108E-07	7.732E-07	6.749E-07	4.195E-07	1.078E-07	9.273E-10
Ac-227	Am-243	2.284E-09	0.000E+00	1.794E-30	1.420E-28	1.620E-26	1.053E-24	6.337E-23	8.943E-22	1.004E-21
Ac-227	Am-243	1.371E-12	0.000E+00	1.077E-33	8.528E-32	9.728E-30	6.321E-28	3.805E-26	5.369E-25	6.027E-25
Ac-227	Cm-243	5.481E-12	0.000E+00	8.081E-38	1.911E-35	7.158E-33	1.335E-30	2.291E-28	6.450E-27	1.002E-26
Ac-227	Cm-243	3.291E-15	0.000E+00	4.851E-41	1.147E-38	4.297E-36	8.015E-34	1.375E-31	3.872E-30	6.016E-30
Ac-227	Cm-243	2.278E-09	0.000E+00	1.783E-30	1.402E-28	1.561E-26	9.464E-25	4.538E-23	3.899E-22	2.212E-22
Ac-227	Cm-243	1.368E-12	0.000E+00	1.071E-33	8.418E-32	9.370E-30	5.682E-28	2.725E-26	2.341E-25	1.328E-25
Ac-227	Pu-239	1.371E-12	0.000E+00	1.497E-28	3.941E-27	1.339E-25	2.843E-24	4.903E-23	2.272E-22	1.022E-22
Ac-227	Pu-239	2.284E-09	0.000E+00	2.493E-25	6.565E-24	2.230E-22	4.735E-21	8.166E-20	3.785E-19	1.702E-19
Ac-227	ΣS(j):		0.000E+00	2.495E-25	6.569E-24	2.231E-22	4.740E-21	8.182E-20	3.800E-19	1.715E-19
Am-243	Am-243	5.901E-04	5.901E-04	5.861E-04	5.782E-04	5.513E-04	4.813E-04	2.991E-04	7.687E-05	6.613E-07
Am-243	Am-243	1.633E-06	1.633E-06	1.622E-06	1.600E-06	1.526E-06	1.332E-06	8.279E-07	2.127E-07	1.830E-09
Am-243	ΣS(j):		5.917E-04	5.877E-04	5.798E-04	5.529E-04	4.826E-04	3.000E-04	7.708E-05	6.631E-07
Pu-239	Am-243	5.901E-04	0.000E+00	1.687E-08	5.004E-08	1.604E-07	4.300E-07	9.689E-07	9.612E-07	7.621E-08
Pu-239	Am-243	1.633E-06	0.000E+00	4.669E-11	1.385E-10	4.439E-10	1.190E-09	2.682E-09	2.660E-09	2.109E-10
Pu-239	Am-243	8.257E-06	0.000E+00	2.360E-10	7.002E-10	2.244E-09	6.017E-09	1.356E-08	1.345E-08	1.066E-09
Pu-239	Am-243	2.285E-08	0.000E+00	6.533E-13	1.938E-12	6.211E-12	1.665E-11	3.752E-11	3.722E-11	2.951E-12
Pu-239	Am-243	4.954E-10	0.000E+00	1.416E-14	4.201E-14	1.346E-13	3.610E-13	8.135E-13	8.070E-13	6.399E-14
Pu-239	Am-243	1.371E-12	0.000E+00	3.920E-17	1.163E-16	3.727E-16	9.992E-16	2.251E-15	2.234E-15	1.771E-16
Pu-239	Cm-243	1.416E-06	0.000E+00	1.892E-15	1.663E-14	1.702E-13	1.217E-12	6.385E-12	9.458E-12	8.496E-13
Pu-239	Cm-243	3.920E-09	0.000E+00	5.236E-18	4.602E-17	4.710E-16	3.368E-15	1.767E-14	2.618E-14	2.351E-15
Pu-239	Cm-243	1.982E-08	0.000E+00	2.647E-17	2.327E-16	2.381E-15	1.703E-14	8.934E-14	1.323E-13	1.189E-14
Pu-239	Cm-243	5.484E-11	0.000E+00	7.327E-20	6.440E-19	6.590E-18	4.712E-17	2.473E-16	3.663E-16	3.290E-17
Pu-239	Cm-243	1.189E-12	0.000E+00	1.589E-21	1.396E-20	1.429E-19	1.022E-18	5.361E-18	7.941E-18	7.133E-19
Pu-239	Cm-243	3.291E-15	0.000E+00	4.396E-24	3.864E-23	3.954E-22	2.827E-21	1.484E-20	2.198E-20	1.974E-21
Pu-239	Cm-243	5.887E-04	0.000E+00	1.668E-08	4.863E-08	1.467E-07	3.342E-07	4.693E-07	2.223E-07	9.863E-09
Pu-239	Cm-243	1.629E-06	0.000E+00	4.617E-11	1.346E-10	4.061E-10	9.250E-10	1.299E-09	6.152E-10	2.730E-11
Pu-239	Cm-243	8.237E-06	0.000E+00	2.334E-10	6.804E-10	2.053E-09	4.676E-09	6.567E-09	3.110E-09	1.380E-10
Pu-239	Cm-243	2.280E-08	0.000E+00	6.460E-13	1.883E-12	5.682E-12	1.294E-11	1.817E-11	8.608E-12	3.819E-13
Pu-239	Cm-243	4.942E-10	0.000E+00	1.401E-14	4.083E-14	1.232E-13	2.806E-13	3.940E-13	1.866E-13	8.280E-15
Pu-239	Cm-243	1.368E-12	0.000E+00	3.876E-17	1.130E-16	3.410E-16	7.766E-16	1.091E-15	5.165E-16	2.292E-17
Pu-239	Pu-239	5.901E-04	5.901E-04	5.875E-04	5.823E-04	5.644E-04	5.163E-04	3.780E-04	1.551E-04	6.864E-06
Pu-239	ΣS(j):		5.901E-04	5.875E-04	5.824E-04	5.647E-04	5.171E-04	3.795E-04	1.563E-04	6.952E-06
Am-243	Am-243	8.257E-06	8.257E-06	8.201E-06	8.090E-06	7.714E-06	6.734E-06	4.186E-06	1.076E-06	9.253E-09
Am-243	Am-243	2.285E-08	2.285E-08	2.270E-08	2.239E-08	2.135E-08	1.864E-08	1.158E-08	2.977E-09	2.561E-11
Am-243	ΣS(j):		8.280E-06	8.223E-06	8.112E-06	7.736E-06	6.753E-06	4.197E-06	1.079E-06	9.278E-09
Ac-227	Am-243	8.257E-06	0.000E+00	6.485E-27	5.135E-25	5.858E-23	3.806E-21	2.291E-19	3.233E-18	3.630E-18
Ac-227	Cm-243	3.301E-05	0.000E+00	4.866E-31	1.151E-28	4.310E-26	8.039E-24	1.379E-21	3.884E-20	6.034E-20
Ac-227	Cm-243	1.982E-08	0.000E+00	2.921E-34	6.909E-32	2.588E-29	4.826E-27	8.281E-25	2.332E-23	3.622E-23
Ac-227	Cm-243	1.372E-02	0.000E+00	1.074E-23	8.443E-22	9.398E-20	5.699E-18	2.733E-16	2.348E-15	1.332E-15
Ac-227	Cm-243	8.237E-06	0.000E+00	6.447E-27	5.069E-25	5.642E-23	3.421E-21	1.641E-19	1.410E-18	7.996E-19
Ac-227	Pu-239	8.257E-06	0.000E+00	9.013E-22	2.373E-20	8.060E-19	1.712E-17	2.952E-16	1.368E-15	6.152E-16

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Pu-239	1.375E-02	0.000E+00	1.501E-18	3.953E-17	1.343E-15	2.851E-14	4.917E-13	2.279E-12	1.025E-12
Ac-227	ΣS(j):		0.000E+00	1.502E-18	3.956E-17	1.343E-15	2.854E-14	4.923E-13	2.283E-12	1.027E-12
Am-243	Am-243	4.954E-10	4.954E-10	4.921E-10	4.854E-10	4.629E-10	4.041E-10	2.511E-10	6.454E-11	5.552E-13
Am-243	Am-243	1.371E-12	1.371E-12	1.362E-12	1.344E-12	1.281E-12	1.118E-12	6.951E-13	1.786E-13	1.537E-15
Am-243	ΣS(j):		4.968E-10	4.934E-10	4.868E-10	4.642E-10	4.052E-10	2.518E-10	6.472E-11	5.567E-13
Ac-227	Am-243	4.954E-10	0.000E+00	3.891E-31	3.081E-29	3.515E-27	2.284E-25	1.375E-23	1.940E-22	2.178E-22
Ac-227	Cm-243	1.981E-09	0.000E+00	2.920E-35	6.905E-33	2.586E-30	4.823E-28	8.277E-26	2.330E-24	3.620E-24
Ac-227	Cm-243	1.189E-12	0.000E+00	1.753E-38	4.146E-36	1.553E-33	2.896E-31	4.969E-29	1.399E-27	2.174E-27
Ac-227	Cm-243	8.232E-07	0.000E+00	6.443E-28	5.066E-26	5.639E-24	3.420E-22	1.640E-20	1.409E-19	7.992E-20
Ac-227	Cm-243	4.942E-10	0.000E+00	3.868E-31	3.041E-29	3.386E-27	2.053E-25	9.844E-24	8.458E-23	4.798E-23
Ac-227	Pu-239	4.954E-10	0.000E+00	5.408E-26	1.424E-24	4.837E-23	1.027E-21	1.771E-20	8.210E-20	3.691E-20
Ac-227	Pu-239	8.252E-07	0.000E+00	9.008E-23	2.372E-21	8.056E-20	1.711E-18	2.951E-17	1.368E-16	6.148E-17
Ac-227	ΣS(j):		0.000E+00	9.013E-23	2.374E-21	8.061E-20	1.712E-18	2.954E-17	1.370E-16	6.160E-17
C-14	C-14	1.000E+00	1.000E+00	9.769E-11	9.324E-31	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cm-243	Cm-243	2.359E-03	2.359E-03	2.302E-03	2.192E-03	1.848E-03	1.134E-03	2.053E-04	1.555E-06	5.877E-14
Cm-243	Cm-243	6.529E-06	6.529E-06	6.371E-06	6.068E-06	5.114E-06	3.138E-06	5.682E-07	4.303E-09	1.627E-16
Cm-243	ΣS(j):		2.365E-03	2.308E-03	2.198E-03	1.853E-03	1.137E-03	2.059E-04	1.559E-06	5.894E-14
Cm-243	Cm-243	3.301E-05	3.301E-05	3.221E-05	3.068E-05	2.586E-05	1.587E-05	2.872E-06	2.175E-08	8.224E-16
Cm-243	Cm-243	9.135E-08	9.135E-08	8.915E-08	8.490E-08	7.156E-08	4.391E-08	7.950E-09	6.021E-11	2.276E-18
Cm-243	ΣS(j):		3.310E-05	3.230E-05	3.076E-05	2.593E-05	1.591E-05	2.880E-06	2.181E-08	8.247E-16
Cm-243	Cm-243	1.981E-09	1.981E-09	1.933E-09	1.841E-09	1.551E-09	9.521E-10	1.724E-10	1.305E-12	4.935E-20
Cm-243	Cm-243	5.481E-12	5.481E-12	5.349E-12	5.094E-12	4.294E-12	2.635E-12	4.770E-13	3.613E-15	1.366E-22
Cm-243	ΣS(j):		1.986E-09	1.938E-09	1.846E-09	1.556E-09	9.547E-10	1.728E-10	1.309E-12	4.948E-20
Cm-243	Cm-243	1.416E-06	1.416E-06	1.382E-06	1.316E-06	1.109E-06	6.808E-07	1.232E-07	9.334E-10	3.529E-17
Cm-243	Cm-243	3.920E-09	3.920E-09	3.825E-09	3.643E-09	3.070E-09	1.884E-09	3.411E-10	2.583E-12	9.766E-20
Cm-243	ΣS(j):		1.420E-06	1.386E-06	1.320E-06	1.112E-06	6.827E-07	1.236E-07	9.360E-10	3.538E-17
Cm-243	Cm-243	1.982E-08	1.982E-08	1.934E-08	1.842E-08	1.552E-08	9.526E-09	1.724E-09	1.306E-11	4.937E-19
Cm-243	Cm-243	5.484E-11	5.484E-11	5.352E-11	5.097E-11	4.296E-11	2.636E-11	4.773E-12	3.615E-14	1.366E-21
Cm-243	ΣS(j):		1.987E-08	1.939E-08	1.847E-08	1.557E-08	9.552E-09	1.729E-09	1.310E-11	4.951E-19
Cm-243	Cm-243	1.189E-12	1.189E-12	1.160E-12	1.105E-12	9.314E-13	5.716E-13	1.035E-13	7.837E-16	2.963E-23
Cm-243	Cm-243	3.291E-15	3.291E-15	3.211E-15	3.058E-15	2.578E-15	1.582E-15	2.864E-16	2.169E-18	8.199E-26
Cm-243	ΣS(j):		1.192E-12	1.164E-12	1.108E-12	9.340E-13	5.732E-13	1.038E-13	7.858E-16	2.971E-23
Cm-243	Cm-243	9.805E-01	9.805E-01	9.569E-01	9.113E-01	7.681E-01	4.714E-01	8.533E-02	6.463E-04	2.443E-11
Cm-243	Cm-243	2.714E-03	2.714E-03	2.648E-03	2.522E-03	2.126E-03	1.305E-03	2.362E-04	1.789E-06	6.762E-14
Cm-243	ΣS(j):		9.832E-01	9.595E-01	9.138E-01	7.702E-01	4.727E-01	8.557E-02	6.480E-04	2.450E-11
Cm-243	Cm-243	1.372E-02	1.372E-02	1.339E-02	1.275E-02	1.075E-02	6.595E-03	1.194E-03	9.043E-06	3.418E-13
Cm-243	Cm-243	3.797E-05	3.797E-05	3.706E-05	3.529E-05	2.975E-05	1.825E-05	3.304E-06	2.503E-08	9.461E-16
Cm-243	ΣS(j):		1.376E-02	1.343E-02	1.279E-02	1.078E-02	6.614E-03	1.197E-03	9.068E-06	3.428E-13

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g								
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03	
Cm-243	Cm-243	8.232E-07	8.232E-07	8.034E-07	7.651E-07	6.449E-07	3.957E-07	7.164E-08	5.426E-10	2.051E-17	
Cm-243	Cm-243	2.278E-09	2.278E-09	2.223E-09	2.118E-09	1.785E-09	1.095E-09	1.983E-10	1.502E-12	5.677E-20	
Cm-243	ΣS(j):		8.255E-07	8.056E-07	7.672E-07	6.467E-07	3.968E-07	7.184E-08	5.441E-10	2.057E-17	
Cm-243	Cm-243	5.887E-04	5.887E-04	5.745E-04	5.471E-04	4.611E-04	2.830E-04	5.123E-05	3.880E-07	1.467E-14	
Cm-243	Cm-243	1.629E-06	1.629E-06	1.590E-06	1.514E-06	1.276E-06	7.832E-07	1.418E-07	1.074E-09	4.059E-17	
Cm-243	ΣS(j):		5.903E-04	5.761E-04	5.486E-04	4.624E-04	2.838E-04	5.137E-05	3.891E-07	1.471E-14	
Cm-243	Cm-243	8.237E-06	8.237E-06	8.038E-06	7.655E-06	6.452E-06	3.960E-06	7.168E-07	5.429E-09	2.052E-16	
Cm-243	Cm-243	2.280E-08	2.280E-08	2.225E-08	2.119E-08	1.786E-08	1.096E-08	1.984E-09	1.502E-11	5.680E-19	
Cm-243	ΣS(j):		8.260E-06	8.060E-06	7.676E-06	6.470E-06	3.971E-06	7.188E-07	5.444E-09	2.058E-16	
Cm-243	Cm-243	4.942E-10	4.942E-10	4.823E-10	4.593E-10	3.872E-10	2.376E-10	4.301E-11	3.257E-13	1.231E-20	
Cm-243	Cm-243	1.368E-12	1.368E-12	1.335E-12	1.271E-12	1.072E-12	6.576E-13	1.190E-13	9.016E-16	3.408E-23	
Cm-243	ΣS(j):		4.956E-10	4.837E-10	4.606E-10	3.882E-10	2.382E-10	4.313E-11	3.266E-13	1.235E-20	
Cm-244	Cm-244	1.371E-06	1.371E-06	1.319E-06	1.220E-06	9.293E-07	4.269E-07	2.805E-08	1.175E-11	1.765E-23	
Cm-244	Cm-244	5.750E-08	5.750E-08	5.531E-08	5.117E-08	3.897E-08	1.790E-08	1.177E-09	4.927E-13	7.402E-25	
Cm-244	ΣS(j):		1.429E-06	1.374E-06	1.271E-06	9.682E-07	4.448E-07	2.923E-08	1.224E-11	1.839E-23	
Pu-240	Cm-244	5.750E-08	0.000E+00	5.942E-12	1.707E-11	4.911E-11	9.923E-11	1.087E-10	4.539E-11	1.904E-12	
Pu-240	Pu-240	5.750E-08	5.750E-08	5.724E-08	5.672E-08	5.495E-08	5.019E-08	3.655E-08	1.477E-08	6.194E-10	
Pu-240	ΣS(j):		5.750E-08	5.725E-08	5.674E-08	5.500E-08	5.029E-08	3.666E-08	1.481E-08	6.213E-10	
Cm-244	Cm-244	1.000E+00	1.000E+00	9.619E-01	8.899E-01	6.778E-01	3.114E-01	2.046E-02	8.568E-06	1.287E-17	
Pu-240	Cm-244	1.000E+00	0.000E+00	1.033E-04	2.969E-04	8.541E-04	1.726E-03	1.891E-03	7.894E-04	3.311E-05	
U-236	Cm-244	1.000E+00	0.000E+00	1.535E-12	1.334E-11	1.314E-10	8.500E-10	3.434E-09	3.497E-09	1.990E-10	
U-236	Pu-240	1.000E+00	0.000E+00	2.939E-08	8.695E-08	2.761E-07	7.210E-07	1.489E-06	1.197E-06	6.483E-08	
U-236	ΣS(j):		0.000E+00	2.939E-08	8.697E-08	2.762E-07	7.218E-07	1.492E-06	1.201E-06	6.503E-08	
Th-232	Cm-244	1.000E+00	0.000E+00	2.536E-23	6.669E-22	2.256E-20	4.754E-19	8.277E-18	4.645E-17	7.943E-17	
Th-232	Pu-240	1.000E+00	0.000E+00	7.266E-19	6.478E-18	6.966E-17	5.713E-16	4.637E-15	1.865E-14	2.920E-14	
Th-232	ΣS(j):		0.000E+00	7.267E-19	6.479E-18	6.968E-17	5.718E-16	4.645E-15	1.870E-14	2.927E-14	
Ra-228	Cm-244	1.000E+00	0.000E+00	7.481E-25	5.660E-23	5.558E-21	2.519E-19	6.960E-18	4.494E-17	7.926E-17	
Ra-228	Pu-240	1.000E+00	0.000E+00	2.837E-20	7.174E-19	2.144E-17	3.471E-16	4.045E-15	1.813E-14	2.914E-14	
Ra-228	ΣS(j):		0.000E+00	2.837E-20	7.174E-19	2.144E-17	3.474E-16	4.052E-15	1.818E-14	2.921E-14	
Th-228	Cm-244	1.000E+00	0.000E+00	5.142E-26	1.054E-23	2.543E-21	1.904E-19	6.535E-18	4.445E-17	7.923E-17	
Th-228	Pu-240	1.000E+00	0.000E+00	2.411E-21	1.620E-19	1.128E-17	2.807E-16	3.853E-15	1.796E-14	2.913E-14	
Th-228	ΣS(j):		0.000E+00	2.411E-21	1.620E-19	1.129E-17	2.809E-16	3.859E-15	1.801E-14	2.921E-14	
Co-60	Co-60	1.000E+00	1.000E+00	8.759E-01	6.720E-01	2.658E-01	1.877E-02	1.758E-06	5.429E-18	0.000E+00	
Cs-134	Cs-134	1.000E+00	1.000E+00	7.135E-01	3.632E-01	3.418E-02	3.991E-05	2.173E-15	9.809E-45	0.000E+00	
Cs-137	Cs-137	1.000E+00	1.000E+00	9.754E-01	9.280E-01	7.795E-01	4.737E-01	8.286E-02	5.690E-04	1.527E-11	

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g								
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03	
Eu-152	Eu-152	7.210E-01	7.210E-01	6.765E-01	5.956E-01	3.814E-01	1.067E-01	1.236E-03	3.636E-09	1.585E-28	
Eu-152	Eu-152	2.790E-01	2.790E-01	2.618E-01	2.305E-01	1.476E-01	4.129E-02	4.784E-04	1.407E-09	6.135E-29	
Eu-152	ΣS(j):		1.000E+00	9.383E-01	8.261E-01	5.290E-01	1.480E-01	1.715E-03	5.043E-09	2.199E-28	
Gd-152	Eu-152	2.790E-01	0.000E+00	1.734E-15	4.879E-15	1.314E-14	2.329E-14	2.487E-14	1.869E-14	6.832E-15	
Sm-148	Eu-152	2.790E-01	0.000E+00	8.672E-32	7.472E-31	7.176E-30	4.479E-29	2.072E-28	5.254E-28	6.656E-28	
Nd-144	Eu-152	2.790E-01	0.000E+00	0.000E+00	0.000E+00	7.006E-45	1.471E-43	2.297E-42	1.373E-41	2.766E-41	
Eu-154	Eu-154	1.000E+00	1.000E+00	9.111E-01	7.562E-01	3.940E-01	6.116E-02	9.011E-05	7.317E-13	3.530E-41	
Eu-155	Eu-155	1.000E+00	1.000E+00	8.538E-01	6.224E-01	2.058E-01	8.721E-03	1.365E-07	2.546E-21	0.000E+00	
Fe-55	Fe-55	1.000E+00	1.000E+00	7.760E-01	4.672E-01	7.913E-02	4.955E-04	9.626E-12	8.919E-34	0.000E+00	
H-3	H-3	1.000E+00	1.000E+00	4.444E-13	8.779E-38	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
Nb-94	Nb-94	1.000E+00	1.000E+00	9.737E-01	9.233E-01	7.664E-01	4.501E-01	6.990E-02	3.416E-04	2.785E-12	
Ni-59	Ni-59	1.000E+00	1.000E+00	9.811E-01	9.442E-01	8.259E-01	5.634E-01	1.477E-01	3.221E-03	4.938E-09	
Ni-63	Ni-63	1.000E+00	1.000E+00	9.743E-01	9.248E-01	7.707E-01	4.578E-01	7.395E-02	4.044E-04	4.889E-12	
Pm-147	Pm-147	1.000E+00	1.000E+00	7.583E-01	4.360E-01	6.284E-02	2.481E-04	9.595E-13	8.833E-37	0.000E+00	
Sm-147	Pm-147	1.000E+00	0.000E+00	5.708E-12	1.330E-11	2.192E-11	2.275E-11	2.057E-11	1.543E-11	5.641E-12	
Pu-238	Pu-238	1.850E-09	1.850E-09	1.827E-09	1.783E-09	1.635E-09	1.278E-09	5.392E-10	4.580E-11	8.182E-15	
Pu-238	Pu-238	9.996E-01	9.996E-01	9.873E-01	9.633E-01	8.836E-01	6.905E-01	2.913E-01	2.475E-02	4.421E-06	
Pu-238	ΣS(j):		9.996E-01	9.873E-01	9.633E-01	8.836E-01	6.905E-01	2.913E-01	2.475E-02	4.421E-06	
U-234	Pu-238	9.996E-01	0.000E+00	2.792E-06	8.195E-06	2.532E-05	6.112E-05	9.550E-05	3.350E-05	7.472E-08	
U-234	Pu-238	1.899E-08	0.000E+00	5.304E-14	1.557E-13	4.810E-13	1.161E-12	1.814E-12	6.365E-13	1.420E-15	
U-234	Pu-238	2.100E-04	0.000E+00	5.864E-10	1.721E-09	5.318E-09	1.284E-08	2.006E-08	7.037E-09	1.569E-11	
U-234	Pu-238	2.771E-10	0.000E+00	7.740E-16	2.272E-15	7.019E-15	1.695E-14	2.648E-14	9.289E-15	2.072E-17	
U-234	Pu-238	3.989E-12	0.000E+00	1.114E-17	3.271E-17	1.010E-16	2.439E-16	3.811E-16	1.337E-16	2.982E-19	
U-234	Pu-238	1.998E-04	0.000E+00	5.579E-10	1.638E-09	5.059E-09	1.222E-08	1.908E-08	6.695E-09	1.493E-11	
U-234	Pu-238	2.637E-10	0.000E+00	7.364E-16	2.162E-15	6.678E-15	1.612E-14	2.519E-14	8.838E-15	1.971E-17	
U-234	Pu-238	3.795E-12	0.000E+00	1.060E-17	3.112E-17	9.612E-17	2.321E-16	3.626E-16	1.272E-16	2.837E-19	
U-234	Pu-238	4.196E-08	0.000E+00	1.172E-13	3.440E-13	1.063E-12	2.566E-12	4.009E-12	1.406E-12	3.136E-15	
U-234	Pu-238	5.538E-14	0.000E+00	1.547E-19	4.541E-19	1.403E-18	3.387E-18	5.291E-18	1.856E-18	4.140E-21	
U-234	Pu-238	7.972E-16	0.000E+00	2.226E-21	6.536E-21	2.019E-20	4.875E-20	7.616E-20	2.672E-20	5.959E-23	
U-234	Pu-238	2.000E-07	0.000E+00	5.586E-13	1.640E-12	5.065E-12	1.223E-11	1.911E-11	6.703E-12	1.495E-14	
U-234	Pu-238	2.640E-13	0.000E+00	7.373E-19	2.164E-18	6.686E-18	1.614E-17	2.522E-17	8.848E-18	1.973E-20	
U-234	Pu-238	3.800E-15	0.000E+00	1.061E-20	3.115E-20	9.624E-20	2.324E-19	3.630E-19	1.274E-19	2.841E-22	
U-234	ΣS(j):		0.000E+00	2.793E-06	8.198E-06	2.533E-05	6.115E-05	9.554E-05	3.352E-05	7.475E-08	
Th-230	Pu-238	9.996E-01	0.000E+00	1.288E-11	1.142E-10	1.206E-09	9.405E-09	6.461E-08	1.792E-07	1.884E-07	

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g							
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-230	Pu-238	1.899E-08	0.000E+00	2.447E-19	2.171E-18	2.292E-17	1.787E-16	1.228E-15	3.405E-15	3.580E-15
Th-230	Pu-238	2.100E-04	0.000E+00	2.706E-15	2.400E-14	2.534E-13	1.975E-12	1.357E-11	3.764E-11	3.957E-11
Th-230	Pu-238	2.771E-10	0.000E+00	3.571E-21	3.168E-20	3.345E-19	2.608E-18	1.791E-17	4.969E-17	5.224E-17
Th-230	Pu-238	3.989E-12	0.000E+00	5.141E-23	4.560E-22	4.815E-21	3.753E-20	2.578E-19	7.152E-19	7.519E-19
Th-230	Pu-238	1.998E-04	0.000E+00	2.574E-15	2.283E-14	2.411E-13	1.879E-12	1.291E-11	3.581E-11	3.765E-11
Th-230	Pu-238	2.637E-10	0.000E+00	3.398E-21	3.014E-20	3.182E-19	2.481E-18	1.704E-17	4.727E-17	4.970E-17
Th-230	Pu-238	3.795E-12	0.000E+00	4.891E-23	4.338E-22	4.581E-21	3.571E-20	2.453E-19	6.805E-19	7.154E-19
Th-230	Pu-238	4.196E-08	0.000E+00	5.407E-19	4.796E-18	5.064E-17	3.948E-16	2.712E-15	7.522E-15	7.908E-15
Th-230	Pu-238	5.538E-14	0.000E+00	7.137E-25	6.330E-24	6.684E-23	5.211E-22	3.580E-21	9.930E-21	1.044E-20
Th-230	Pu-238	7.972E-16	0.000E+00	1.027E-26	9.112E-26	9.622E-25	7.501E-24	5.153E-23	1.429E-22	1.503E-22
Th-230	Pu-238	2.000E-07	0.000E+00	2.577E-18	2.286E-17	2.414E-16	1.882E-15	1.293E-14	3.586E-14	3.770E-14
Th-230	Pu-238	2.640E-13	0.000E+00	3.402E-24	3.017E-23	3.186E-22	2.484E-21	1.706E-20	4.733E-20	4.976E-20
Th-230	Pu-238	3.800E-15	0.000E+00	4.897E-26	4.343E-25	4.586E-24	3.575E-23	2.456E-22	6.813E-22	7.162E-22
Th-230	ΣS(j):		0.000E+00	1.289E-11	1.143E-10	1.207E-09	9.409E-09	6.464E-08	1.793E-07	1.885E-07
Ra-226	Pu-238	9.996E-01	0.000E+00	1.863E-15	4.974E-14	1.771E-12	4.277E-11	1.092E-09	1.171E-08	5.287E-08
Ra-226	Pu-238	1.899E-08	0.000E+00	3.540E-23	9.450E-22	3.365E-20	8.127E-19	2.074E-17	2.224E-16	1.005E-15
Ra-226	ΣS(j):		0.000E+00	1.863E-15	4.974E-14	1.771E-12	4.277E-11	1.092E-09	1.171E-08	5.287E-08
Pb-210	Pu-238	9.996E-01	0.000E+00	1.447E-17	1.147E-15	1.313E-13	8.628E-12	5.435E-10	9.495E-09	5.072E-08
Pb-210	Pu-238	1.319E-06	0.000E+00	1.910E-23	1.514E-21	1.733E-19	1.139E-17	7.174E-16	1.253E-14	6.695E-14
Pb-210	Pu-238	2.100E-04	0.000E+00	3.039E-21	2.409E-19	2.758E-17	1.812E-15	1.142E-13	1.994E-12	1.065E-11
Pb-210	Pu-238	1.998E-04	0.000E+00	2.891E-21	2.292E-19	2.624E-17	1.724E-15	1.086E-13	1.897E-12	1.014E-11
Pb-210	Pu-238	4.196E-08	0.000E+00	6.073E-25	4.814E-23	5.512E-21	3.621E-19	2.281E-17	3.985E-16	2.129E-15
Pb-210	Pu-238	2.000E-07	0.000E+00	2.895E-24	2.294E-22	2.627E-20	1.726E-18	1.087E-16	1.900E-15	1.015E-14
Pb-210	ΣS(j):		0.000E+00	1.447E-17	1.147E-15	1.314E-13	8.631E-12	5.437E-10	9.499E-09	5.074E-08
Po-210	Pu-238	9.996E-01	0.000E+00	4.024E-18	6.324E-16	1.070E-13	8.047E-12	5.325E-10	9.426E-09	5.052E-08
Po-210	Pu-238	2.100E-04	0.000E+00	8.452E-22	1.328E-19	2.248E-17	1.690E-15	1.119E-13	1.980E-12	1.061E-11
Po-210	Pu-238	1.998E-04	0.000E+00	8.042E-22	1.264E-19	2.139E-17	1.608E-15	1.064E-13	1.884E-12	1.010E-11
Po-210	Pu-238	4.196E-08	0.000E+00	1.689E-25	2.654E-23	4.492E-21	3.378E-19	2.235E-17	3.957E-16	2.121E-15
Po-210	Pu-238	2.000E-07	0.000E+00	8.051E-25	1.265E-22	2.141E-20	1.610E-18	1.065E-16	1.886E-15	1.011E-14
Po-210	ΣS(j):		0.000E+00	4.026E-18	6.326E-16	1.071E-13	8.051E-12	5.327E-10	9.430E-09	5.054E-08
Pu-238	Pu-238	1.319E-06	1.319E-06	1.303E-06	1.272E-06	1.166E-06	9.115E-07	3.846E-07	3.267E-08	5.835E-12
Pu-238	Pu-238	1.899E-08	1.899E-08	1.876E-08	1.830E-08	1.679E-08	1.312E-08	5.535E-09	4.702E-10	8.399E-14
Pu-238	ΣS(j):		1.338E-06	1.322E-06	1.290E-06	1.183E-06	9.246E-07	3.901E-07	3.314E-08	5.919E-12
U-234	Pu-238	1.319E-06	0.000E+00	3.685E-12	1.082E-11	3.342E-11	8.068E-11	1.261E-10	4.422E-11	9.863E-14
Th-230	Pu-238	1.319E-06	0.000E+00	1.700E-17	1.508E-16	1.592E-15	1.241E-14	8.528E-14	2.366E-13	2.487E-13
Ra-226	Pu-238	1.319E-06	0.000E+00	2.459E-21	6.565E-20	2.337E-18	5.646E-17	1.441E-15	1.545E-14	6.979E-14
Pb-210	Pu-238	1.899E-08	0.000E+00	2.749E-25	2.179E-23	2.495E-21	1.639E-19	1.033E-17	1.804E-16	9.637E-16
Pb-210	Pu-238	3.989E-12	0.000E+00	5.774E-29	4.577E-27	5.241E-25	3.443E-23	2.169E-21	3.789E-20	2.024E-19
Pb-210	Pu-238	3.795E-12	0.000E+00	5.493E-29	4.354E-27	4.986E-25	3.276E-23	2.064E-21	3.605E-20	1.926E-19
Pb-210	Pu-238	7.972E-16	0.000E+00	1.154E-32	9.146E-31	1.047E-28	6.881E-27	4.335E-25	7.572E-24	4.045E-23
Pb-210	Pu-238	3.800E-15	0.000E+00	5.500E-32	4.359E-30	4.992E-28	3.280E-26	2.066E-24	3.609E-23	1.928E-22
Pb-210	ΣS(j):		0.000E+00	2.750E-25	2.180E-23	2.496E-21	1.640E-19	1.033E-17	1.805E-16	9.641E-16

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g								
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03	
Pu-238	Pu-238	2.100E-04	2.100E-04	2.074E-04	2.023E-04	1.856E-04	1.450E-04	6.119E-05	5.198E-06	9.285E-10	
Pu-238	Pu-238	2.771E-10	2.771E-10	2.737E-10	2.671E-10	2.450E-10	1.915E-10	8.077E-11	6.861E-12	1.226E-15	
Pu-238	ΣS(j):		2.100E-04	2.074E-04	2.023E-04	1.856E-04	1.450E-04	6.119E-05	5.198E-06	9.285E-10	
Ra-226	Pu-238	2.100E-04	0.000E+00	3.913E-19	1.045E-17	3.719E-16	8.984E-15	2.293E-13	2.459E-12	1.110E-11	
Ra-226	Pu-238	2.771E-10	0.000E+00	5.166E-25	1.379E-23	4.910E-22	1.186E-20	3.027E-19	3.246E-18	1.466E-17	
Ra-226	Pu-238	3.989E-12	0.000E+00	7.436E-27	1.985E-25	7.067E-24	1.707E-22	4.357E-21	4.672E-20	2.110E-19	
Ra-226	ΣS(j):		0.000E+00	3.913E-19	1.045E-17	3.719E-16	8.984E-15	2.293E-13	2.459E-12	1.110E-11	
Pb-210	Pu-238	2.771E-10	0.000E+00	4.011E-27	3.179E-25	3.641E-23	2.392E-21	1.507E-19	2.633E-18	1.406E-17	
Pb-210	Pu-238	2.637E-10	0.000E+00	3.816E-27	3.025E-25	3.464E-23	2.276E-21	1.434E-19	2.505E-18	1.338E-17	
Pb-210	Pu-238	5.538E-14	0.000E+00	8.016E-31	6.354E-29	7.276E-27	4.780E-25	3.011E-23	5.261E-22	2.810E-21	
Pb-210	Pu-238	2.640E-13	0.000E+00	3.821E-30	3.029E-28	3.468E-26	2.279E-24	1.435E-22	2.508E-21	1.340E-20	
Pb-210	ΣS(j):		0.000E+00	7.832E-27	6.208E-25	7.109E-23	4.671E-21	2.942E-19	5.140E-18	2.746E-17	
Pu-238	Pu-238	3.989E-12	3.989E-12	3.940E-12	3.844E-12	3.526E-12	2.756E-12	1.163E-12	9.876E-14	1.764E-17	
Pu-238	Pu-238	1.998E-04	1.998E-04	1.973E-04	1.925E-04	1.766E-04	1.380E-04	5.822E-05	4.945E-06	8.834E-10	
Pu-238	ΣS(j):		1.998E-04	1.973E-04	1.925E-04	1.766E-04	1.380E-04	5.822E-05	4.945E-06	8.834E-10	
Ra-226	Pu-238	1.998E-04	0.000E+00	3.723E-19	9.940E-18	3.539E-16	8.548E-15	2.182E-13	2.339E-12	1.057E-11	
Ra-226	Pu-238	3.795E-12	0.000E+00	7.074E-27	1.889E-25	6.724E-24	1.624E-22	4.145E-21	4.445E-20	2.007E-19	
Ra-226	ΣS(j):		0.000E+00	3.723E-19	9.940E-18	3.539E-16	8.548E-15	2.182E-13	2.339E-12	1.057E-11	
Pu-238	Pu-238	2.637E-10	2.637E-10	2.604E-10	2.541E-10	2.331E-10	1.822E-10	7.685E-11	6.528E-12	1.166E-15	
Pu-238	Pu-238	3.795E-12	3.795E-12	3.749E-12	3.658E-12	3.355E-12	2.622E-12	1.106E-12	9.396E-14	1.679E-17	
Pu-238	ΣS(j):		2.675E-10	2.642E-10	2.578E-10	2.365E-10	1.848E-10	7.796E-11	6.622E-12	1.183E-15	
Ra-226	Pu-238	2.637E-10	0.000E+00	4.915E-25	1.312E-23	4.671E-22	1.128E-20	2.880E-19	3.088E-18	1.395E-17	
Pu-238	Pu-238	4.196E-08	4.196E-08	4.144E-08	4.043E-08	3.709E-08	2.899E-08	1.223E-08	1.039E-09	1.856E-13	
Pu-238	Pu-238	5.538E-14	5.538E-14	5.471E-14	5.337E-14	4.896E-14	3.826E-14	1.614E-14	1.371E-15	2.449E-19	
Pu-238	ΣS(j):		4.196E-08	4.144E-08	4.043E-08	3.709E-08	2.899E-08	1.223E-08	1.039E-09	1.856E-13	
Ra-226	Pu-238	4.196E-08	0.000E+00	7.821E-23	2.088E-21	7.433E-20	1.795E-18	4.582E-17	4.914E-16	2.219E-15	
Ra-226	Pu-238	5.538E-14	0.000E+00	1.032E-28	2.756E-27	9.812E-26	2.370E-24	6.048E-23	6.486E-22	2.929E-21	
Ra-226	Pu-238	7.972E-16	0.000E+00	1.486E-30	3.967E-29	1.412E-27	3.411E-26	8.706E-25	9.336E-24	4.217E-23	
Ra-226	ΣS(j):		0.000E+00	7.821E-23	2.088E-21	7.433E-20	1.795E-18	4.582E-17	4.914E-16	2.219E-15	
Pu-238	Pu-238	7.972E-16	7.972E-16	7.874E-16	7.683E-16	7.047E-16	5.507E-16	2.323E-16	1.974E-17	3.526E-21	
Pu-238	Pu-238	2.000E-07	2.000E-07	1.975E-07	1.927E-07	1.768E-07	1.382E-07	5.829E-08	4.951E-09	8.845E-13	
Pu-238	ΣS(j):		2.000E-07	1.975E-07	1.927E-07	1.768E-07	1.382E-07	5.829E-08	4.951E-09	8.845E-13	
Ra-226	Pu-238	2.000E-07	0.000E+00	3.728E-22	9.952E-21	3.543E-19	8.558E-18	2.184E-16	2.342E-15	1.058E-14	
Ra-226	Pu-238	3.800E-15	0.000E+00	7.083E-30	1.891E-28	6.732E-27	1.626E-25	4.150E-24	4.450E-23	2.010E-22	
Ra-226	ΣS(j):		0.000E+00	3.728E-22	9.952E-21	3.543E-19	8.558E-18	2.184E-16	2.342E-15	1.058E-14	
Pu-238	Pu-238	2.640E-13	2.640E-13	2.608E-13	2.544E-13	2.334E-13	1.824E-13	7.694E-14	6.536E-15	1.168E-18	
Pu-238	Pu-238	3.800E-15	3.800E-15	3.753E-15	3.662E-15	3.359E-15	2.625E-15	1.108E-15	9.408E-17	1.681E-20	
Pu-238	ΣS(j):		2.678E-13	2.645E-13	2.581E-13	2.367E-13	1.850E-13	7.805E-14	6.630E-15	1.184E-18	

Summary : RESRAD Default

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Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g								
			t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03	
Ra-226	Pu-238	2.640E-13	0.000E+00	4.921E-28	1.314E-26	4.677E-25	1.130E-23	2.883E-22	3.092E-21	1.396E-20	
Pu-239	Pu-239	1.633E-06	1.633E-06	1.626E-06	1.611E-06	1.562E-06	1.429E-06	1.046E-06	4.293E-07	1.900E-08	
Pu-239	Pu-239	8.257E-06	8.257E-06	8.220E-06	8.147E-06	7.897E-06	7.224E-06	5.289E-06	2.170E-06	9.605E-08	
Pu-239	ΣS(j):		9.890E-06	9.846E-06	9.759E-06	9.459E-06	8.653E-06	6.335E-06	2.600E-06	1.150E-07	
Pu-239	Pu-239	2.285E-08	2.285E-08	2.275E-08	2.255E-08	2.186E-08	1.999E-08	1.464E-08	6.006E-09	2.658E-10	
Pu-239	Pu-239	4.954E-10	4.954E-10	4.932E-10	4.889E-10	4.738E-10	4.335E-10	3.174E-10	1.302E-10	5.763E-12	
Pu-239	ΣS(j):		2.335E-08	2.324E-08	2.304E-08	2.233E-08	2.043E-08	1.496E-08	6.137E-09	2.716E-10	
Pu-239	Pu-239	1.371E-12	1.371E-12	1.365E-12	1.353E-12	1.311E-12	1.200E-12	8.783E-13	3.604E-13	1.595E-14	
Pu-239	Pu-239	2.720E-03	2.720E-03	2.708E-03	2.684E-03	2.602E-03	2.380E-03	1.743E-03	7.150E-04	3.164E-05	
Pu-239	Pu-239	1.375E-02	1.375E-02	1.369E-02	1.357E-02	1.315E-02	1.203E-02	8.810E-03	3.615E-03	1.600E-04	
Pu-239	ΣS(j):		1.647E-02	1.640E-02	1.625E-02	1.576E-02	1.441E-02	1.055E-02	4.330E-03	1.916E-04	
Pu-239	Pu-239	3.806E-05	3.806E-05	3.789E-05	3.756E-05	3.640E-05	3.330E-05	2.438E-05	1.000E-05	4.428E-07	
Pu-239	Pu-239	8.252E-07	8.252E-07	8.216E-07	8.143E-07	7.893E-07	7.220E-07	5.286E-07	2.169E-07	9.600E-09	
Pu-239	ΣS(j):		3.889E-05	3.872E-05	3.837E-05	3.719E-05	3.402E-05	2.491E-05	1.022E-05	4.524E-07	
Pu-239	Pu-239	2.284E-09	2.284E-09	2.274E-09	2.254E-09	2.184E-09	1.998E-09	1.463E-09	6.003E-10	2.657E-11	
Pu-240	Pu-240	1.000E+00	1.000E+00	9.955E-01	9.865E-01	9.557E-01	8.729E-01	6.357E-01	2.569E-01	1.077E-02	
Pu-241	Pu-241	1.000E+00	1.000E+00	9.486E-01	8.537E-01	5.902E-01	2.056E-01	5.129E-03	1.349E-07	1.260E-23	
Pu-241	Pu-241	2.450E-05	2.450E-05	2.324E-05	2.092E-05	1.446E-05	5.037E-06	1.257E-07	3.306E-12	3.088E-28	
Pu-241	ΣS(j):		1.000E+00	9.486E-01	8.537E-01	5.902E-01	2.056E-01	5.129E-03	1.349E-07	1.260E-23	
Sb-125	Sb-125	7.686E-01	7.686E-01	5.576E-01	2.935E-01	3.105E-02	5.068E-05	8.903E-15	1.194E-42	0.000E+00	
Sb-125	Sb-125	2.314E-01	2.314E-01	1.679E-01	8.835E-02	9.347E-03	1.526E-05	2.680E-15	3.601E-43	0.000E+00	
Sb-125	ΣS(j):		1.000E+00	7.255E-01	3.819E-01	4.040E-02	6.594E-05	1.158E-14	1.554E-42	0.000E+00	
Te-125m	Sb-125	2.314E-01	0.000E+00	2.032E-02	1.069E-02	1.131E-03	1.847E-06	3.244E-16	4.344E-44	0.000E+00	
Sr-90	Sr-90	1.000E+00	1.000E+00	5.876E-01	2.029E-01	4.908E-03	1.182E-07	8.114E-24	0.000E+00	0.000E+00	
Tc-99	Tc-99	1.000E+00	1.000E+00	4.690E-06	1.031E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	

THF(i) is the thread fraction of the parent nuclide.

RESRAD.EXE execution time = 180.32 seconds