

Summary : RESRAD Default Parameters

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FCS FGR11 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	Am-241 (Source: FGR 12)	4.372E-02	4.372E-02	DCF1 (4)
A-1	Am-243 (Source: FGR 12)	1.420E-01	1.420E-01	DCF1 (5)
A-1	At-217 (Source: FGR 12)	1.773E-03	1.773E-03	DCF1 (6)
A-1	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	DCF1 (7)
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1 (8)
A-1	Bi-210 (Source: FGR 12)	3.606E-03	3.606E-03	DCF1 (9)
A-1	Bi-211 (Source: FGR 12)	2.559E-01	2.559E-01	DCF1 (10)
A-1	Bi-212 (Source: FGR 12)	1.171E+00	1.171E+00	DCF1 (11)
A-1	Bi-213 (Source: FGR 12)	7.660E-01	7.660E-01	DCF1 (12)
A-1	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	DCF1 (13)
A-1	C-14 (Source: FGR 12)	1.345E-05	1.345E-05	DCF1 (14)
A-1	Ce-144 (Source: FGR 12)	7.174E-02	7.174E-02	DCF1 (15)
A-1	Cm-243 (Source: FGR 12)	5.829E-01	5.829E-01	DCF1 (16)
A-1	Cm-244 (Source: FGR 12)	1.259E-04	1.259E-04	DCF1 (17)
A-1	Co-58 (Source: FGR 12)	5.960E+00	5.960E+00	DCF1 (18)
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1 (19)
A-1	Cs-134 (Source: FGR 12)	9.472E+00	9.472E+00	DCF1 (20)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1 (21)
A-1	Eu-152 (Source: FGR 12)	7.006E+00	7.006E+00	DCF1 (22)
A-1	Eu-154 (Source: FGR 12)	7.678E+00	7.678E+00	DCF1 (23)
A-1	Eu-155 (Source: FGR 12)	1.822E-01	1.822E-01	DCF1 (24)
A-1	Fe-55 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (25)
A-1	Fr-221 (Source: FGR 12)	1.536E-01	1.536E-01	DCF1 (26)
A-1	Fr-223 (Source: FGR 12)	1.980E-01	1.980E-01	DCF1 (27)
A-1	Gd-152 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (28)
A-1	H-3 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (29)
A-1	Ni-59 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (30)
A-1	Ni-63 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (31)
A-1	Np-237 (Source: FGR 12)	7.790E-02	7.790E-02	DCF1 (32)
A-1	Np-239 (Source: FGR 12)	7.529E-01	7.529E-01	DCF1 (33)
A-1	Pa-231 (Source: FGR 12)	1.906E-01	1.906E-01	DCF1 (34)
A-1	Pa-233 (Source: FGR 12)	1.020E+00	1.020E+00	DCF1 (35)
A-1	Pb-209 (Source: FGR 12)	7.734E-04	7.734E-04	DCF1 (36)
A-1	Pb-210 (Source: FGR 12)	2.447E-03	2.447E-03	DCF1 (37)
A-1	Pb-211 (Source: FGR 12)	3.064E-01	3.064E-01	DCF1 (38)
A-1	Pb-212 (Source: FGR 12)	7.043E-01	7.043E-01	DCF1 (39)
A-1	Pb-214 (Source: FGR 12)	1.341E+00	1.341E+00	DCF1 (40)
A-1	Po-210 (Source: FGR 12)	5.231E-05	5.231E-05	DCF1 (41)
A-1	Po-211 (Source: FGR 12)	4.764E-02	4.764E-02	DCF1 (42)
A-1	Po-212 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (43)
A-1	Po-213 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (44)
A-1	Po-214 (Source: FGR 12)	5.138E-04	5.138E-04	DCF1 (45)
A-1	Po-215 (Source: FGR 12)	1.016E-03	1.016E-03	DCF1 (46)
A-1	Po-216 (Source: FGR 12)	1.042E-04	1.042E-04	DCF1 (47)
A-1	Po-218 (Source: FGR 12)	5.642E-05	5.642E-05	DCF1 (48)
A-1	Pr-144 (Source: FGR 12)	2.522E-01	2.522E-01	DCF1 (49)

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Pr-144m (Source: FGR 12)	1.437E-02	1.437E-02	DCF1 (50)
A-1	Pu-238 (Source: FGR 12)	1.513E-04	1.513E-04	DCF1 (51)
A-1	Pu-239 (Source: FGR 12)	2.952E-04	2.952E-04	DCF1 (52)
A-1	Pu-240 (Source: FGR 12)	1.467E-04	1.467E-04	DCF1 (53)
A-1	Pu-241 (Source: FGR 12)	5.904E-06	5.904E-06	DCF1 (54)
A-1	Ra-223 (Source: FGR 12)	6.034E-01	6.034E-01	DCF1 (55)
A-1	Ra-224 (Source: FGR 12)	5.119E-02	5.119E-02	DCF1 (56)
A-1	Ra-225 (Source: FGR 12)	1.102E-02	1.102E-02	DCF1 (57)
A-1	Ra-226 (Source: FGR 12)	3.176E-02	3.176E-02	DCF1 (58)
A-1	Ra-228 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1 (59)
A-1	Rn-219 (Source: FGR 12)	3.083E-01	3.083E-01	DCF1 (60)
A-1	Rn-220 (Source: FGR 12)	2.298E-03	2.298E-03	DCF1 (61)
A-1	Rn-222 (Source: FGR 12)	2.354E-03	2.354E-03	DCF1 (62)
A-1	Sb-125 (Source: FGR 12)	2.447E+00	2.447E+00	DCF1 (63)
A-1	Sr-90 (Source: FGR 12)	7.043E-04	7.043E-04	DCF1 (64)
A-1	Tc-99 (Source: FGR 12)	1.255E-04	1.255E-04	DCF1 (65)
A-1	Te-125m (Source: FGR 12)	1.515E-02	1.515E-02	DCF1 (66)
A-1	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCF1 (67)
A-1	Th-228 (Source: FGR 12)	7.940E-03	7.940E-03	DCF1 (68)
A-1	Th-229 (Source: FGR 12)	3.213E-01	3.213E-01	DCF1 (69)
A-1	Th-230 (Source: FGR 12)	1.209E-03	1.209E-03	DCF1 (70)
A-1	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCF1 (71)
A-1	Th-232 (Source: FGR 12)	5.212E-04	5.212E-04	DCF1 (72)
A-1	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCF1 (73)
A-1	Tl-208 (Source: FGR 12)	2.298E+01	2.298E+01	DCF1 (74)
A-1	Tl-209 (Source: FGR 12)	1.293E+01	1.293E+01	DCF1 (75)
A-1	Tl-210 (Source: no data)	0.000E+00	-2.000E+00	DCF1 (76)
A-1	U-233 (Source: FGR 12)	1.397E-03	1.397E-03	DCF1 (77)
A-1	U-234 (Source: FGR 12)	4.017E-04	4.017E-04	DCF1 (78)
A-1	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCF1 (79)
A-1	U-236 (Source: FGR 12)	2.148E-04	2.148E-04	DCF1 (80)
A-1	U-237 (Source: FGR 12)	5.306E-01	5.306E-01	DCF1 (81)
A-1	Y-90 (Source: FGR 12)	2.391E-02	2.391E-02	DCF1 (82)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.724E+00	6.700E+00	DCF2 (1)
B-1	Am-241	4.440E-01	4.440E-01	DCF2 (2)
B-1	Am-243+D	4.400E-01	4.400E-01	DCF2 (3)
B-1	C-14 (p) (Class: ORGANIC)	2.090E-06	2.090E-06	DCF2 (4)
B-1	C-14 (g) (Class: CO2)	2.350E-08	2.350E-08	C14InhDCF
B-1	Ce-144+D	3.740E-04	3.740E-04	DCF2 (5)
B-1	Cm-243	3.070E-01	3.070E-01	DCF2 (6)
B-1	Cm-244	2.480E-01	2.480E-01	DCF2 (8)
B-1	Co-58	1.090E-05	1.090E-05	DCF2 (11)
B-1	Co-60	2.190E-04	2.190E-04	DCF2 (12)
B-1	Cs-134	4.620E-05	4.620E-05	DCF2 (13)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2 (14)
B-1	Eu-152	2.210E-04	2.210E-04	DCF2 (15)
B-1	Eu-154	2.860E-04	2.860E-04	DCF2 (17)
B-1	Eu-155	4.140E-05	4.140E-05	DCF2 (18)

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	Fe-55	2.690E-06	2.690E-06	DCF2(19)
B-1	Gd-152	2.430E-01	2.430E-01	DCF2(20)
B-1	H-3	6.400E-08	6.400E-08	DCF2(21)
B-1	Ni-59	2.700E-06	2.700E-06	DCF2(22)
B-1	Ni-63	6.290E-06	6.290E-06	DCF2(23)
B-1	Np-237+D	5.400E-01	5.400E-01	DCF2(24)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(25)
B-1	Pb-210+D	1.380E-02	1.360E-02	DCF2(26)
B-1	Po-210	9.400E-03	9.400E-03	DCF2(27)
B-1	Pu-238	3.920E-01	3.920E-01	DCF2(28)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(30)
B-1	Pu-240	4.290E-01	4.290E-01	DCF2(31)
B-1	Pu-241	8.250E-03	8.250E-03	DCF2(33)
B-1	Pu-241+D	8.254E-03	8.250E-03	DCF2(34)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(35)
B-1	Ra-228+D	5.078E-03	4.770E-03	DCF2(36)
B-1	Sb-125	1.220E-05	1.220E-05	DCF2(37)
B-1	Sr-90+D	1.308E-03	1.300E-03	DCF2(39)
B-1	Tc-99	8.320E-06	8.320E-06	DCF2(40)
B-1	Te-125m	7.290E-06	7.290E-06	DCF2(41)
B-1	Th-228+D	3.454E-01	3.420E-01	DCF2(42)
B-1	Th-229+D	2.169E+00	2.150E+00	DCF2(43)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(44)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(45)
B-1	U-233	1.350E-01	1.350E-01	DCF2(46)
B-1	U-234	1.320E-01	1.320E-01	DCF2(47)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(48)
B-1	U-236	1.250E-01	1.250E-01	DCF2(49)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.410E-02	DCF3(1)
D-1	Am-241	3.640E-03	3.640E-03	DCF3(2)
D-1	Am-243+D	3.623E-03	3.620E-03	DCF3(3)
D-1	C-14	2.090E-06	2.090E-06	DCF3(4)
D-1	Ce-144+D	2.112E-05	2.100E-05	DCF3(5)
D-1	Cm-243	2.510E-03	2.510E-03	DCF3(6)
D-1	Cm-244	2.020E-03	2.020E-03	DCF3(8)
D-1	Co-58	3.580E-06	3.580E-06	DCF3(11)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(12)
D-1	Cs-134	7.330E-05	7.330E-05	DCF3(13)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(14)
D-1	Eu-152	6.480E-06	6.480E-06	DCF3(15)
D-1	Eu-154	9.550E-06	9.550E-06	DCF3(17)
D-1	Eu-155	1.530E-06	1.530E-06	DCF3(18)
D-1	Fe-55	6.070E-07	6.070E-07	DCF3(19)
D-1	Gd-152	1.610E-04	1.610E-04	DCF3(20)
D-1	H-3	6.400E-08	6.400E-08	DCF3(21)
D-1	Ni-59	2.100E-07	2.100E-07	DCF3(22)
D-1	Ni-63	5.770E-07	5.770E-07	DCF3(23)
D-1	Np-237+D	4.444E-03	4.440E-03	DCF3(24)

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(25)
D-1	Pb-210+D	5.376E-03	5.370E-03	DCF3(26)
D-1	Po-210	1.900E-03	1.900E-03	DCF3(27)
D-1	Pu-238	3.200E-03	3.200E-03	DCF3(28)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(30)
D-1	Pu-240	3.540E-03	3.540E-03	DCF3(31)
D-1	Pu-241	6.840E-05	6.840E-05	DCF3(33)
D-1	Pu-241+D	7.157E-05	6.840E-05	DCF3(34)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(35)
D-1	Ra-228+D	1.442E-03	1.440E-03	DCF3(36)
D-1	Sb-125	2.810E-06	2.810E-06	DCF3(37)
D-1	Sr-90+D	1.528E-04	1.420E-04	DCF3(39)
D-1	Tc-99	1.460E-06	1.460E-06	DCF3(40)
D-1	Te-125m	3.670E-06	3.670E-06	DCF3(41)
D-1	Th-228+D	8.086E-04	3.960E-04	DCF3(42)
D-1	Th-229+D	4.027E-03	3.530E-03	DCF3(43)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(44)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(45)
D-1	U-233	2.890E-04	2.890E-04	DCF3(46)
D-1	U-234	2.830E-04	2.830E-04	DCF3(47)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(48)
D-1	U-236	2.690E-04	2.690E-04	DCF3(49)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-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-05	2.000E-05	RTF(1,3)
D-34				
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(2,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.740E-05	5.000E-05	RTF(2,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.260E-06	2.000E-06	RTF(2,3)
D-34				
D-34	Am-243+D , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(3,1)
D-34	Am-243+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.740E-05	5.000E-05	RTF(3,2)
D-34	Am-243+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.260E-06	2.000E-06	RTF(3,3)
D-34				
D-34	C-14 , plant/soil concentration ratio, dimensionless	1.280E+00	5.500E+00	RTF(4,1)
D-34	C-14 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.110E-02	3.100E-02	RTF(4,2)
D-34	C-14 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.250E-02	1.200E-02	RTF(4,3)
D-34				
D-34	Ce-144+D , plant/soil concentration ratio, dimensionless	3.940E-03	2.000E-03	RTF(5,1)
D-34	Ce-144+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.790E-05	2.000E-05	RTF(5,2)
D-34	Ce-144+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.840E-05	5.000E-05	RTF(5,3)
D-34				
D-34	Cm-243 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(6,1)
D-34	Cm-243 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.080E-05	2.000E-05	RTF(6,2)
D-34	Cm-243 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.800E-06	2.000E-06	RTF(6,3)
D-34				

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Cm-244 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(8,1)
D-34	Cm-244 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.080E-05	2.000E-05	RTF(8,2)
D-34	Cm-244 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.800E-06	2.000E-06	RTF(8,3)
D-34				
D-34	Co-58 , plant/soil concentration ratio, dimensionless	1.460E-01	8.000E-02	RTF(11,1)
D-34	Co-58 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.980E-02	2.000E-02	RTF(11,2)
D-34	Co-58 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.220E-03	2.000E-03	RTF(11,3)
D-34				
D-34	Co-60 , plant/soil concentration ratio, dimensionless	1.460E-01	8.000E-02	RTF(12,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.980E-02	2.000E-02	RTF(12,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.220E-03	2.000E-03	RTF(12,3)
D-34				
D-34	Cs-134 , plant/soil concentration ratio, dimensionless	7.830E-02	4.000E-02	RTF(13,1)
D-34	Cs-134 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.560E-02	3.000E-02	RTF(13,2)
D-34	Cs-134 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-02	8.000E-03	RTF(13,3)
D-34				
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	7.830E-02	4.000E-02	RTF(14,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	6.560E-02	3.000E-02	RTF(14,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.370E-02	8.000E-03	RTF(14,3)
D-34				
D-34	Eu-152 , plant/soil concentration ratio, dimensionless	4.210E-03	2.500E-03	RTF(15,1)
D-34	Eu-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.020E-03	2.000E-03	RTF(15,2)
D-34	Eu-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.120E-04	5.000E-05	RTF(15,3)
D-34				
D-34	Eu-154 , plant/soil concentration ratio, dimensionless	4.210E-03	2.500E-03	RTF(17,1)
D-34	Eu-154 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.020E-03	2.000E-03	RTF(17,2)
D-34	Eu-154 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.120E-04	5.000E-05	RTF(17,3)
D-34				
D-34	Eu-155 , plant/soil concentration ratio, dimensionless	4.210E-03	2.500E-03	RTF(18,1)
D-34	Eu-155 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	4.020E-03	2.000E-03	RTF(18,2)
D-34	Eu-155 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.120E-04	5.000E-05	RTF(18,3)
D-34				
D-34	Fe-55 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(19,1)
D-34	Fe-55 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.940E-02	2.000E-02	RTF(19,2)
D-34	Fe-55 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.780E-04	3.000E-04	RTF(19,3)
D-34				
D-34	Gd-152 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(20,1)
D-34	Gd-152 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(20,2)
D-34	Gd-152 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(20,3)
D-34				
D-34	H-3 , plant/soil concentration ratio, dimensionless	1.010E+01	4.800E+00	RTF(21,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.360E-02	1.200E-02	RTF(21,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.850E-02	1.000E-02	RTF(21,3)
D-34				
D-34	Ni-59 , plant/soil concentration ratio, dimensionless	9.130E-02	5.000E-02	RTF(22,1)
D-34	Ni-59 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.260E-03	5.000E-03	RTF(22,2)
D-34	Ni-59 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.190E-02	2.000E-02	RTF(22,3)
D-34				

Summary : RESRAD Default Parameters

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Ni-63 , plant/soil concentration ratio, dimensionless	9.130E-02	5.000E-02	RTF(23,1)
D-34	Ni-63 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.260E-03	5.000E-03	RTF(23,2)
D-34	Ni-63 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.190E-02	2.000E-02	RTF(23,3)
D-34				
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	3.670E-02	2.000E-02	RTF(24,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.590E-03	1.000E-03	RTF(24,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.610E-05	5.000E-06	RTF(24,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(25,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(25,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(25,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(26,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(26,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(26,3)
D-34				
D-34	Po-210 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(27,1)
D-34	Po-210 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(27,2)
D-34	Po-210 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.400E-04	3.400E-04	RTF(27,3)
D-34				
D-34	Pu-238 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(28,1)
D-34	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.140E-04	1.000E-04	RTF(28,2)
D-34	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.390E-06	1.000E-06	RTF(28,3)
D-34				
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(30,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.140E-04	1.000E-04	RTF(30,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.390E-06	1.000E-06	RTF(30,3)
D-34				
D-34	Pu-240 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(31,1)
D-34	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.140E-04	1.000E-04	RTF(31,2)
D-34	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.390E-06	1.000E-06	RTF(31,3)
D-34				
D-34	Pu-241 , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(33,1)
D-34	Pu-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.140E-04	1.000E-04	RTF(33,2)
D-34	Pu-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.390E-06	1.000E-06	RTF(33,3)
D-34				
D-34	Pu-241+D , plant/soil concentration ratio, dimensionless	1.830E-03	1.000E-03	RTF(34,1)
D-34	Pu-241+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.140E-04	1.000E-04	RTF(34,2)
D-34	Pu-241+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.390E-06	1.000E-06	RTF(34,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(35,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(35,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(35,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(36,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(36,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(36,3)
D-34				

Summary : RESRAD Default Parameters

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Sb-125 , plant/soil concentration ratio, dimensionless	1.950E-02	1.000E-02	RTF(37,1)
D-34	Sb-125 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.850E-03	1.000E-03	RTF(37,2)
D-34	Sb-125 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.120E-04	1.000E-04	RTF(37,3)
D-34				
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	5.900E-01	3.000E-01	RTF(39,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.310E-02	8.000E-03	RTF(39,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.760E-03	2.000E-03	RTF(39,3)
D-34				
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	9.170E+00	5.000E+00	RTF(40,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.590E-04	1.000E-04	RTF(40,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.590E-03	1.000E-03	RTF(40,3)
D-34				
D-34	Te-125m , plant/soil concentration ratio, dimensionless	6.000E-01	6.000E-01	RTF(41,1)
D-34	Te-125m , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	7.000E-03	7.000E-03	RTF(41,2)
D-34	Te-125m , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-04	5.000E-04	RTF(41,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(42,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(42,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(42,3)
D-34				
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(43,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(43,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(43,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(44,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(44,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(44,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(45,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(45,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(45,3)
D-34				
D-34	U-233 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(46,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(46,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(46,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(47,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(47,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(47,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(48,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(48,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(48,3)
D-34				
D-34	U-236 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(49,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(49,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(49,3)
D-34				

Summary : RESRAD Default Parameters

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
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	Am-241 , fish	3.000E+01	3.000E+01	BIOFAC(2,1)
D-5	Am-241 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(2,2)
D-5				
D-5	Am-243+D , fish	3.000E+01	3.000E+01	BIOFAC(3,1)
D-5	Am-243+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(3,2)
D-5				
D-5	C-14 , fish	5.000E+04	5.000E+04	BIOFAC(4,1)
D-5	C-14 , crustacea and mollusks	9.100E+03	9.100E+03	BIOFAC(4,2)
D-5				
D-5	Ce-144+D , fish	3.000E+01	3.000E+01	BIOFAC(5,1)
D-5	Ce-144+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(5,2)
D-5				
D-5	Cm-243 , fish	3.000E+01	3.000E+01	BIOFAC(6,1)
D-5	Cm-243 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(6,2)
D-5				
D-5	Cm-244 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Cm-244 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(8,2)
D-5				
D-5	Co-58 , fish	3.000E+02	3.000E+02	BIOFAC(11,1)
D-5	Co-58 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(11,2)
D-5				
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(12,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(12,2)
D-5				
D-5	Cs-134 , fish	2.000E+03	2.000E+03	BIOFAC(13,1)
D-5	Cs-134 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(13,2)
D-5				
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(14,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(14,2)
D-5				
D-5	Eu-152 , fish	5.000E+01	5.000E+01	BIOFAC(15,1)
D-5	Eu-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(15,2)
D-5				
D-5	Eu-154 , fish	5.000E+01	5.000E+01	BIOFAC(17,1)
D-5	Eu-154 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(17,2)
D-5				
D-5	Eu-155 , fish	5.000E+01	5.000E+01	BIOFAC(18,1)
D-5	Eu-155 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(18,2)
D-5				
D-5	Fe-55 , fish	2.000E+02	2.000E+02	BIOFAC(19,1)
D-5	Fe-55 , crustacea and mollusks	3.200E+03	3.200E+03	BIOFAC(19,2)
D-5				
D-5	Gd-152 , fish	2.500E+01	2.500E+01	BIOFAC(20,1)
D-5	Gd-152 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(20,2)
D-5				

Summary : RESRAD Default Parameters

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(21,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(21,2)
D-5				
D-5	Ni-59 , fish	1.000E+02	1.000E+02	BIOFAC(22,1)
D-5	Ni-59 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(22,2)
D-5				
D-5	Ni-63 , fish	1.000E+02	1.000E+02	BIOFAC(23,1)
D-5	Ni-63 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(23,2)
D-5				
D-5	Np-237+D , fish	3.000E+01	3.000E+01	BIOFAC(24,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(24,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(25,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(25,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(26,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(26,2)
D-5				
D-5	Po-210 , fish	1.000E+02	1.000E+02	BIOFAC(27,1)
D-5	Po-210 , crustacea and mollusks	2.000E+04	2.000E+04	BIOFAC(27,2)
D-5				
D-5	Pu-238 , fish	3.000E+01	3.000E+01	BIOFAC(28,1)
D-5	Pu-238 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(28,2)
D-5				
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(30,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(30,2)
D-5				
D-5	Pu-240 , fish	3.000E+01	3.000E+01	BIOFAC(31,1)
D-5	Pu-240 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(31,2)
D-5				
D-5	Pu-241 , fish	3.000E+01	3.000E+01	BIOFAC(33,1)
D-5	Pu-241 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(33,2)
D-5				
D-5	Pu-241+D , fish	3.000E+01	3.000E+01	BIOFAC(34,1)
D-5	Pu-241+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(34,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(35,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(35,2)
D-5				
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(36,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(36,2)
D-5				
D-5	Sb-125 , fish	1.000E+02	1.000E+02	BIOFAC(37,1)
D-5	Sb-125 , crustacea and mollusks	1.000E+01	1.000E+01	BIOFAC(37,2)
D-5				
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(39,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(39,2)
D-5				
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(40,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(40,2)

Summary : RESRAD Default Parameters

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

Dose Library: FCS FGR11 Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Te-125m , fish	4.000E+02	4.000E+02	BIOFAC (41,1)
D-5	Te-125m , crustacea and mollusks	7.500E+01	7.500E+01	BIOFAC (41,2)
D-5				
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC (42,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC (42,2)
D-5				
D-5	Th-229+D , fish	1.000E+02	1.000E+02	BIOFAC (43,1)
D-5	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC (43,2)
D-5				
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC (44,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC (44,2)
D-5				
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC (45,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC (45,2)
D-5				
D-5	U-233 , fish	1.000E+01	1.000E+01	BIOFAC (46,1)
D-5	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC (46,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC (47,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC (47,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC (48,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC (48,2)
D-5				
D-5	U-236 , fish	1.000E+01	1.000E+01	BIOFAC (49,1)
D-5	U-236 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC (49,2)

#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 Parameters

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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)	7.960E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.000E+00	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)	3.180E+02	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): Am-241	1.000E+00	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): C-14	1.000E+00	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Ce-144	1.000E+00	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Cm-243	1.000E+00	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Cm-244	1.000E+00	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Co-58	1.000E+00	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(12)
R012	Initial principal radionuclide (pCi/g): Cs-134	1.000E+00	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): Eu-152	1.000E+00	0.000E+00	---	S1(15)
R012	Initial principal radionuclide (pCi/g): Eu-154	1.000E+00	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): Eu-155	1.000E+00	0.000E+00	---	S1(18)
R012	Initial principal radionuclide (pCi/g): Fe-55	1.000E+00	0.000E+00	---	S1(19)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+00	0.000E+00	---	S1(21)
R012	Initial principal radionuclide (pCi/g): Ni-59	1.000E+00	0.000E+00	---	S1(22)
R012	Initial principal radionuclide (pCi/g): Ni-63	1.000E+00	0.000E+00	---	S1(23)
R012	Initial principal radionuclide (pCi/g): Np-237	1.000E+00	0.000E+00	---	S1(24)
R012	Initial principal radionuclide (pCi/g): Pu-238	1.000E+00	0.000E+00	---	S1(28)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+00	0.000E+00	---	S1(30)
R012	Initial principal radionuclide (pCi/g): Pu-240	1.000E+00	0.000E+00	---	S1(31)
R012	Initial principal radionuclide (pCi/g): Pu-241	1.000E+00	0.000E+00	---	S1(33)
R012	Initial principal radionuclide (pCi/g): Sb-125	1.000E+00	0.000E+00	---	S1(37)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.000E+00	0.000E+00	---	S1(39)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+00	0.000E+00	---	S1(40)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): C-14	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Ce-144	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Cm-243	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Cm-244	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Co-58	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(12)
R012	Concentration in groundwater (pCi/L): Cs-134	not used	0.000E+00	---	W1(13)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(14)
R012	Concentration in groundwater (pCi/L): Eu-152	not used	0.000E+00	---	W1(15)

Summary : RESRAD Default Parameters

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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): Eu-154	not used	0.000E+00	---	W1 (17)
R012	Concentration in groundwater (pCi/L): Eu-155	not used	0.000E+00	---	W1 (18)
R012	Concentration in groundwater (pCi/L): Fe-55	not used	0.000E+00	---	W1 (19)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1 (21)
R012	Concentration in groundwater (pCi/L): Ni-59	not used	0.000E+00	---	W1 (22)
R012	Concentration in groundwater (pCi/L): Ni-63	not used	0.000E+00	---	W1 (23)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1 (24)
R012	Concentration in groundwater (pCi/L): Pu-238	not used	0.000E+00	---	W1 (28)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1 (30)
R012	Concentration in groundwater (pCi/L): Pu-240	not used	0.000E+00	---	W1 (31)
R012	Concentration in groundwater (pCi/L): Pu-241	not used	0.000E+00	---	W1 (33)
R012	Concentration in groundwater (pCi/L): Sb-125	not used	0.000E+00	---	W1 (37)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1 (39)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1 (40)
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)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	7.590E-04	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.300E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.800E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	3.440E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	2.870E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.270E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	7.240E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	8.700E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	7.600E-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	6.300E-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	Romberg failures occurred	EPS
R014	Density of saturated zone (g/cm**3)	1.490E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.500E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.400E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	4.350E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	8.400E-04	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)	2.140E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	4.550E+03	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS

Summary : RESRAD Default Parameters

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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	Unsat. zone 1, thickness (m)	1.000E-01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.300E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	1.600E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.800E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	3.600E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	3.440E+01	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Am-241				
R016	Contaminated zone (cm**3/g)	1.250E+03	2.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	1.250E+03	2.000E+01	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	1.000E+03	2.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.266E-05	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for C-14				
R016	Contaminated zone (cm**3/g)	9.670E+01	0.000E+00	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	9.670E+01	0.000E+00	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	1.100E+01	0.000E+00	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.215E-04	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Ce-144				
R016	Contaminated zone (cm**3/g)	3.010E+03	1.000E+03	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	3.010E+03	1.000E+03	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	3.990E+02	1.000E+03	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.357E-05	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Cm-243				
R016	Contaminated zone (cm**3/g)	1.900E+04	-1.000E+00	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	1.900E+04	-1.000E+00	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	3.390E+03	-1.000E+00	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.149E-06	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for Cm-244				
R016	Contaminated zone (cm**3/g)	1.900E+04	-1.000E+00	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	1.900E+04	-1.000E+00	---	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	3.390E+03	-1.000E+00	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.149E-06	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for Co-58				
R016	Contaminated zone (cm**3/g)	5.050E+03	1.000E+03	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	5.050E+03	1.000E+03	---	DCNUCU(11,1)
R016	Saturated zone (cm**3/g)	2.600E+02	1.000E+03	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.086E-06	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)

Summary : RESRAD Default Parameters

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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)	5.050E+03	1.000E+03	---	DCNUCC (12)
R016	Unsaturated zone 1 (cm**3/g)	5.050E+03	1.000E+03	---	DCNUCU (12,1)
R016	Saturated zone (cm**3/g)	2.600E+02	1.000E+03	---	DCNUCS (12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.086E-06	ALEACH (12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (12)
R016	Distribution coefficients for Cs-134				
R016	Contaminated zone (cm**3/g)	3.500E+03	4.600E+03	---	DCNUCC (13)
R016	Unsaturated zone 1 (cm**3/g)	3.500E+03	4.600E+03	---	DCNUCU (13,1)
R016	Saturated zone (cm**3/g)	5.280E+02	4.600E+03	---	DCNUCS (13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.167E-05	ALEACH (13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (13)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	3.500E+03	4.600E+03	---	DCNUCC (14)
R016	Unsaturated zone 1 (cm**3/g)	3.500E+03	4.600E+03	---	DCNUCU (14,1)
R016	Saturated zone (cm**3/g)	5.280E+02	4.600E+03	---	DCNUCS (14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.167E-05	ALEACH (14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (14)
R016	Distribution coefficients for Eu-152				
R016	Contaminated zone (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCC (15)
R016	Unsaturated zone 1 (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCU (15,1)
R016	Saturated zone (cm**3/g)	8.290E+02	-1.000E+00	---	DCNUCS (15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.617E-06	ALEACH (15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (15)
R016	Distribution coefficients for Eu-154				
R016	Contaminated zone (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCC (17)
R016	Unsaturated zone 1 (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCU (17,1)
R016	Saturated zone (cm**3/g)	8.290E+02	-1.000E+00	---	DCNUCS (17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.617E-06	ALEACH (17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (17)
R016	Distribution coefficients for Eu-155				
R016	Contaminated zone (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCC (18)
R016	Unsaturated zone 1 (cm**3/g)	7.270E+03	-1.000E+00	---	DCNUCU (18,1)
R016	Saturated zone (cm**3/g)	8.290E+02	-1.000E+00	---	DCNUCS (18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.617E-06	ALEACH (18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (18)
R016	Distribution coefficients for Fe-55				
R016	Contaminated zone (cm**3/g)	8.890E+02	1.000E+03	---	DCNUCC (19)
R016	Unsaturated zone 1 (cm**3/g)	8.890E+02	1.000E+03	---	DCNUCU (19,1)
R016	Saturated zone (cm**3/g)	3.210E+02	1.000E+03	---	DCNUCS (19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.593E-05	ALEACH (19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (19)

Summary : RESRAD Default Parameters

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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)	4.300E-02	0.000E+00	---	DCNUCC (21)
R016	Unsaturated zone 1 (cm**3/g)	4.300E-02	0.000E+00	---	DCNUCU (21,1)
R016	Saturated zone (cm**3/g)	6.020E-02	0.000E+00	---	DCNUCS (21)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.778E-01	ALEACH (21)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (21)
R016	Distribution coefficients for Ni-59				
R016	Contaminated zone (cm**3/g)	1.790E+02	1.000E+03	---	DCNUCC (22)
R016	Unsaturated zone 1 (cm**3/g)	1.790E+02	1.000E+03	---	DCNUCU (22,1)
R016	Saturated zone (cm**3/g)	1.300E+02	1.000E+03	---	DCNUCS (22)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.279E-04	ALEACH (22)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (22)
R016	Distribution coefficients for Ni-63				
R016	Contaminated zone (cm**3/g)	5.320E+02	1.000E+03	---	DCNUCC (23)
R016	Unsaturated zone 1 (cm**3/g)	5.320E+02	1.000E+03	---	DCNUCU (23,1)
R016	Saturated zone (cm**3/g)	1.300E+02	1.000E+03	---	DCNUCS (23)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.673E-05	ALEACH (23)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (23)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	9.050E+00	-1.000E+00	---	DCNUCC (24)
R016	Unsaturated zone 1 (cm**3/g)	9.050E+00	-1.000E+00	---	DCNUCU (24,1)
R016	Saturated zone (cm**3/g)	5.490E+00	-1.000E+00	---	DCNUCS (24)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.421E-03	ALEACH (24)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (24)
R016	Distribution coefficients for Pu-238				
R016	Contaminated zone (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCC (28)
R016	Unsaturated zone 1 (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCU (28,1)
R016	Saturated zone (cm**3/g)	3.990E+02	2.000E+03	---	DCNUCS (28)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.284E-05	ALEACH (28)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (28)
R016	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCC (30)
R016	Unsaturated zone 1 (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCU (30,1)
R016	Saturated zone (cm**3/g)	3.990E+02	2.000E+03	---	DCNUCS (30)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.284E-05	ALEACH (30)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (30)
R016	Distribution coefficients for Pu-240				
R016	Contaminated zone (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCC (31)
R016	Unsaturated zone 1 (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCU (31,1)
R016	Saturated zone (cm**3/g)	3.990E+02	2.000E+03	---	DCNUCS (31)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.284E-05	ALEACH (31)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (31)

Summary : RESRAD Default Parameters

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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 Pu-241				
R016	Contaminated zone (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCC (33)
R016	Unsaturated zone 1 (cm**3/g)	9.530E+02	2.000E+03	---	DCNUCU (33,1)
R016	Saturated zone (cm**3/g)	3.990E+02	2.000E+03	---	DCNUCS (33)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.284E-05	ALEACH (33)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (33)
R016	Distribution coefficients for Sb-125				
R016	Contaminated zone (cm**3/g)	1.280E+02	0.000E+00	---	DCNUCC (37)
R016	Unsaturated zone 1 (cm**3/g)	1.280E+02	0.000E+00	---	DCNUCU (37,1)
R016	Saturated zone (cm**3/g)	1.690E+01	0.000E+00	---	DCNUCS (37)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.186E-04	ALEACH (37)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (37)
R016	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	1.680E+02	3.000E+01	---	DCNUCC (39)
R016	Unsaturated zone 1 (cm**3/g)	1.680E+02	3.000E+01	---	DCNUCU (39,1)
R016	Saturated zone (cm**3/g)	2.200E+01	3.000E+01	---	DCNUCS (39)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.428E-04	ALEACH (39)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (39)
R016	Distribution coefficients for Tc-99				
R016	Contaminated zone (cm**3/g)	1.470E-01	0.000E+00	---	DCNUCC (40)
R016	Unsaturated zone 1 (cm**3/g)	1.470E-01	0.000E+00	---	DCNUCU (40,1)
R016	Saturated zone (cm**3/g)	4.000E-01	0.000E+00	---	DCNUCS (40)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.224E-01	ALEACH (40)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (40)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC (1)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU (1,1)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS (1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.023E-03	ALEACH (1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (1)
R016	Distribution coefficients for daughter Am-243				
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC (3)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU (3,1)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS (3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.023E-03	ALEACH (3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (3)
R016	Distribution coefficients for daughter Gd-152				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC (20)
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU (20,1)
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS (20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.950E-05	ALEACH (20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (20)

Summary : RESRAD Default Parameters

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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 Pa-231				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC (25)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU (25,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS (25)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.137E-04	ALEACH (25)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (25)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC (26)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU (26,1)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS (26)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.076E-04	ALEACH (26)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (26)
R016	Distribution coefficients for daughter Po-210				
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC (27)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU (27,1)
R016	Saturated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCS (27)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.009E-03	ALEACH (27)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (27)
R016	Distribution coefficients for daughter Ra-226				
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC (35)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU (35,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS (35)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.818E-04	ALEACH (35)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (35)
R016	Distribution coefficients for daughter Ra-228				
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC (36)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU (36,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS (36)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.818E-04	ALEACH (36)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (36)
R016	Distribution coefficients for daughter Te-125m				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC (41)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU (41,1)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS (41)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.188E-01	ALEACH (41)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (41)
R016	Distribution coefficients for daughter Th-228				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (42)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU (42,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS (42)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.806E-07	ALEACH (42)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (42)

Summary : RESRAD Default Parameters

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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 Th-229				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (43)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU (43,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS (43)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.806E-07	ALEACH (43)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (43)
R016	Distribution coefficients for daughter Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (44)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU (44,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS (44)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.806E-07	ALEACH (44)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (44)
R016	Distribution coefficients for daughter Th-232				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC (45)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU (45,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS (45)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.806E-07	ALEACH (45)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (45)
R016	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC (46)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU (46,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS (46)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.137E-04	ALEACH (46)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (46)
R016	Distribution coefficients for daughter U-234				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC (47)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU (47,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS (47)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.137E-04	ALEACH (47)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (47)
R016	Distribution coefficients for daughter U-235				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC (48)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU (48,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS (48)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.137E-04	ALEACH (48)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (48)
R016	Distribution coefficients for daughter U-236				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC (49)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU (49,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS (49)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.137E-04	ALEACH (49)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK (49)
R017	Inhalation rate (m**3/yr)	8.600E+03	8.400E+03	---	INHALR

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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	Mass loading for inhalation (g/m**3)	2.870E-05	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	7.500E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	5.520E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	6.600E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.200E-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)
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)	2.240E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	4.280E+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	0.500E+00	FPLANT
R018	Contamination fraction of meat	-1	-1	0.100E+01	FMEAT

Summary : RESRAD Default Parameters

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Contamination fraction of milk	-1	-1	0.100E+01	FMILK
R019	Livestock fodder intake for meat (kg/day)	2.710E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	6.321E+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)	7.000E-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)	2.300E-01	1.500E-01	---	DM
R019	Depth of roots (m)	1.230E+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)	2.890E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.890E+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)
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)	3.000E-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	9.000E-02	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	3.000E-02	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	2.000E+01	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)

Summary : RESRAD Default Parameters

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	128	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	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	suppressed

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	79600.00 square meters	Am-241	1.000E+00
Thickness:	1.00 meters	C-14	1.000E+00
Cover Depth:	0.00 meters	Ce-144	1.000E+00
		Cm-243	1.000E+00
		Cm-244	1.000E+00
		Co-58	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
		Ni-59	1.000E+00
		Ni-63	1.000E+00
		Np-237	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):	6.797E+01	6.057E+01	5.428E+01	4.284E+01	3.345E+01	2.915E+01	3.381E+01	1.300E+00
M(t):	2.719E+00	2.423E+00	2.171E+00	1.714E+00	1.338E+00	1.166E+00	1.352E+00	5.199E-02

Maximum TDOSE(t): 6.797E+01 mrem/yr at t = 0.000E+00 years

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 = 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.
Am-241	2.104E-02	0.0003	1.109E-02	0.0002	0.000E+00	0.0000	7.227E-01	0.0106	1.007E-02	0.0001	2.195E-03	0.0000	5.191E-02	0.0008
C-14	9.773E-07	0.0000	1.612E-04	0.0000	0.000E+00	0.0000	1.212E+00	0.0178	6.738E-01	0.0099	5.682E-01	0.0084	4.489E-06	0.0000
Ce-144	1.015E-01	0.0015	6.188E-06	0.0000	0.000E+00	0.0000	5.977E-03	0.0001	2.715E-05	0.0000	1.424E-04	0.0000	1.996E-04	0.0000
Cm-243	2.746E-01	0.0040	7.579E-03	0.0001	0.000E+00	0.0000	4.927E-01	0.0072	4.878E-03	0.0001	1.745E-03	0.0000	3.540E-02	0.0005
Cm-244	5.981E-05	0.0000	6.081E-03	0.0001	0.000E+00	0.0000	3.938E-01	0.0058	3.899E-03	0.0001	1.395E-03	0.0000	2.829E-02	0.0004
Co-58	7.628E-01	0.0112	7.404E-08	0.0000	0.000E+00	0.0000	1.542E-02	0.0002	1.484E-02	0.0002	5.989E-03	0.0001	1.389E-05	0.0000
Co-60	7.162E+00	0.1054	5.128E-06	0.0000	0.000E+00	0.0000	3.990E-01	0.0059	3.843E-01	0.0057	1.551E-01	0.0023	3.598E-04	0.0000
Cs-134	3.788E+00	0.0557	9.805E-07	0.0000	0.000E+00	0.0000	5.285E-01	0.0078	6.447E-01	0.0095	9.386E-01	0.0138	8.886E-04	0.0000
Cs-137	1.588E+00	0.0234	7.880E-07	0.0000	0.000E+00	0.0000	4.196E-01	0.0062	5.119E-01	0.0075	7.452E-01	0.0110	7.055E-04	0.0000
Eu-152	3.222E+00	0.0474	5.382E-06	0.0000	0.000E+00	0.0000	2.884E-03	0.0000	1.310E-03	0.0000	1.511E-04	0.0000	9.013E-05	0.0000
Eu-154	3.481E+00	0.0512	6.873E-06	0.0000	0.000E+00	0.0000	4.194E-03	0.0001	1.906E-03	0.0000	2.198E-04	0.0000	1.311E-04	0.0000
Eu-155	8.159E-02	0.0012	9.655E-07	0.0000	0.000E+00	0.0000	6.522E-04	0.0000	2.963E-04	0.0000	3.417E-05	0.0000	2.038E-05	0.0000
Fe-55	0.000E+00	0.0000	5.929E-08	0.0000	0.000E+00	0.0000	1.064E-04	0.0000	1.017E-03	0.0000	4.738E-05	0.0000	7.641E-06	0.0000
H-3	0.000E+00	0.0000	4.187E-04	0.0000	0.000E+00	0.0000	1.331E-02	0.0002	1.716E-03	0.0000	1.293E-02	0.0002	4.866E-07	0.0000
Ni-59	0.000E+00	0.0000	6.746E-08	0.0000	0.000E+00	0.0000	2.078E-03	0.0000	3.432E-04	0.0000	8.414E-03	0.0001	2.997E-06	0.0000
Ni-63	0.000E+00	0.0000	1.566E-07	0.0000	0.000E+00	0.0000	5.691E-03	0.0001	9.397E-04	0.0000	2.304E-02	0.0003	8.206E-06	0.0000
Np-237	5.207E-01	0.0077	1.346E-02	0.0002	0.000E+00	0.0000	1.765E+01	0.2596	6.927E-01	0.0102	4.303E-02	0.0006	6.329E-02	0.0009
Pu-238	7.284E-05	0.0000	9.757E-03	0.0001	0.000E+00	0.0000	6.333E-01	0.0093	1.752E-02	0.0003	8.204E-04	0.0000	4.550E-02	0.0007
Pu-239	1.407E-04	0.0000	1.072E-02	0.0002	0.000E+00	0.0000	7.034E-01	0.0103	1.946E-02	0.0003	9.111E-04	0.0000	5.053E-02	0.0007
Pu-240	7.075E-05	0.0000	1.072E-02	0.0002	0.000E+00	0.0000	7.034E-01	0.0103	1.946E-02	0.0003	9.111E-04	0.0000	5.053E-02	0.0007
Pu-241	2.543E-05	0.0000	2.100E-04	0.0000	0.000E+00	0.0000	1.384E-02	0.0002	3.757E-04	0.0000	1.892E-05	0.0000	9.942E-04	0.0000
Sb-125	1.023E+00	0.0151	2.977E-07	0.0000	0.000E+00	0.0000	3.698E-02	0.0005	1.954E-03	0.0000	1.294E-03	0.0000	4.352E-05	0.0000
Sr-90	1.147E-02	0.0002	3.231E-05	0.0000	0.000E+00	0.0000	9.658E+00	0.1421	1.764E+00	0.0259	3.011E+00	0.0443	2.155E-03	0.0000
Tc-99	5.653E-05	0.0000	1.957E-07	0.0000	0.000E+00	0.0000	1.371E+00	0.0202	2.937E-03	0.0000	2.434E-01	0.0036	1.962E-05	0.0000
Total	2.204E+01	0.3243	7.026E-02	0.0010	0.000E+00	0.0000	3.498E+01	0.5147	4.774E+00	0.0702	5.765E+00	0.0848	3.311E-01	0.0049

Summary : RESRAD Default Parameters

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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.
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	8.190E-01	0.0120
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	2.455E+00	0.0361
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.078E-01	0.0016
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	8.169E-01	0.0120
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	4.336E-01	0.0064
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.991E-01	0.0118
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	8.101E+00	0.1192
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	5.900E+00	0.0868
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	3.266E+00	0.0480
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	3.227E+00	0.0475
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	3.488E+00	0.0513
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	8.259E-02	0.0012
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	1.178E-03	0.0000
H-3	3.412E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.737E-05	0.0000	1.881E-05	0.0000	9.361E-05	0.0000	2.889E-02	0.0004
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	1.084E-02	0.0002
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	2.968E-02	0.0004
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	1.898E+01	0.2792
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	7.070E-01	0.0104
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	7.851E-01	0.0116
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	7.850E-01	0.0115
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	1.546E-02	0.0002
Sb-125	1.213E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.050E-04	0.0000	5.049E-05	0.0000	2.566E-05	0.0000	1.065E+00	0.0157
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	1.445E+01	0.2125
Tc-99	3.005E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.047E-03	0.0000	4.188E-06	0.0000	2.778E-04	0.0000	1.622E+00	0.0239
Total	4.559E-03	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	1.209E-03	0.0000	7.349E-05	0.0000	3.971E-04	0.0000	6.797E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

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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.
Am-241	2.101E-02	0.0003	1.107E-02	0.0002	0.000E+00	0.0000	7.210E-01	0.0119	1.005E-02	0.0002	2.192E-03	0.0000	5.183E-02	0.0009
C-14	1.273E-09	0.0000	2.100E-07	0.0000	0.000E+00	0.0000	1.835E-03	0.0000	1.552E-03	0.0000	1.147E-03	0.0000	5.849E-09	0.0000
Ce-144	4.165E-02	0.0007	2.540E-06	0.0000	0.000E+00	0.0000	2.451E-03	0.0000	1.114E-05	0.0000	5.843E-05	0.0000	8.191E-05	0.0000
Cm-243	2.680E-01	0.0044	7.398E-03	0.0001	0.000E+00	0.0000	4.806E-01	0.0079	4.761E-03	0.0001	1.703E-03	0.0000	3.455E-02	0.0006
Cm-244	5.757E-05	0.0000	5.854E-03	0.0001	0.000E+00	0.0000	3.788E-01	0.0063	3.755E-03	0.0001	1.342E-03	0.0000	2.723E-02	0.0004
Co-58	2.135E-02	0.0004	2.072E-09	0.0000	0.000E+00	0.0000	4.315E-04	0.0000	4.153E-04	0.0000	1.675E-04	0.0000	3.888E-07	0.0000
Co-60	6.280E+00	0.1037	4.496E-06	0.0000	0.000E+00	0.0000	3.496E-01	0.0058	3.367E-01	0.0056	1.359E-01	0.0022	3.155E-04	0.0000
Cs-134	2.706E+00	0.0447	7.006E-07	0.0000	0.000E+00	0.0000	3.773E-01	0.0062	4.604E-01	0.0076	6.702E-01	0.0111	6.349E-04	0.0000
Cs-137	1.552E+00	0.0256	7.700E-07	0.0000	0.000E+00	0.0000	4.097E-01	0.0068	4.999E-01	0.0083	7.277E-01	0.0120	6.894E-04	0.0000
Eu-152	3.059E+00	0.0505	5.109E-06	0.0000	0.000E+00	0.0000	2.736E-03	0.0000	1.244E-03	0.0000	1.434E-04	0.0000	8.556E-05	0.0000
Eu-154	3.218E+00	0.0531	6.352E-06	0.0000	0.000E+00	0.0000	3.874E-03	0.0001	1.761E-03	0.0000	2.031E-04	0.0000	1.212E-04	0.0000
Eu-155	7.095E-02	0.0012	8.396E-07	0.0000	0.000E+00	0.0000	5.667E-04	0.0000	2.577E-04	0.0000	2.971E-05	0.0000	1.772E-05	0.0000
Fe-55	0.000E+00	0.0000	4.586E-08	0.0000	0.000E+00	0.0000	8.222E-05	0.0000	7.866E-04	0.0000	3.665E-05	0.0000	5.911E-06	0.0000
H-3	0.000E+00	0.0000	1.004E-04	0.0000	0.000E+00	0.0000	3.226E-03	0.0001	4.346E-04	0.0000	3.227E-03	0.0001	1.167E-07	0.0000
Ni-59	0.000E+00	0.0000	6.745E-08	0.0000	0.000E+00	0.0000	2.076E-03	0.0000	3.429E-04	0.0000	8.407E-03	0.0001	2.996E-06	0.0000
Ni-63	0.000E+00	0.0000	1.555E-07	0.0000	0.000E+00	0.0000	5.645E-03	0.0001	9.323E-04	0.0000	2.285E-02	0.0004	8.146E-06	0.0000
Np-237	5.184E-01	0.0086	1.341E-02	0.0002	0.000E+00	0.0000	1.755E+01	0.2898	6.894E-01	0.0114	4.282E-02	0.0007	6.301E-02	0.0010
Pu-238	7.226E-05	0.0000	9.680E-03	0.0002	0.000E+00	0.0000	6.279E-01	0.0104	1.738E-02	0.0003	8.139E-04	0.0000	4.514E-02	0.0007
Pu-239	1.407E-04	0.0000	1.072E-02	0.0002	0.000E+00	0.0000	7.028E-01	0.0116	1.945E-02	0.0003	9.110E-04	0.0000	5.052E-02	0.0008
Pu-240	7.074E-05	0.0000	1.072E-02	0.0002	0.000E+00	0.0000	7.027E-01	0.0116	1.945E-02	0.0003	9.108E-04	0.0000	5.052E-02	0.0008
Pu-241	5.715E-05	0.0000	2.175E-04	0.0000	0.000E+00	0.0000	1.431E-02	0.0002	3.739E-04	0.0000	2.146E-05	0.0000	1.029E-03	0.0000
Sb-125	7.969E-01	0.0132	2.386E-07	0.0000	0.000E+00	0.0000	3.716E-02	0.0006	2.133E-03	0.0000	1.394E-03	0.0000	3.587E-05	0.0000
Sr-90	1.120E-02	0.0002	3.154E-05	0.0000	0.000E+00	0.0000	9.421E+00	0.1555	1.720E+00	0.0284	2.937E+00	0.0485	2.104E-03	0.0000
Tc-99	5.002E-05	0.0000	1.731E-07	0.0000	0.000E+00	0.0000	1.213E+00	0.0200	2.605E-03	0.0000	2.157E-01	0.0036	1.736E-05	0.0000
Total	1.856E+01	0.3065	6.921E-02	0.0011	0.000E+00	0.0000	3.301E+01	0.5450	3.795E+00	0.0626	4.775E+00	0.0788	3.279E-01	0.0054

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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+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.
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	8.171E-01	0.0135
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	4.534E-03	0.0001
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.425E-02	0.0007
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	7.969E-01	0.0132
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	4.171E-01	0.0069
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.237E-02	0.0004
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	7.102E+00	0.1173
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	4.215E+00	0.0696
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	3.190E+00	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	3.063E+00	0.0506
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	3.224E+00	0.0532
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	7.182E-02	0.0012
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	9.114E-04	0.0000
H-3	8.679E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.559E-04	0.0000	5.461E-05	0.0000	2.502E-04	0.0000	8.316E-03	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	1.083E-02	0.0002
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	2.944E-02	0.0005
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	1.888E+01	0.3117
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	7.009E-01	0.0116
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	7.846E-01	0.0130
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	7.844E-01	0.0130
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	1.601E-02	0.0003
Sb-125	2.451E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.205E-04	0.0000	1.235E-04	0.0000	5.786E-05	0.0000	8.405E-01	0.0139
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	1.409E+01	0.2327
Tc-99	1.423E-02	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	5.293E-03	0.0001	2.502E-05	0.0000	1.543E-03	0.0000	1.452E+00	0.0240
Total	1.755E-02	0.0003	0.000E+00	0.0000	0.000E+00	0.0000	5.669E-03	0.0001	2.031E-04	0.0000	1.852E-03	0.0000	6.057E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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.
Am-241	2.094E-02	0.0004	1.103E-02	0.0002	0.000E+00	0.0000	7.175E-01	0.0132	1.002E-02	0.0002	2.184E-03	0.0000	5.166E-02	0.0010
C-14	2.097E-15	0.0000	3.459E-13	0.0000	0.000E+00	0.0000	3.024E-09	0.0000	2.565E-09	0.0000	1.894E-09	0.0000	9.634E-15	0.0000
Ce-144	7.016E-03	0.0001	4.279E-07	0.0000	0.000E+00	0.0000	4.123E-04	0.0000	1.877E-06	0.0000	9.840E-06	0.0000	1.380E-05	0.0000
Cm-243	2.553E-01	0.0047	7.047E-03	0.0001	0.000E+00	0.0000	4.571E-01	0.0084	4.536E-03	0.0001	1.622E-03	0.0000	3.291E-02	0.0006
Cm-244	5.334E-05	0.0000	5.424E-03	0.0001	0.000E+00	0.0000	3.505E-01	0.0065	3.482E-03	0.0001	1.243E-03	0.0000	2.524E-02	0.0005
Co-58	1.673E-05	0.0000	1.624E-12	0.0000	0.000E+00	0.0000	3.376E-07	0.0000	3.250E-07	0.0000	1.311E-07	0.0000	3.046E-10	0.0000
Co-60	4.827E+00	0.0889	3.456E-06	0.0000	0.000E+00	0.0000	2.683E-01	0.0049	2.585E-01	0.0048	1.043E-01	0.0019	2.425E-04	0.0000
Cs-134	1.382E+00	0.0255	3.577E-07	0.0000	0.000E+00	0.0000	1.923E-01	0.0035	2.348E-01	0.0043	3.417E-01	0.0063	3.241E-04	0.0000
Cs-137	1.482E+00	0.0273	7.352E-07	0.0000	0.000E+00	0.0000	3.906E-01	0.0072	4.768E-01	0.0088	6.940E-01	0.0128	6.582E-04	0.0000
Eu-152	2.757E+00	0.0508	4.604E-06	0.0000	0.000E+00	0.0000	2.462E-03	0.0000	1.121E-03	0.0000	1.292E-04	0.0000	7.711E-05	0.0000
Eu-154	2.749E+00	0.0506	5.426E-06	0.0000	0.000E+00	0.0000	3.304E-03	0.0001	1.504E-03	0.0000	1.734E-04	0.0000	1.035E-04	0.0000
Eu-155	5.365E-02	0.0010	6.349E-07	0.0000	0.000E+00	0.0000	4.279E-04	0.0000	1.948E-04	0.0000	2.246E-05	0.0000	1.340E-05	0.0000
Fe-55	0.000E+00	0.0000	2.744E-08	0.0000	0.000E+00	0.0000	4.913E-05	0.0000	4.707E-04	0.0000	2.193E-05	0.0000	3.537E-06	0.0000
H-3	0.000E+00	0.0000	5.749E-06	0.0000	0.000E+00	0.0000	1.844E-04	0.0000	2.485E-05	0.0000	1.845E-04	0.0000	6.682E-09	0.0000
Ni-59	0.000E+00	0.0000	6.742E-08	0.0000	0.000E+00	0.0000	2.072E-03	0.0000	3.424E-04	0.0000	8.392E-03	0.0002	2.995E-06	0.0000
Ni-63	0.000E+00	0.0000	1.532E-07	0.0000	0.000E+00	0.0000	5.555E-03	0.0001	9.178E-04	0.0000	2.249E-02	0.0004	8.028E-06	0.0000
Np-237	5.138E-01	0.0095	1.329E-02	0.0002	0.000E+00	0.0000	1.737E+01	0.3201	6.828E-01	0.0126	4.240E-02	0.0008	6.245E-02	0.0012
Pu-238	7.113E-05	0.0000	9.527E-03	0.0002	0.000E+00	0.0000	6.170E-01	0.0114	1.710E-02	0.0003	8.011E-04	0.0000	4.442E-02	0.0008
Pu-239	1.407E-04	0.0000	1.072E-02	0.0002	0.000E+00	0.0000	7.016E-01	0.0129	1.945E-02	0.0004	9.107E-04	0.0000	5.052E-02	0.0009
Pu-240	7.072E-05	0.0000	1.071E-02	0.0002	0.000E+00	0.0000	7.014E-01	0.0129	1.944E-02	0.0004	9.104E-04	0.0000	5.050E-02	0.0009
Pu-241	1.160E-04	0.0000	2.313E-04	0.0000	0.000E+00	0.0000	1.517E-02	0.0003	3.702E-04	0.0000	2.617E-05	0.0000	1.092E-03	0.0000
Sb-125	4.828E-01	0.0089	1.446E-07	0.0000	0.000E+00	0.0000	2.255E-02	0.0004	1.298E-03	0.0000	8.479E-04	0.0000	2.175E-05	0.0000
Sr-90	1.067E-02	0.0002	3.006E-05	0.0000	0.000E+00	0.0000	8.965E+00	0.1652	1.637E+00	0.0302	2.795E+00	0.0515	2.005E-03	0.0000
Tc-99	3.916E-05	0.0000	1.356E-07	0.0000	0.000E+00	0.0000	9.480E-01	0.0175	2.036E-03	0.0000	1.686E-01	0.0031	1.359E-05	0.0000
Total	1.454E+01	0.2679	6.803E-02	0.0013	0.000E+00	0.0000	3.174E+01	0.5847	3.372E+00	0.0621	4.186E+00	0.0771	3.223E-01	0.0059

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 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.
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	8.134E-01	0.0150
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	7.484E-09	0.0000
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.454E-03	0.0001
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	7.585E-01	0.0140
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	3.860E-01	0.0071
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.752E-05	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	5.459E+00	0.1006
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	2.151E+00	0.0396
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	3.044E+00	0.0561
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	2.761E+00	0.0509
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	2.754E+00	0.0507
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	5.431E-02	0.0010
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	5.453E-04	0.0000
H-3	9.416E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.710E-04	0.0000	6.056E-05	0.0000	2.739E-04	0.0000	1.847E-03	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	1.081E-02	0.0002
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	2.897E-02	0.0005
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	1.869E+01	0.3443
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	6.889E-01	0.0127
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	7.834E-01	0.0144
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	7.831E-01	0.0144
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	1.701E-02	0.0003
Sb-125	1.569E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.415E-04	0.0000	8.026E-05	0.0000	3.737E-05	0.0000	5.094E-01	0.0094
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	1.341E+01	0.2471
Tc-99	3.396E-02	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	1.284E-02	0.0002	6.340E-05	0.0000	3.840E-03	0.0001	1.169E+00	0.0215
Total	3.647E-02	0.0007	0.000E+00	0.0000	0.000E+00	0.0000	1.316E-02	0.0002	2.042E-04	0.0000	4.151E-03	0.0001	5.428E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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.
Am-241	2.070E-02	0.0005	1.091E-02	0.0003	0.000E+00	0.0000	7.056E-01	0.0165	9.900E-03	0.0002	2.158E-03	0.0001	5.107E-02	0.0012
C-14	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.262E-29	0.0000	1.081E-29	0.0000	7.954E-30	0.0000	0.000E+00	0.0000
Ce-144	1.377E-05	0.0000	8.396E-10	0.0000	0.000E+00	0.0000	8.048E-07	0.0000	3.680E-09	0.0000	1.929E-08	0.0000	2.707E-08	0.0000
Cm-243	2.153E-01	0.0050	5.946E-03	0.0001	0.000E+00	0.0000	3.836E-01	0.0090	3.828E-03	0.0001	1.367E-03	0.0000	2.777E-02	0.0006
Cm-244	4.085E-05	0.0000	4.156E-03	0.0001	0.000E+00	0.0000	2.672E-01	0.0062	2.675E-03	0.0001	9.510E-04	0.0000	1.934E-02	0.0005
Co-58	2.252E-16	0.0000	2.186E-23	0.0000	0.000E+00	0.0000	4.520E-18	0.0000	4.355E-18	0.0000	1.756E-18	0.0000	4.101E-21	0.0000
Co-60	1.923E+00	0.0449	1.377E-06	0.0000	0.000E+00	0.0000	1.063E-01	0.0025	1.025E-01	0.0024	4.135E-02	0.0010	9.659E-05	0.0000
Cs-134	1.314E-01	0.0031	3.400E-08	0.0000	0.000E+00	0.0000	1.819E-02	0.0004	2.224E-02	0.0005	3.234E-02	0.0008	3.081E-05	0.0000
Cs-137	1.260E+00	0.0294	6.254E-07	0.0000	0.000E+00	0.0000	3.305E-01	0.0077	4.040E-01	0.0094	5.876E-01	0.0137	5.599E-04	0.0000
Eu-152	1.916E+00	0.0447	3.199E-06	0.0000	0.000E+00	0.0000	1.702E-03	0.0000	7.784E-04	0.0000	8.967E-05	0.0000	5.358E-05	0.0000
Eu-154	1.584E+00	0.0370	3.126E-06	0.0000	0.000E+00	0.0000	1.894E-03	0.0000	8.662E-04	0.0000	9.978E-05	0.0000	5.963E-05	0.0000
Eu-155	2.017E-02	0.0005	2.387E-07	0.0000	0.000E+00	0.0000	1.600E-04	0.0000	7.319E-05	0.0000	8.432E-06	0.0000	5.039E-06	0.0000
Fe-55	0.000E+00	0.0000	4.548E-09	0.0000	0.000E+00	0.0000	8.099E-06	0.0000	7.798E-05	0.0000	3.632E-06	0.0000	5.862E-07	0.0000
H-3	0.000E+00	0.0000	2.434E-10	0.0000	0.000E+00	0.0000	7.770E-09	0.0000	1.049E-09	0.0000	7.784E-09	0.0000	2.830E-13	0.0000
Ni-59	0.000E+00	0.0000	6.730E-08	0.0000	0.000E+00	0.0000	2.058E-03	0.0000	3.405E-04	0.0000	8.339E-03	0.0002	2.990E-06	0.0000
Ni-63	0.000E+00	0.0000	1.456E-07	0.0000	0.000E+00	0.0000	5.250E-03	0.0001	8.686E-04	0.0000	2.127E-02	0.0005	7.629E-06	0.0000
Np-237	4.981E-01	0.0116	1.288E-02	0.0003	0.000E+00	0.0000	1.675E+01	0.3910	6.601E-01	0.0154	4.094E-02	0.0010	6.055E-02	0.0014
Pu-238	6.728E-05	0.0000	9.012E-03	0.0002	0.000E+00	0.0000	5.805E-01	0.0135	1.617E-02	0.0004	7.580E-04	0.0000	4.202E-02	0.0010
Pu-239	1.406E-04	0.0000	1.071E-02	0.0003	0.000E+00	0.0000	6.976E-01	0.0163	1.943E-02	0.0005	9.096E-04	0.0000	5.049E-02	0.0012
Pu-240	7.065E-05	0.0000	1.070E-02	0.0002	0.000E+00	0.0000	6.970E-01	0.0163	1.942E-02	0.0005	9.089E-04	0.0000	5.045E-02	0.0012
Pu-241	2.811E-04	0.0000	2.696E-04	0.0000	0.000E+00	0.0000	1.753E-02	0.0004	3.590E-04	0.0000	3.934E-05	0.0000	1.269E-03	0.0000
Sb-125	8.358E-02	0.0020	2.504E-08	0.0000	0.000E+00	0.0000	3.883E-03	0.0001	2.237E-04	0.0000	1.460E-04	0.0000	3.765E-06	0.0000
Sr-90	9.019E-03	0.0002	2.540E-05	0.0000	0.000E+00	0.0000	7.536E+00	0.1759	1.377E+00	0.0321	2.350E+00	0.0548	1.694E-03	0.0000
Tc-99	1.662E-05	0.0000	5.755E-08	0.0000	0.000E+00	0.0000	4.003E-01	0.0093	8.599E-04	0.0000	7.119E-02	0.0017	5.768E-06	0.0000
Total	7.661E+00	0.1788	6.462E-02	0.0015	0.000E+00	0.0000	2.851E+01	0.6654	2.641E+00	0.0617	3.160E+00	0.0738	3.055E-01	0.0071

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 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.
Am-241	1.229E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.578E-09	0.0000	1.882E-09	0.0000	1.115E-10	0.0000	8.004E-01	0.0187
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	3.138E-29	0.0000
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.462E-05	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	6.378E-01	0.0149
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	2.943E-01	0.0069
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.358E-16	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	2.173E+00	0.0507
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	2.041E-01	0.0048
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	2.583E+00	0.0603
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	1.918E+00	0.0448
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	1.587E+00	0.0370
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	2.042E-02	0.0005
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	9.030E-05	0.0000
H-3	6.436E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.170E-04	0.0000	4.144E-05	0.0000	1.873E-04	0.0000	9.893E-04	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	1.074E-02	0.0003
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	2.740E-02	0.0006
Np-237	3.552E-01	0.0083	0.000E+00	0.0000	0.000E+00	0.0000	2.787E-02	0.0007	5.691E-03	0.0001	3.321E-04	0.0000	1.842E+01	0.4298
Pu-238	3.021E-23	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.168E-24	0.0000	1.063E-24	0.0000	5.051E-25	0.0000	6.486E-01	0.0151
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	7.792E-01	0.0182
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	7.785E-01	0.0182
Pu-241	1.427E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.104E-11	0.0000	2.097E-12	0.0000	1.260E-13	0.0000	1.975E-02	0.0005
Sb-125	2.896E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.612E-05	0.0000	1.481E-05	0.0000	6.898E-06	0.0000	8.817E-02	0.0021
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	1.127E+01	0.2631
Tc-99	7.475E-02	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	2.846E-02	0.0007	1.428E-04	0.0000	8.591E-03	0.0002	5.843E-01	0.0136
Total	4.309E-01	0.0101	0.000E+00	0.0000	0.000E+00	0.0000	5.648E-02	0.0013	5.890E-03	0.0001	9.118E-03	0.0002	4.284E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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+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.
Am-241	2.004E-02	0.0006	1.056E-02	0.0003	0.000E+00	0.0000	6.726E-01	0.0201	9.577E-03	0.0003	2.085E-03	0.0001	4.943E-02	0.0015
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
Ce-144	2.534E-13	0.0000	1.546E-17	0.0000	0.000E+00	0.0000	1.459E-14	0.0000	6.764E-17	0.0000	3.538E-16	0.0000	4.984E-16	0.0000
Cm-243	1.324E-01	0.0040	3.660E-03	0.0001	0.000E+00	0.0000	2.326E-01	0.0070	2.361E-03	0.0001	8.394E-04	0.0000	1.709E-02	0.0005
Cm-244	1.910E-05	0.0000	1.949E-03	0.0001	0.000E+00	0.0000	1.234E-01	0.0037	1.272E-03	0.0000	4.428E-04	0.0000	9.069E-03	0.0003
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.386E-01	0.0041	9.921E-08	0.0000	0.000E+00	0.0000	7.543E-03	0.0002	7.295E-03	0.0002	2.938E-03	0.0001	6.960E-06	0.0000
Cs-134	1.580E-04	0.0000	4.089E-11	0.0000	0.000E+00	0.0000	2.154E-05	0.0000	2.645E-05	0.0000	3.838E-05	0.0000	3.706E-08	0.0000
Cs-137	7.938E-01	0.0237	3.939E-07	0.0000	0.000E+00	0.0000	2.049E-01	0.0061	2.517E-01	0.0075	3.653E-01	0.0109	3.526E-04	0.0000
Eu-152	6.770E-01	0.0202	1.131E-06	0.0000	0.000E+00	0.0000	5.922E-04	0.0000	2.746E-04	0.0000	3.158E-05	0.0000	1.894E-05	0.0000
Eu-154	3.277E-01	0.0098	6.469E-07	0.0000	0.000E+00	0.0000	3.858E-04	0.0000	1.789E-04	0.0000	2.057E-05	0.0000	1.234E-05	0.0000
Eu-155	1.233E-03	0.0000	1.459E-08	0.0000	0.000E+00	0.0000	9.628E-06	0.0000	4.465E-06	0.0000	5.134E-07	0.0000	3.079E-07	0.0000
Fe-55	0.000E+00	0.0000	2.677E-11	0.0000	0.000E+00	0.0000	4.693E-08	0.0000	4.585E-07	0.0000	2.133E-08	0.0000	3.450E-09	0.0000
H-3	0.000E+00	0.0000	4.701E-23	0.0000	0.000E+00	0.0000	1.479E-21	0.0000	2.009E-22	0.0000	1.487E-21	0.0000	5.464E-26	0.0000
Ni-59	0.000E+00	0.0000	6.699E-08	0.0000	0.000E+00	0.0000	2.017E-03	0.0001	3.350E-04	0.0000	8.189E-03	0.0002	2.976E-06	0.0000
Ni-63	0.000E+00	0.0000	1.258E-07	0.0000	0.000E+00	0.0000	4.468E-03	0.0001	7.422E-04	0.0000	1.814E-02	0.0005	6.593E-06	0.0000
Np-237	4.560E-01	0.0136	1.179E-02	0.0004	0.000E+00	0.0000	1.510E+01	0.4515	5.993E-01	0.0179	3.706E-02	0.0011	5.543E-02	0.0017
Pu-238	5.741E-05	0.0000	7.689E-03	0.0002	0.000E+00	0.0000	4.877E-01	0.0146	1.379E-02	0.0004	6.472E-04	0.0000	3.585E-02	0.0011
Pu-239	1.404E-04	0.0000	1.070E-02	0.0003	0.000E+00	0.0000	6.859E-01	0.0205	1.939E-02	0.0006	9.067E-04	0.0000	5.042E-02	0.0015
Pu-240	7.044E-05	0.0000	1.067E-02	0.0003	0.000E+00	0.0000	6.843E-01	0.0205	1.934E-02	0.0006	9.046E-04	0.0000	5.030E-02	0.0015
Pu-241	5.255E-04	0.0000	3.232E-04	0.0000	0.000E+00	0.0000	2.062E-02	0.0006	3.367E-04	0.0000	5.850E-05	0.0000	1.516E-03	0.0000
Sb-125	5.569E-04	0.0000	1.668E-10	0.0000	0.000E+00	0.0000	2.548E-05	0.0000	1.471E-06	0.0000	9.592E-07	0.0000	2.509E-08	0.0000
Sr-90	5.576E-03	0.0002	1.570E-05	0.0000	0.000E+00	0.0000	4.587E+00	0.1371	8.387E-01	0.0251	1.431E+00	0.0428	1.048E-03	0.0000
Tc-99	1.438E-06	0.0000	4.977E-09	0.0000	0.000E+00	0.0000	3.409E-02	0.0010	7.323E-05	0.0000	6.062E-03	0.0002	4.988E-07	0.0000
Total	2.554E+00	0.0763	5.736E-02	0.0017	0.000E+00	0.0000	2.285E+01	0.6831	1.765E+00	0.0528	1.875E+00	0.0560	2.706E-01	0.0081

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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+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.
Am-241	1.292E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.020E-06	0.0000	2.152E-07	0.0000	1.240E-08	0.0000	7.643E-01	0.0228
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
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.689E-13	0.0000
Cm-243	2.699E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.097E-08	0.0000	1.612E-10	0.0000	5.216E-11	0.0000	3.889E-01	0.0116
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	1.361E-01	0.0041
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.563E-01	0.0047
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	2.444E-04	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	1.616E+00	0.0483
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	6.779E-01	0.0203
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	3.283E-01	0.0098
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	1.247E-03	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	5.303E-07	0.0000
H-3	5.315E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.014E-10	0.0000	3.768E-11	0.0000	1.611E-10	0.0000	8.317E-10	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	1.054E-02	0.0003
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	2.336E-02	0.0007
Np-237	3.581E+00	0.1070	0.000E+00	0.0000	0.000E+00	0.0000	2.828E-01	0.0085	5.992E-02	0.0018	3.447E-03	0.0001	2.019E+01	0.6035
Pu-238	5.177E-19	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.893E-20	0.0000	2.198E-20	0.0000	9.139E-21	0.0000	5.457E-01	0.0163
Pu-239	6.162E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.794E-15	0.0000	1.273E-17	0.0000	7.274E-17	0.0000	7.675E-01	0.0229
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	7.656E-01	0.0229
Pu-241	1.214E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.579E-09	0.0000	2.016E-09	0.0000	1.163E-10	0.0000	2.338E-02	0.0007
Sb-125	2.358E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.127E-07	0.0000	1.206E-07	0.0000	5.617E-08	0.0000	5.876E-04	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	6.864E+00	0.2052
Tc-99	1.020E-01	0.0030	0.000E+00	0.0000	0.000E+00	0.0000	3.891E-02	0.0012	1.959E-04	0.0000	1.177E-02	0.0004	1.931E-01	0.0058
Total	3.683E+00	0.1101	0.000E+00	0.0000	0.000E+00	0.0000	3.217E-01	0.0096	6.012E-02	0.0018	1.521E-02	0.0005	3.345E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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.
Am-241	1.788E-02	0.0006	9.413E-03	0.0003	0.000E+00	0.0000	5.675E-01	0.0195	8.527E-03	0.0003	1.848E-03	0.0001	4.408E-02	0.0015
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
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	2.412E-02	0.0008	6.773E-04	0.0000	0.000E+00	0.0000	4.070E-02	0.0014	4.475E-04	0.0000	1.529E-04	0.0000	3.164E-03	0.0001
Cm-244	1.491E-06	0.0000	1.610E-04	0.0000	0.000E+00	0.0000	9.662E-03	0.0003	1.364E-04	0.0000	3.249E-05	0.0000	7.510E-04	0.0000
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.392E-05	0.0000	9.967E-12	0.0000	0.000E+00	0.0000	7.166E-07	0.0000	7.003E-07	0.0000	2.805E-07	0.0000	6.993E-10	0.0000
Cs-134	9.527E-15	0.0000	2.466E-21	0.0000	0.000E+00	0.0000	1.228E-15	0.0000	1.534E-15	0.0000	2.208E-15	0.0000	2.235E-18	0.0000
Cs-137	1.574E-01	0.0054	7.809E-08	0.0000	0.000E+00	0.0000	3.842E-02	0.0013	4.799E-02	0.0016	6.908E-02	0.0024	6.991E-05	0.0000
Eu-152	1.777E-02	0.0006	2.967E-08	0.0000	0.000E+00	0.0000	1.470E-05	0.0000	7.162E-06	0.0000	8.182E-07	0.0000	4.970E-07	0.0000
Eu-154	1.320E-03	0.0000	2.607E-09	0.0000	0.000E+00	0.0000	1.470E-06	0.0000	7.165E-07	0.0000	8.186E-08	0.0000	4.972E-08	0.0000
Eu-155	6.954E-08	0.0000	8.229E-13	0.0000	0.000E+00	0.0000	5.137E-10	0.0000	2.503E-10	0.0000	2.860E-11	0.0000	1.737E-11	0.0000
Fe-55	0.000E+00	0.0000	4.185E-19	0.0000	0.000E+00	0.0000	6.940E-16	0.0000	7.149E-15	0.0000	3.315E-16	0.0000	5.394E-17	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
Ni-59	0.000E+00	0.0000	6.588E-08	0.0000	0.000E+00	0.0000	1.876E-03	0.0001	3.163E-04	0.0000	7.674E-03	0.0003	2.927E-06	0.0000
Ni-63	0.000E+00	0.0000	7.550E-08	0.0000	0.000E+00	0.0000	2.535E-03	0.0001	4.275E-04	0.0000	1.037E-02	0.0004	3.956E-06	0.0000
Np-237	3.346E-01	0.0115	8.654E-03	0.0003	0.000E+00	0.0000	1.048E+01	0.3595	4.271E-01	0.0147	2.614E-02	0.0009	4.067E-02	0.0014
Pu-238	3.296E-05	0.0000	4.410E-03	0.0002	0.000E+00	0.0000	2.645E-01	0.0091	7.885E-03	0.0003	3.735E-04	0.0000	2.056E-02	0.0007
Pu-239	1.398E-04	0.0000	1.064E-02	0.0004	0.000E+00	0.0000	6.454E-01	0.0221	1.924E-02	0.0007	8.965E-04	0.0000	5.017E-02	0.0017
Pu-240	6.971E-05	0.0000	1.056E-02	0.0004	0.000E+00	0.0000	6.404E-01	0.0220	1.909E-02	0.0007	8.896E-04	0.0000	4.978E-02	0.0017
Pu-241	6.103E-04	0.0000	3.230E-04	0.0000	0.000E+00	0.0000	1.947E-02	0.0007	2.939E-04	0.0000	6.323E-05	0.0000	1.512E-03	0.0001
Sb-125	1.345E-11	0.0000	4.030E-18	0.0000	0.000E+00	0.0000	5.821E-13	0.0000	3.390E-14	0.0000	2.199E-14	0.0000	6.061E-16	0.0000
Sr-90	1.036E-03	0.0000	2.917E-06	0.0000	0.000E+00	0.0000	8.059E-01	0.0276	1.478E-01	0.0051	2.517E-01	0.0086	1.946E-04	0.0000
Tc-99	2.734E-10	0.0000	9.465E-13	0.0000	0.000E+00	0.0000	6.131E-06	0.0000	1.317E-08	0.0000	1.090E-06	0.0000	9.487E-11	0.0000
Total	5.550E-01	0.0190	4.485E-02	0.0015	0.000E+00	0.0000	1.352E+01	0.4637	6.792E-01	0.0233	3.692E-01	0.0127	2.110E-01	0.0072

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 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.
Am-241	1.890E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.493E-05	0.0000	3.170E-06	0.0000	1.822E-07	0.0000	6.494E-01	0.0223
C-14	5.887E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.742E-07	0.0000	4.014E-07	0.0000	2.948E-07	0.0000	2.159E-06	0.0000
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	7.075E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.508E-07	0.0000	4.283E-09	0.0000	1.380E-09	0.0000	6.927E-02	0.0024
Cm-244	1.225E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.538E-13	0.0000	4.381E-14	0.0000	4.391E-13	0.0000	1.074E-02	0.0004
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.562E-05	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	1.450E-14	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	3.129E-01	0.0107
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	1.779E-02	0.0006
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	1.323E-03	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	7.035E-08	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	8.229E-15	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
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	9.869E-03	0.0003
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	1.334E-02	0.0005
Np-237	1.256E+01	0.4308	0.000E+00	0.0000	0.000E+00	0.0000	9.925E-01	0.0340	2.109E-01	0.0072	1.212E-02	0.0004	2.509E+01	0.8608
Pu-238	8.633E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.722E-08	0.0000	3.093E-09	0.0000	3.096E-08	0.0000	2.978E-01	0.0102
Pu-239	4.378E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.409E-11	0.0000	2.371E-12	0.0000	1.189E-11	0.0000	7.265E-01	0.0249
Pu-240	9.916E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.720E-10	0.0000	3.549E-11	0.0000	3.556E-10	0.0000	7.208E-01	0.0247
Pu-241	4.193E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.313E-07	0.0000	7.031E-08	0.0000	4.041E-09	0.0000	2.228E-02	0.0008
Sb-125	9.132E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.239E-15	0.0000	4.674E-15	0.0000	2.176E-15	0.0000	1.420E-11	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	1.207E+00	0.0414
Tc-99	6.625E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.537E-05	0.0000	1.289E-07	0.0000	7.715E-06	0.0000	1.067E-04	0.0000
Total	1.256E+01	0.4308	0.000E+00	0.0000	0.000E+00	0.0000	9.925E-01	0.0341	2.109E-01	0.0072	1.212E-02	0.0004	2.915E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 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.
Am-241	1.290E-02	0.0004	6.786E-03	0.0002	0.000E+00	0.0000	3.423E-01	0.0101	6.109E-03	0.0002	1.309E-03	0.0000	3.178E-02	0.0009
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
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.885E-04	0.0000	1.762E-05	0.0000	0.000E+00	0.0000	8.907E-04	0.0000	2.559E-05	0.0000	2.189E-06	0.0000	8.282E-05	0.0000
Cm-244	1.888E-07	0.0000	2.857E-05	0.0000	0.000E+00	0.0000	1.448E-03	0.0000	5.114E-05	0.0000	2.372E-06	0.0000	1.347E-04	0.0000
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	5.257E-17	0.0000	3.765E-23	0.0000	0.000E+00	0.0000	2.262E-18	0.0000	2.294E-18	0.0000	9.015E-19	0.0000	2.641E-21	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	1.546E-03	0.0000	7.669E-10	0.0000	0.000E+00	0.0000	3.153E-04	0.0000	4.174E-04	0.0000	5.845E-04	0.0000	6.866E-07	0.0000
Eu-152	5.402E-07	0.0000	9.024E-13	0.0000	0.000E+00	0.0000	3.734E-10	0.0000	2.138E-10	0.0000	2.397E-11	0.0000	1.511E-11	0.0000
Eu-154	1.899E-10	0.0000	3.750E-16	0.0000	0.000E+00	0.0000	1.768E-13	0.0000	1.012E-13	0.0000	1.135E-14	0.0000	7.152E-15	0.0000
Eu-155	5.052E-20	0.0000	5.978E-25	0.0000	0.000E+00	0.0000	3.119E-22	0.0000	1.786E-22	0.0000	2.002E-23	0.0000	1.262E-23	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
Ni-59	0.000E+00	0.0000	6.283E-08	0.0000	0.000E+00	0.0000	1.495E-03	0.0000	2.656E-04	0.0000	6.284E-03	0.0002	2.791E-06	0.0000
Ni-63	0.000E+00	0.0000	1.754E-08	0.0000	0.000E+00	0.0000	4.923E-04	0.0000	8.748E-05	0.0000	2.069E-03	0.0001	9.192E-07	0.0000
Np-237	1.382E-01	0.0041	3.576E-03	0.0001	0.000E+00	0.0000	3.617E+00	0.1070	1.614E-01	0.0048	9.545E-03	0.0003	1.680E-02	0.0005
Pu-238	6.913E-06	0.0000	9.014E-04	0.0000	0.000E+00	0.0000	4.517E-02	0.0013	1.598E-03	0.0000	8.239E-05	0.0000	4.200E-03	0.0001
Pu-239	1.378E-04	0.0000	1.049E-02	0.0003	0.000E+00	0.0000	5.319E-01	0.0157	1.881E-02	0.0006	8.677E-04	0.0000	4.945E-02	0.0015
Pu-240	6.766E-05	0.0000	1.025E-02	0.0003	0.000E+00	0.0000	5.197E-01	0.0154	1.838E-02	0.0005	8.480E-04	0.0000	4.832E-02	0.0014
Pu-241	4.444E-04	0.0000	2.338E-04	0.0000	0.000E+00	0.0000	1.179E-02	0.0003	2.105E-04	0.0000	4.510E-05	0.0000	1.095E-03	0.0000
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	8.447E-06	0.0000	2.379E-08	0.0000	0.000E+00	0.0000	5.492E-03	0.0002	1.018E-03	0.0000	1.724E-03	0.0001	1.587E-06	0.0000
Tc-99	6.396E-21	0.0000	2.214E-23	0.0000	0.000E+00	0.0000	1.198E-16	0.0000	2.577E-19	0.0000	2.132E-17	0.0000	2.219E-21	0.0000
Total	1.535E-01	0.0045	3.229E-02	0.0010	0.000E+00	0.0000	5.078E+00	0.1502	2.084E-01	0.0062	2.336E-02	0.0007	1.519E-01	0.0045

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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.
Am-241	1.187E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.380E-05	0.0000	1.994E-05	0.0000	1.145E-06	0.0000	4.025E-01	0.0119
C-14	5.755E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.547E-07	0.0000	3.925E-07	0.0000	2.882E-07	0.0000	2.111E-06	0.0000
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	2.781E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.165E-06	0.0000	1.686E-08	0.0000	5.429E-09	0.0000	1.237E-03	0.0000
Cm-244	4.111E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.202E-11	0.0000	1.475E-12	0.0000	1.477E-11	0.0000	1.665E-03	0.0000
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	5.803E-17	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	2.864E-03	0.0001
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	5.408E-07	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	1.902E-10	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	5.104E-20	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
Ni-59	2.374E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.920E-07	0.0000	2.324E-07	0.0000	4.544E-06	0.0000	8.054E-03	0.0002
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	2.650E-03	0.0001
Np-237	2.568E+01	0.7594	0.000E+00	0.0000	0.000E+00	0.0000	2.030E+00	0.0600	4.315E-01	0.0128	2.479E-02	0.0007	3.211E+01	0.9497
Pu-238	1.016E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.914E-07	0.0000	3.712E-08	0.0000	3.648E-07	0.0000	5.197E-02	0.0015
Pu-239	1.083E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.438E-10	0.0000	7.879E-11	0.0000	2.223E-10	0.0000	6.116E-01	0.0181
Pu-240	1.818E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.416E-08	0.0000	6.526E-10	0.0000	6.533E-09	0.0000	5.975E-01	0.0177
Pu-241	3.526E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.787E-06	0.0000	5.922E-07	0.0000	3.403E-08	0.0000	1.386E-02	0.0004
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	8.999E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.785E-07	0.0000	1.256E-06	0.0000	1.508E-06	0.0000	8.256E-03	0.0002
Tc-99	1.302E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.984E-16	0.0000	2.534E-18	0.0000	1.516E-16	0.0000	2.096E-15	0.0000
Total	2.568E+01	0.7595	0.000E+00	0.0000	0.000E+00	0.0000	2.030E+00	0.0600	4.315E-01	0.0128	2.480E-02	0.0007	3.381E+01	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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 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.
Am-241	4.107E-03	0.0032	2.158E-03	0.0017	0.000E+00	0.0000	3.412E-02	0.0263	1.887E-03	0.0015	3.894E-04	0.0003	1.011E-02	0.0078
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
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	6.770E-07	0.0000	1.184E-05	0.0000	0.000E+00	0.0000	1.879E-04	0.0001	2.059E-05	0.0000	9.171E-07	0.0000	5.580E-05	0.0000
Cm-244	1.697E-07	0.0000	2.569E-05	0.0000	0.000E+00	0.0000	4.077E-04	0.0003	4.470E-05	0.0000	1.989E-06	0.0000	1.211E-04	0.0001
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.425E-10	0.0000	7.197E-17	0.0000	0.000E+00	0.0000	9.226E-12	0.0000	2.151E-11	0.0000	2.405E-11	0.0000	6.443E-14	0.0000
Eu-152	8.099E-23	0.0000	1.993E-16	0.0000	0.000E+00	0.0000	3.464E-16	0.0000	4.910E-16	0.0000	1.802E-17	0.0000	7.543E-17	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
Ni-59	0.000E+00	0.0000	5.322E-08	0.0000	0.000E+00	0.0000	3.948E-04	0.0003	1.183E-04	0.0001	2.253E-03	0.0017	2.364E-06	0.0000
Ni-63	0.000E+00	0.0000	1.061E-10	0.0000	0.000E+00	0.0000	9.283E-07	0.0000	2.782E-07	0.0000	5.299E-06	0.0000	5.560E-09	0.0000
Np-237	6.266E-03	0.0048	1.663E-04	0.0001	0.000E+00	0.0000	5.107E-02	0.0393	4.940E-03	0.0038	2.464E-04	0.0002	7.655E-04	0.0006
Pu-238	1.668E-06	0.0000	4.061E-06	0.0000	0.000E+00	0.0000	5.858E-05	0.0000	6.964E-06	0.0000	5.592E-06	0.0000	1.692E-05	0.0000
Pu-239	1.312E-04	0.0001	9.979E-03	0.0077	0.000E+00	0.0000	1.584E-01	0.1219	1.736E-02	0.0134	7.719E-04	0.0006	4.703E-02	0.0362
Pu-240	6.102E-05	0.0000	9.237E-03	0.0071	0.000E+00	0.0000	1.466E-01	0.1128	1.607E-02	0.0124	7.150E-04	0.0006	4.354E-02	0.0335
Pu-241	1.415E-04	0.0001	7.438E-05	0.0001	0.000E+00	0.0000	1.176E-03	0.0009	6.503E-05	0.0001	1.342E-05	0.0000	3.483E-04	0.0003
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	4.136E-13	0.0000	1.165E-15	0.0000	0.000E+00	0.0000	8.383E-11	0.0000	1.778E-11	0.0000	2.800E-11	0.0000	7.770E-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	1.071E-02	0.0082	2.166E-02	0.0167	0.000E+00	0.0000	3.924E-01	0.3019	4.052E-02	0.0312	4.403E-03	0.0034	1.020E-01	0.0785

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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.
Am-241	6.171E-04	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	4.878E-05	0.0000	1.037E-05	0.0000	5.971E-07	0.0000	5.345E-02	0.0411
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
Ce-144	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	4.872E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.794E-06	0.0000	3.074E-08	0.0000	9.292E-09	0.0000	3.302E-04	0.0003
Cm-244	4.846E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.773E-07	0.0000	5.839E-09	0.0000	5.251E-10	0.0000	6.065E-04	0.0005
Co-58	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+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	1.974E-10	0.0000
Eu-152	3.491E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.719E-19	0.0000	7.372E-20	0.0000	4.181E-21	0.0000	1.134E-15	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
Ni-59	9.717E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.859E-07	0.0000	9.518E-07	0.0000	1.861E-05	0.0000	2.799E-03	0.0022
Ni-63	5.104E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.128E-10	0.0000	4.999E-10	0.0000	9.773E-09	0.0000	6.527E-06	0.0000
Np-237	6.585E-01	0.5067	0.000E+00	0.0000	0.000E+00	0.0000	5.206E-02	0.0401	1.107E-02	0.0085	6.487E-04	0.0005	7.858E-01	0.6046
Pu-238	3.379E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.630E-06	0.0000	1.576E-07	0.0000	1.168E-06	0.0000	1.315E-04	0.0001
Pu-239	2.335E-03	0.0018	0.000E+00	0.0000	0.000E+00	0.0000	1.818E-04	0.0001	2.811E-06	0.0000	1.960E-07	0.0000	2.362E-01	0.1817
Pu-240	2.162E-03	0.0017	0.000E+00	0.0000	0.000E+00	0.0000	1.684E-04	0.0001	2.605E-06	0.0000	2.267E-07	0.0000	2.186E-01	0.1682
Pu-241	2.110E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.668E-06	0.0000	3.547E-07	0.0000	2.041E-08	0.0000	1.842E-03	0.0014
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	2.019E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.971E-13	0.0000	2.819E-13	0.0000	3.383E-13	0.0000	1.329E-10	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	6.638E-01	0.5107	0.000E+00	0.0000	0.000E+00	0.0000	5.247E-02	0.0404	1.109E-02	0.0085	6.696E-04	0.0005	1.300E+00	1.0000

*Sum of all water independent and dependent pathways.

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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-241	Am-241	1.000E+00	8.190E-01	8.171E-01	8.133E-01	8.003E-01	7.641E-01	6.488E-01	4.006E-01	5.266E-02	
Am-241	Np-237+D	1.000E+00	2.899E-06	8.987E-06	2.108E-05	6.215E-05	1.816E-04	6.322E-04	1.902E-03	7.890E-04	
Am-241	U-233	1.000E+00	5.815E-14	2.997E-13	1.304E-12	1.014E-11	8.144E-11	9.378E-10	9.351E-09	4.713E-08	
Am-241	Th-229+D	1.000E+00	8.588E-18	1.168E-16	1.313E-15	3.388E-14	7.935E-13	2.471E-11	4.512E-10	4.874E-09	
Am-241	ΣDSR(j)		8.190E-01	8.171E-01	8.134E-01	8.004E-01	7.643E-01	6.494E-01	4.025E-01	5.345E-02	
C-14	C-14	1.000E+00	2.455E+00	4.534E-03	7.484E-09	3.138E-29	0.000E+00	2.159E-06	2.111E-06	0.000E+00	
Ce-144+D	Ce-144+D	1.000E+00	1.078E-01	4.425E-02	7.454E-03	1.462E-05	2.689E-13	2.269E-40	0.000E+00	0.000E+00	
Cm-243	Cm-243	2.400E-03	1.961E-03	1.913E-03	1.820E-03	1.530E-03	9.321E-04	1.643E-04	1.146E-06	2.903E-14	
Cm-243	Am-243+D	2.400E-03	1.365E-07	4.047E-07	9.194E-07	2.512E-06	5.937E-06	1.618E-05	3.567E-05	5.122E-05	
Cm-243	Pu-239	2.400E-03	8.427E-13	5.855E-12	3.040E-11	2.549E-10	1.800E-09	1.167E-08	3.894E-08	7.668E-08	
Cm-243	U-235+D	2.400E-03	1.251E-22	1.873E-21	2.161E-20	5.474E-19	1.176E-17	2.885E-16	3.675E-15	3.543E-14	
Cm-243	Pa-231	2.400E-03	1.428E-26	4.774E-25	1.241E-23	9.529E-22	8.776E-20	6.832E-18	2.037E-16	5.795E-15	
Cm-243	Ac-227+D	2.400E-03	4.985E-29	2.626E-27	1.216E-25	2.363E-23	1.026E-19	7.080E-18	1.577E-16	1.237E-14	
Cm-243	ΣDSR(j)		1.961E-03	1.913E-03	1.821E-03	1.533E-03	9.381E-04	1.805E-04	3.685E-05	5.129E-05	
Cm-243	Cm-243	9.976E-01	8.149E-01	7.950E-01	7.566E-01	6.361E-01	3.875E-01	6.830E-02	4.764E-04	1.207E-11	
Cm-243	Pu-239	9.976E-01	1.117E-05	3.317E-05	7.549E-05	2.075E-04	4.753E-04	7.856E-04	7.242E-04	2.790E-04	
Cm-243	U-235+D	9.976E-01	2.217E-15	1.546E-14	8.052E-14	6.804E-13	4.900E-12	3.341E-11	1.290E-10	3.636E-10	
Cm-243	Pa-231	9.976E-01	3.256E-19	5.197E-18	6.191E-17	1.594E-15	3.430E-14	8.192E-13	9.802E-12	6.664E-11	
Cm-243	Ac-227+D	9.976E-01	1.263E-21	3.297E-20	7.261E-19	4.833E-17	2.667E-15	1.831E-13	5.662E-12	1.080E-10	
Cm-243	ΣDSR(j)		8.150E-01	7.950E-01	7.566E-01	6.363E-01	3.879E-01	6.909E-02	1.201E-03	2.790E-04	
Cm-244	Cm-244	1.350E-06	5.853E-07	5.629E-07	5.207E-07	3.964E-07	1.818E-07	1.186E-08	4.784E-12	4.329E-24	
Cm-244	Cm-244	4.950E-08	2.146E-08	2.064E-08	1.909E-08	1.453E-08	6.666E-09	4.348E-10	1.754E-13	1.587E-25	
Cm-244	Pu-240	4.950E-08	2.031E-12	5.992E-12	1.346E-11	3.535E-11	7.245E-11	9.708E-11	8.225E-11	3.002E-11	
Cm-244	ΣDSR(j)		2.146E-08	2.065E-08	1.911E-08	1.457E-08	6.738E-09	5.319E-10	8.243E-11	3.002E-11	
Cm-244	Cm-244	1.000E+00	4.335E-01	4.170E-01	3.857E-01	2.936E-01	1.347E-01	8.783E-03	3.543E-06	3.207E-18	
Cm-244	Pu-240	1.000E+00	4.103E-05	1.211E-04	2.719E-04	7.142E-04	1.464E-03	1.961E-03	1.662E-03	6.065E-04	
Cm-244	U-236	1.000E+00	5.531E-14	4.000E-13	2.103E-12	1.736E-11	1.154E-10	6.620E-10	2.391E-09	6.667E-09	
Cm-244	Th-232	1.000E+00	2.889E-24	4.018E-23	4.423E-22	1.069E-20	2.152E-19	4.505E-18	4.571E-17	2.388E-16	
Cm-244	Ra-228+D	1.000E+00	1.340E-24	4.323E-23	1.064E-21	6.890E-20	2.910E-18	9.571E-17	1.136E-15	6.910E-15	
Cm-244	Th-228+D	1.000E+00	4.815E-26	2.689E-24	1.197E-22	1.626E-20	1.099E-18	4.598E-17	6.393E-16	6.301E-15	
Cm-244	ΣDSR(j)		4.336E-01	4.171E-01	3.860E-01	2.943E-01	1.361E-01	1.074E-02	1.665E-03	6.065E-04	
Co-58	Co-58	1.000E+00	7.991E-01	2.237E-02	1.752E-05	2.358E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
Co-60	Co-60	1.000E+00	8.101E+00	7.102E+00	5.459E+00	2.173E+00	1.563E-01	1.562E-05	5.803E-17	0.000E+00	
Cs-134	Cs-134	1.000E+00	5.900E+00	4.215E+00	2.151E+00	2.041E-01	2.444E-04	1.450E-14	8.128E-44	0.000E+00	
Cs-137+D	Cs-137+D	1.000E+00	3.266E+00	3.190E+00	3.044E+00	2.583E+00	1.616E+00	3.129E-01	2.864E-03	1.974E-10	

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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	
Eu-152	Eu-152	7.208E-01	2.326E+00	2.208E+00	1.990E+00	1.383E+00	4.887E-01	1.282E-02	3.898E-07	5.842E-23	
Eu-152	Eu-152	2.792E-01	9.009E-01	8.552E-01	7.708E-01	5.356E-01	1.893E-01	4.967E-03	1.510E-07	2.263E-23	
Eu-152	Gd-152	2.792E-01	6.338E-17	1.802E-16	3.951E-16	9.901E-16	1.848E-15	2.222E-15	1.981E-15	1.134E-15	
Eu-152	ΣDSR(j)		9.009E-01	8.552E-01	7.708E-01	5.356E-01	1.893E-01	4.967E-03	1.510E-07	1.134E-15	
Eu-154	Eu-154	1.000E+00	3.488E+00	3.224E+00	2.754E+00	1.587E+00	3.283E-01	1.323E-03	1.902E-10	2.074E-34	
Eu-155	Eu-155	1.000E+00	8.259E-02	7.182E-02	5.431E-02	2.042E-02	1.247E-03	7.035E-08	5.104E-20	0.000E+00	
Fe-55	Fe-55	1.000E+00	1.178E-03	9.114E-04	5.453E-04	9.030E-05	5.303E-07	8.229E-15	4.011E-37	0.000E+00	
H-3	H-3	1.000E+00	2.889E-02	8.316E-03	1.847E-03	9.893E-04	8.317E-10	0.000E+00	0.000E+00	0.000E+00	
Ni-59	Ni-59	1.000E+00	1.084E-02	1.083E-02	1.081E-02	1.074E-02	1.054E-02	9.869E-03	8.054E-03	2.799E-03	
Ni-63	Ni-63	1.000E+00	2.968E-02	2.944E-02	2.897E-02	2.740E-02	2.336E-02	1.334E-02	2.650E-03	6.527E-06	
Np-237+D	Np-237+D	1.000E+00	1.898E+01	1.888E+01	1.869E+01	1.842E+01	2.019E+01	2.509E+01	3.211E+01	7.853E-01	
Np-237+D	U-233	1.000E+00	4.456E-07	1.017E-06	2.091E-06	5.761E-06	1.702E-05	6.690E-05	2.656E-04	4.411E-04	
Np-237+D	Th-229+D	1.000E+00	1.003E-10	6.587E-10	3.403E-09	2.977E-08	2.405E-07	2.272E-06	1.397E-05	5.006E-05	
Np-237+D	ΣDSR(j)		1.898E+01	1.888E+01	1.869E+01	1.842E+01	2.019E+01	2.509E+01	3.211E+01	7.858E-01	
Pu-238	Pu-238	1.840E-09	1.301E-09	1.290E-09	1.268E-09	1.193E-09	1.004E-09	5.479E-10	9.555E-11	1.493E-13	
Pu-238	Pu-238	1.000E+00	7.070E-01	7.009E-01	6.889E-01	6.486E-01	5.457E-01	2.978E-01	5.193E-02	8.116E-05	
Pu-238	U-234	1.000E+00	1.695E-07	5.113E-07	1.186E-06	3.444E-06	9.093E-06	2.263E-05	3.966E-05	4.594E-05	
Pu-238	Th-230	1.000E+00	3.770E-13	2.474E-12	1.261E-11	1.084E-10	8.486E-10	7.291E-09	3.574E-08	6.785E-08	
Pu-238	Ra-226+D	1.000E+00	5.065E-15	7.919E-14	9.398E-13	2.475E-11	5.747E-10	1.701E-08	2.763E-07	2.304E-06	
Pu-238	Pb-210+D	1.000E+00	2.653E-17	7.105E-16	1.597E-14	1.099E-12	6.418E-11	4.399E-09	1.098E-07	8.788E-07	
Pu-238	Po-210	1.000E+00	9.437E-19	3.915E-17	1.291E-15	1.228E-13	8.227E-12	6.609E-10	3.301E-08	1.185E-06	
Pu-238	ΣDSR(j)		7.070E-01	7.009E-01	6.889E-01	6.486E-01	5.457E-01	2.978E-01	5.197E-02	1.315E-04	
Pu-239	Pu-239	1.000E+00	7.851E-01	7.846E-01	7.834E-01	7.792E-01	7.675E-01	7.265E-01	6.116E-01	2.362E-01	
Pu-239	U-235+D	1.000E+00	2.334E-10	7.016E-10	1.637E-09	4.893E-09	1.405E-08	4.488E-08	1.258E-07	3.193E-07	
Pu-239	Pa-231	1.000E+00	4.702E-14	3.475E-13	1.878E-12	1.688E-11	1.395E-10	1.418E-09	1.085E-08	6.197E-08	
Pu-239	Ac-227+D	1.000E+00	2.090E-16	2.675E-15	2.789E-14	6.541E-13	1.324E-11	3.753E-10	6.824E-09	1.037E-07	
Pu-239	ΣDSR(j)		7.851E-01	7.846E-01	7.834E-01	7.792E-01	7.675E-01	7.265E-01	6.116E-01	2.362E-01	
Pu-240	Pu-240	4.950E-08	3.886E-08	3.883E-08	3.876E-08	3.854E-08	3.790E-08	3.568E-08	2.958E-08	1.082E-08	
Pu-240	Pu-240	1.000E+00	7.850E-01	7.844E-01	7.831E-01	7.785E-01	7.656E-01	7.208E-01	5.975E-01	2.186E-01	
Pu-240	U-236	1.000E+00	1.686E-09	5.101E-09	1.192E-08	3.558E-08	1.014E-07	3.224E-07	9.584E-07	2.509E-06	
Pu-240	Th-232	1.000E+00	1.072E-19	7.045E-19	3.609E-18	3.157E-17	2.601E-16	2.643E-15	1.948E-14	9.018E-14	
Pu-240	Ra-228+D	1.000E+00	6.494E-20	1.005E-18	1.141E-17	2.541E-16	4.014E-15	5.810E-14	4.870E-13	2.614E-12	
Pu-240	Th-228+D	1.000E+00	2.672E-21	7.324E-20	1.519E-18	6.832E-17	1.614E-15	2.827E-14	2.742E-13	2.381E-12	
Pu-240	ΣDSR(j)		7.850E-01	7.844E-01	7.831E-01	7.785E-01	7.656E-01	7.208E-01	5.975E-01	2.186E-01	

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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-241	Pu-241	1.000E+00	1.481E-02	1.410E-02	1.279E-02	9.086E-03	3.419E-03	1.116E-04	6.228E-09	5.707E-24
Pu-241	Am-241	1.000E+00	6.471E-04	1.897E-03	4.211E-03	1.066E-02	1.996E-02	2.215E-02	1.380E-02	1.815E-03
Pu-241	Np-237+D	1.000E+00	1.474E-09	1.072E-08	5.602E-08	4.477E-07	2.850E-06	1.639E-05	5.836E-05	2.699E-05
Pu-241	U-233	1.000E+00	2.614E-17	2.837E-16	2.557E-15	5.219E-14	9.575E-13	2.054E-11	2.667E-10	1.525E-09
Pu-241	Th-229+D	1.000E+00	2.895E-21	7.803E-20	1.834E-18	1.303E-16	7.497E-15	4.897E-13	1.265E-11	1.566E-10
Pu-241	∑DSR(j)		1.546E-02	1.600E-02	1.700E-02	1.975E-02	2.338E-02	2.228E-02	1.386E-02	1.842E-03
Pu-241+D	Pu-241+D	2.450E-05	6.437E-06	6.134E-06	5.570E-06	3.974E-06	1.515E-06	5.183E-08	3.360E-12	7.378E-27
Pu-241+D	Np-237+D	2.450E-05	6.998E-11	2.125E-10	4.767E-10	1.204E-09	2.425E-09	3.841E-09	5.132E-09	1.424E-10
Pu-241+D	U-233	2.450E-05	1.406E-18	7.140E-18	3.013E-17	2.114E-16	1.315E-15	8.380E-15	3.948E-14	7.090E-14
Pu-241+D	Th-229+D	2.450E-05	2.084E-22	2.806E-21	3.088E-20	7.374E-19	1.411E-17	2.571E-16	2.062E-15	8.090E-15
Pu-241+D	∑DSR(j)		6.437E-06	6.134E-06	5.570E-06	3.976E-06	1.518E-06	5.567E-08	5.135E-09	1.425E-10
Sb-125	Sb-125	7.720E-01	7.936E-01	6.178E-01	3.743E-01	6.479E-02	4.317E-04	1.043E-11	1.800E-33	0.000E+00
Sb-125	Sb-125	2.280E-01	2.344E-01	1.824E-01	1.105E-01	1.913E-02	1.275E-04	3.079E-12	5.315E-34	0.000E+00
Sb-125	Te-125m	2.280E-01	3.705E-02	4.027E-02	2.455E-02	4.251E-03	2.844E-05	6.946E-13	1.135E-34	0.000E+00
Sb-125	∑DSR(j)		2.714E-01	2.227E-01	1.351E-01	2.338E-02	1.559E-04	3.774E-12	6.450E-34	0.000E+00
Sr-90+D	Sr-90+D	1.000E+00	1.445E+01	1.409E+01	1.341E+01	1.127E+01	6.864E+00	1.207E+00	8.256E-03	1.329E-10
Tc-99	Tc-99	1.000E+00	1.622E+00	1.452E+00	1.169E+00	5.843E-01	1.931E-01	1.067E-04	2.096E-15	0.000E+00

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

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

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
Am-241	3.053E+01	3.060E+01	3.074E+01	3.124E+01	3.271E+01	3.850E+01	6.212E+01	4.677E+02
C-14	1.019E+01	5.514E+03	3.341E+09	*4.455E+12	*4.455E+12	1.158E+07	1.184E+07	*4.455E+12
Ce-144	2.319E+02	5.650E+02	3.354E+03	1.710E+06	9.296E+13	*3.191E+15	*3.191E+15	*3.191E+15
Cm-243	3.060E+01	3.137E+01	3.296E+01	3.920E+01	6.429E+01	3.609E+02	2.020E+04	7.570E+04
Cm-244	5.766E+01	5.994E+01	6.477E+01	8.494E+01	1.837E+02	2.327E+03	1.501E+04	4.122E+04
Co-58	3.128E+01	1.118E+03	1.427E+06	*3.183E+16	*3.183E+16	*3.183E+16	*3.183E+16	*3.183E+16
Co-60	3.086E+00	3.520E+00	4.580E+00	1.150E+01	1.599E+02	1.601E+06	*1.132E+15	*1.132E+15
Cs-134	4.237E+00	5.931E+00	1.162E+01	1.225E+02	1.023E+05	*1.295E+15	*1.295E+15	*1.295E+15
Cs-137	7.656E+00	7.837E+00	8.213E+00	9.678E+00	1.547E+01	7.989E+01	8.730E+03	1.267E+11
Eu-152	7.748E+00	8.161E+00	9.056E+00	1.303E+01	3.688E+01	1.405E+03	4.623E+07	*1.765E+14
Eu-154	7.168E+00	7.755E+00	9.078E+00	1.576E+01	7.615E+01	1.890E+04	1.314E+11	*2.639E+14
Eu-155	3.027E+02	3.481E+02	4.604E+02	1.225E+03	2.004E+04	3.554E+08	*4.652E+14	*4.652E+14
Fe-55	2.122E+04	2.743E+04	4.585E+04	2.769E+05	4.714E+07	*2.410E+15	*2.410E+15	*2.410E+15
H-3	8.655E+02	3.006E+03	1.354E+04	2.527E+04	3.006E+10	*9.597E+15	*9.597E+15	*9.597E+15
Ni-59	2.307E+03	2.309E+03	2.313E+03	2.328E+03	2.371E+03	2.533E+03	3.104E+03	8.932E+03
Ni-63	8.424E+02	8.492E+02	8.628E+02	9.124E+02	1.070E+03	1.874E+03	9.434E+03	3.830E+06
Np-237	1.317E+00	1.324E+00	1.338E+00	1.358E+00	1.238E+00	9.964E-01	7.786E-01	3.182E+01
Pu-238	3.536E+01	3.567E+01	3.629E+01	3.855E+01	4.581E+01	8.395E+01	4.810E+02	1.901E+05
Pu-239	3.184E+01	3.187E+01	3.191E+01	3.208E+01	3.257E+01	3.441E+01	4.088E+01	1.059E+02
Pu-240	3.185E+01	3.187E+01	3.192E+01	3.211E+01	3.265E+01	3.468E+01	4.184E+01	1.144E+02
Pu-241	1.617E+03	1.562E+03	1.470E+03	1.266E+03	1.069E+03	1.122E+03	1.804E+03	1.358E+04
Sb-125	2.347E+01	2.975E+01	4.908E+01	2.835E+02	4.254E+04	1.761E+12	*1.033E+15	*1.033E+15
Sr-90	1.731E+00	1.774E+00	1.864E+00	2.218E+00	3.642E+00	2.072E+01	3.028E+03	1.881E+11
Tc-99	1.542E+01	1.722E+01	2.138E+01	4.278E+01	1.295E+02	2.343E+05	*1.697E+10	*1.697E+10

*At specific activity limit

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

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)
Am-241	1.000E+00	0.000E+00	8.190E-01	3.053E+01	8.190E-01	3.053E+01
C-14	1.000E+00	0.000E+00	2.455E+00	1.019E+01	2.455E+00	1.019E+01
Ce-144	1.000E+00	0.000E+00	1.078E-01	2.319E+02	1.078E-01	2.319E+02
Cm-243	1.000E+00	0.000E+00	8.169E-01	3.060E+01	8.169E-01	3.060E+01
Cm-244	1.000E+00	0.000E+00	4.336E-01	5.766E+01	4.336E-01	5.766E+01
Co-58	1.000E+00	0.000E+00	7.991E-01	3.128E+01	7.991E-01	3.128E+01
Co-60	1.000E+00	0.000E+00	8.101E+00	3.086E+00	8.101E+00	3.086E+00
Cs-134	1.000E+00	0.000E+00	5.900E+00	4.237E+00	5.900E+00	4.237E+00
Cs-137	1.000E+00	0.000E+00	3.266E+00	7.656E+00	3.266E+00	7.656E+00
Eu-152	1.000E+00	0.000E+00	3.227E+00	7.748E+00	3.227E+00	7.748E+00
Eu-154	1.000E+00	0.000E+00	3.488E+00	7.168E+00	3.488E+00	7.168E+00
Eu-155	1.000E+00	0.000E+00	8.259E-02	3.027E+02	8.259E-02	3.027E+02
Fe-55	1.000E+00	0.000E+00	1.178E-03	2.122E+04	1.178E-03	2.122E+04
H-3	1.000E+00	0.000E+00	2.889E-02	8.655E+02	2.889E-02	8.655E+02
Ni-59	1.000E+00	0.000E+00	1.084E-02	2.307E+03	1.084E-02	2.307E+03
Ni-63	1.000E+00	0.000E+00	2.968E-02	8.424E+02	2.968E-02	8.424E+02
Np-237	1.000E+00	341.4 ± 0.7	3.281E+01	7.619E-01	1.898E+01	1.317E+00
Pu-238	1.000E+00	0.000E+00	7.070E-01	3.536E+01	7.070E-01	3.536E+01
Pu-239	1.000E+00	0.000E+00	7.851E-01	3.184E+01	7.851E-01	3.184E+01
Pu-240	1.000E+00	0.000E+00	7.850E-01	3.185E+01	7.850E-01	3.185E+01
Pu-241	1.000E+00	48.39 ± 0.10	2.403E-02	1.040E+03	1.546E-02	1.617E+03
Sb-125	1.000E+00	0.000E+00	1.065E+00	2.347E+01	1.065E+00	2.347E+01
Sr-90	1.000E+00	0.000E+00	1.445E+01	1.731E+00	1.445E+01	1.731E+00
Tc-99	1.000E+00	0.000E+00	1.622E+00	1.542E+01	1.622E+00	1.542E+01

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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-241	Am-241	1.000E+00	8.190E-01	8.171E-01	8.133E-01	8.003E-01	7.641E-01	6.488E-01	4.006E-01	5.266E-02
Am-241	Pu-241	1.000E+00	6.471E-04	1.897E-03	4.211E-03	1.066E-02	1.996E-02	2.215E-02	1.380E-02	1.815E-03
Am-241	ΣDOSE (j)		8.196E-01	8.190E-01	8.176E-01	8.110E-01	7.841E-01	6.709E-01	4.144E-01	5.447E-02
Np-237	Am-241	1.000E+00	2.899E-06	8.987E-06	2.108E-05	6.215E-05	1.816E-04	6.322E-04	1.902E-03	7.890E-04
Np-237	Np-237	1.000E+00	1.898E+01	1.888E+01	1.869E+01	1.842E+01	2.019E+01	2.509E+01	3.211E+01	7.853E-01
Np-237	Pu-241	1.000E+00	1.474E-09	1.072E-08	5.602E-08	4.477E-07	2.850E-06	1.639E-05	5.836E-05	2.699E-05
Np-237	Pu-241	2.450E-05	6.998E-11	2.125E-10	4.767E-10	1.204E-09	2.425E-09	3.841E-09	5.132E-09	1.424E-10
Np-237	ΣDOSE (j)		1.898E+01	1.888E+01	1.869E+01	1.842E+01	2.019E+01	2.509E+01	3.211E+01	7.861E-01
U-233	Am-241	1.000E+00	5.815E-14	2.997E-13	1.304E-12	1.014E-11	8.144E-11	9.378E-10	9.351E-09	4.713E-08
U-233	Np-237	1.000E+00	4.456E-07	1.017E-06	2.091E-06	5.761E-06	1.702E-05	6.690E-05	2.656E-04	4.411E-04
U-233	Pu-241	1.000E+00	2.614E-17	2.837E-16	2.557E-15	5.219E-14	9.575E-13	2.054E-11	2.667E-10	1.525E-09
U-233	Pu-241	2.450E-05	1.406E-18	7.140E-18	3.013E-17	2.114E-16	1.315E-15	8.380E-15	3.948E-14	7.090E-14
U-233	ΣDOSE (j)		4.456E-07	1.017E-06	2.091E-06	5.761E-06	1.702E-05	6.690E-05	2.656E-04	4.412E-04
Th-229	Am-241	1.000E+00	8.588E-18	1.168E-16	1.313E-15	3.388E-14	7.935E-13	2.471E-11	4.512E-10	4.874E-09
Th-229	Np-237	1.000E+00	1.003E-10	6.587E-10	3.403E-09	2.977E-08	2.405E-07	2.272E-06	1.397E-05	5.006E-05
Th-229	Pu-241	1.000E+00	2.895E-21	7.803E-20	1.834E-18	1.303E-16	7.497E-15	4.897E-13	1.265E-11	1.566E-10
Th-229	Pu-241	2.450E-05	2.084E-22	2.806E-21	3.088E-20	7.374E-19	1.411E-17	2.571E-16	2.062E-15	8.090E-15
Th-229	ΣDOSE (j)		1.003E-10	6.587E-10	3.403E-09	2.977E-08	2.405E-07	2.272E-06	1.397E-05	5.007E-05
C-14	C-14	1.000E+00	2.455E+00	4.534E-03	7.484E-09	3.138E-29	0.000E+00	2.159E-06	2.111E-06	0.000E+00
Ce-144	Ce-144	1.000E+00	1.078E-01	4.425E-02	7.454E-03	1.462E-05	2.689E-13	0.000E+00	0.000E+00	0.000E+00
Cm-243	Cm-243	2.400E-03	1.961E-03	1.913E-03	1.820E-03	1.530E-03	9.321E-04	1.643E-04	1.146E-06	2.903E-14
Cm-243	Cm-243	9.976E-01	8.149E-01	7.950E-01	7.566E-01	6.361E-01	3.875E-01	6.830E-02	4.764E-04	1.207E-11
Cm-243	ΣDOSE (j)		8.169E-01	7.969E-01	7.584E-01	6.376E-01	3.884E-01	6.847E-02	4.775E-04	1.210E-11
Am-243	Cm-243	2.400E-03	1.365E-07	4.047E-07	9.194E-07	2.512E-06	5.937E-06	1.618E-05	3.567E-05	5.122E-05
Pu-239	Cm-243	2.400E-03	8.427E-13	5.855E-12	3.040E-11	2.549E-10	1.800E-09	1.167E-08	3.894E-08	7.668E-08
Pu-239	Cm-243	9.976E-01	1.117E-05	3.317E-05	7.549E-05	2.075E-04	4.753E-04	7.856E-04	7.242E-04	2.790E-04
Pu-239	Pu-239	1.000E+00	7.851E-01	7.846E-01	7.834E-01	7.792E-01	7.675E-01	7.265E-01	6.116E-01	2.362E-01
Pu-239	ΣDOSE (j)		7.852E-01	7.846E-01	7.835E-01	7.795E-01	7.679E-01	7.273E-01	6.123E-01	2.365E-01
U-235	Cm-243	2.400E-03	1.251E-22	1.873E-21	2.161E-20	5.474E-19	1.176E-17	2.885E-16	3.675E-15	3.543E-14
U-235	Cm-243	9.976E-01	2.217E-15	1.546E-14	8.052E-14	6.804E-13	4.900E-12	3.341E-11	1.290E-10	3.636E-10
U-235	Pu-239	1.000E+00	2.334E-10	7.016E-10	1.637E-09	4.893E-09	1.405E-08	4.488E-08	1.258E-07	3.193E-07
U-235	ΣDOSE (j)		2.334E-10	7.016E-10	1.637E-09	4.893E-09	1.406E-08	4.492E-08	1.259E-07	3.197E-07
Pa-231	Cm-243	2.400E-03	1.428E-26	4.774E-25	1.241E-23	9.529E-22	8.776E-20	6.832E-18	2.037E-16	5.795E-15
Pa-231	Cm-243	9.976E-01	3.256E-19	5.197E-18	6.191E-17	1.594E-15	3.430E-14	8.192E-13	9.802E-12	6.664E-11
Pa-231	Pu-239	1.000E+00	4.702E-14	3.475E-13	1.878E-12	1.688E-11	1.395E-10	1.418E-09	1.085E-08	6.197E-08
Pa-231	ΣDOSE (j)		4.702E-14	3.475E-13	1.878E-12	1.688E-11	1.396E-10	1.419E-09	1.086E-08	6.204E-08
Ac-227	Cm-243	2.400E-03	4.846E-29	2.626E-27	1.216E-25	2.363E-23	1.026E-19	7.080E-18	1.577E-16	1.237E-14
Ac-227	Cm-243	9.976E-01	1.263E-21	3.297E-20	7.261E-19	4.833E-17	2.667E-15	1.831E-13	5.662E-12	1.080E-10

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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
Ac-227	Pu-239	1.000E+00	2.090E-16	2.675E-15	2.789E-14	6.541E-13	1.324E-11	3.753E-10	6.824E-09	1.037E-07
Ac-227	ΣDOSE (j)		2.090E-16	2.675E-15	2.790E-14	6.542E-13	1.325E-11	3.755E-10	6.830E-09	1.038E-07
Cm-244	Cm-244	1.350E-06	5.853E-07	5.629E-07	5.207E-07	3.964E-07	1.818E-07	1.186E-08	4.784E-12	4.329E-24
Cm-244	Cm-244	4.950E-08	2.146E-08	2.064E-08	1.909E-08	1.453E-08	6.666E-09	4.348E-10	1.754E-13	1.587E-25
Cm-244	ΣDOSE (j)		6.067E-07	5.835E-07	5.398E-07	4.109E-07	1.885E-07	1.229E-08	4.959E-12	4.488E-24
Pu-240	Cm-244	4.950E-08	2.031E-12	5.992E-12	1.346E-11	3.535E-11	7.245E-11	9.708E-11	8.225E-11	3.002E-11
Pu-240	Pu-240	4.950E-08	3.886E-08	3.883E-08	3.876E-08	3.854E-08	3.790E-08	3.568E-08	2.958E-08	1.082E-08
Pu-240	ΣDOSE (j)		3.886E-08	3.883E-08	3.878E-08	3.857E-08	3.797E-08	3.578E-08	2.966E-08	1.085E-08
Cm-244	Cm-244	1.000E+00	4.335E-01	4.170E-01	3.857E-01	2.936E-01	1.347E-01	8.783E-03	3.543E-06	3.207E-18
Pu-240	Cm-244	1.000E+00	4.103E-05	1.211E-04	2.719E-04	7.142E-04	1.464E-03	1.961E-03	1.662E-03	6.065E-04
U-236	Cm-244	1.000E+00	5.531E-14	4.000E-13	2.103E-12	1.736E-11	1.154E-10	6.620E-10	2.391E-09	6.667E-09
U-236	Pu-240	1.000E+00	1.686E-09	5.101E-09	1.192E-08	3.558E-08	1.014E-07	3.224E-07	9.584E-07	2.509E-06
U-236	ΣDOSE (j)		1.686E-09	5.102E-09	1.192E-08	3.560E-08	1.015E-07	3.230E-07	9.608E-07	2.516E-06
Th-232	Cm-244	1.000E+00	2.889E-24	4.018E-23	4.423E-22	1.069E-20	2.152E-19	4.505E-18	4.571E-17	2.388E-16
Th-232	Pu-240	1.000E+00	1.072E-19	7.045E-19	3.609E-18	3.157E-17	2.601E-16	2.643E-15	1.948E-14	9.018E-14
Th-232	ΣDOSE (j)		1.072E-19	7.046E-19	3.610E-18	3.158E-17	2.603E-16	2.648E-15	1.953E-14	9.042E-14
Ra-228	Cm-244	1.000E+00	1.340E-24	4.323E-23	1.064E-21	6.890E-20	2.910E-18	9.571E-17	1.136E-15	6.910E-15
Ra-228	Pu-240	1.000E+00	6.494E-20	1.005E-18	1.141E-17	2.541E-16	4.014E-15	5.810E-14	4.870E-13	2.614E-12
Ra-228	ΣDOSE (j)		6.494E-20	1.005E-18	1.141E-17	2.541E-16	4.016E-15	5.819E-14	4.881E-13	2.621E-12
Th-228	Cm-244	1.000E+00	4.815E-26	2.689E-24	1.197E-22	1.626E-20	1.099E-18	4.598E-17	6.393E-16	6.301E-15
Th-228	Pu-240	1.000E+00	2.672E-21	7.324E-20	1.519E-18	6.832E-17	1.614E-15	2.827E-14	2.742E-13	2.381E-12
Th-228	ΣDOSE (j)		2.672E-21	7.325E-20	1.519E-18	6.834E-17	1.615E-15	2.832E-14	2.749E-13	2.387E-12
Co-58	Co-58	1.000E+00	7.991E-01	2.237E-02	1.752E-05	2.358E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Co-60	Co-60	1.000E+00	8.101E+00	7.102E+00	5.459E+00	2.173E+00	1.563E-01	1.562E-05	5.803E-17	0.000E+00
Cs-134	Cs-134	1.000E+00	5.900E+00	4.215E+00	2.151E+00	2.041E-01	2.444E-04	1.450E-14	0.000E+00	0.000E+00
Cs-137	Cs-137	1.000E+00	3.266E+00	3.190E+00	3.044E+00	2.583E+00	1.616E+00	3.129E-01	2.864E-03	1.974E-10
Eu-152	Eu-152	7.208E-01	2.326E+00	2.208E+00	1.990E+00	1.383E+00	4.887E-01	1.282E-02	3.898E-07	5.842E-23
Eu-152	Eu-152	2.792E-01	9.009E-01	8.552E-01	7.708E-01	5.356E-01	1.893E-01	4.967E-03	1.510E-07	2.263E-23
Eu-152	ΣDOSE (j)		3.227E+00	3.063E+00	2.761E+00	1.918E+00	6.779E-01	1.779E-02	5.408E-07	8.104E-23
Gd-152	Eu-152	2.792E-01	6.338E-17	1.802E-16	3.951E-16	9.901E-16	1.848E-15	2.222E-15	1.981E-15	1.134E-15
Eu-154	Eu-154	1.000E+00	3.488E+00	3.224E+00	2.754E+00	1.587E+00	3.283E-01	1.323E-03	1.902E-10	0.000E+00
Eu-155	Eu-155	1.000E+00	8.259E-02	7.182E-02	5.431E-02	2.042E-02	1.247E-03	7.035E-08	5.104E-20	0.000E+00
Fe-55	Fe-55	1.000E+00	1.178E-03	9.114E-04	5.453E-04	9.030E-05	5.303E-07	8.229E-15	0.000E+00	0.000E+00

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.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	
H-3	H-3	1.000E+00	2.889E-02	8.316E-03	1.847E-03	9.893E-04	8.317E-10	0.000E+00	0.000E+00	0.000E+00	
Ni-59	Ni-59	1.000E+00	1.084E-02	1.083E-02	1.081E-02	1.074E-02	1.054E-02	9.869E-03	8.054E-03	2.799E-03	
Ni-63	Ni-63	1.000E+00	2.968E-02	2.944E-02	2.897E-02	2.740E-02	2.336E-02	1.334E-02	2.650E-03	6.527E-06	
Pu-238	Pu-238	1.840E-09	1.301E-09	1.290E-09	1.268E-09	1.193E-09	1.004E-09	5.479E-10	9.555E-11	1.493E-13	
Pu-238	Pu-238	1.000E+00	7.070E-01	7.009E-01	6.889E-01	6.486E-01	5.457E-01	2.978E-01	5.193E-02	8.116E-05	
Pu-238	ΣDOSE(j)		7.070E-01	7.009E-01	6.889E-01	6.486E-01	5.457E-01	2.978E-01	5.193E-02	8.116E-05	
U-234	Pu-238	1.000E+00	1.695E-07	5.113E-07	1.186E-06	3.444E-06	9.093E-06	2.263E-05	3.966E-05	4.594E-05	
Th-230	Pu-238	1.000E+00	3.770E-13	2.474E-12	1.261E-11	1.084E-10	8.486E-10	7.291E-09	3.574E-08	6.785E-08	
Ra-226	Pu-238	1.000E+00	5.065E-15	7.919E-14	9.398E-13	2.475E-11	5.747E-10	1.701E-08	2.763E-07	2.304E-06	
Pb-210	Pu-238	1.000E+00	2.653E-17	7.105E-16	1.597E-14	1.099E-12	6.418E-11	4.399E-09	1.098E-07	8.788E-07	
Po-210	Pu-238	1.000E+00	9.437E-19	3.915E-17	1.291E-15	1.228E-13	8.227E-12	6.609E-10	3.301E-08	1.185E-06	
Pu-240	Pu-240	1.000E+00	7.850E-01	7.844E-01	7.831E-01	7.785E-01	7.656E-01	7.208E-01	5.975E-01	2.186E-01	
Pu-241	Pu-241	1.000E+00	1.481E-02	1.410E-02	1.279E-02	9.086E-03	3.419E-03	1.116E-04	6.228E-09	5.707E-24	
Pu-241	Pu-241	2.450E-05	6.437E-06	6.134E-06	5.570E-06	3.974E-06	1.515E-06	5.183E-08	3.360E-12	7.377E-27	
Pu-241	ΣDOSE(j)		1.482E-02	1.411E-02	1.280E-02	9.090E-03	3.421E-03	1.116E-04	6.232E-09	5.715E-24	
Sb-125	Sb-125	7.720E-01	7.936E-01	6.178E-01	3.743E-01	6.479E-02	4.317E-04	1.043E-11	0.000E+00	0.000E+00	
Sb-125	Sb-125	2.280E-01	2.344E-01	1.824E-01	1.105E-01	1.913E-02	1.275E-04	3.079E-12	0.000E+00	0.000E+00	
Sb-125	ΣDOSE(j)		1.028E+00	8.002E-01	4.848E-01	8.392E-02	5.592E-04	1.350E-11	0.000E+00	0.000E+00	
Te-125m	Sb-125	2.280E-01	3.705E-02	4.027E-02	2.455E-02	4.251E-03	2.844E-05	6.946E-13	0.000E+00	0.000E+00	
Sr-90	Sr-90	1.000E+00	1.445E+01	1.409E+01	1.341E+01	1.127E+01	6.864E+00	1.207E+00	8.256E-03	1.329E-10	
Tc-99	Tc-99	1.000E+00	1.622E+00	1.452E+00	1.169E+00	5.843E-01	1.931E-01	1.067E-04	2.096E-15	0.000E+00	

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

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

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-241	Am-241	1.000E+00	1.000E+00	9.984E-01	9.951E-01	9.838E-01	9.521E-01	8.490E-01	6.121E-01	1.947E-01
Am-241	Pu-241	1.000E+00	0.000E+00	1.564E-03	4.468E-03	1.261E-02	2.469E-02	2.898E-02	2.109E-02	6.708E-03
Am-241	ΣS(j):		1.000E+00	9.999E-01	9.996E-01	9.964E-01	9.768E-01	8.780E-01	6.331E-01	2.014E-01
Np-237	Am-241	1.000E+00	0.000E+00	3.229E-07	9.629E-07	3.142E-06	8.876E-06	2.400E-05	4.031E-05	2.124E-05
Np-237	Np-237	1.000E+00	1.000E+00	9.956E-01	9.868E-01	9.567E-01	8.758E-01	6.427E-01	2.654E-01	1.202E-02
Np-237	Pu-241	1.000E+00	0.000E+00	2.551E-10	2.215E-09	2.180E-08	1.426E-07	6.652E-07	1.321E-06	7.289E-07
Np-237	Pu-241	2.450E-05	0.000E+00	7.730E-12	2.202E-11	6.149E-11	1.161E-10	1.151E-10	4.813E-11	2.179E-12
Np-237	ΣS(j):		1.000E+00	9.956E-01	9.868E-01	9.568E-01	8.758E-01	6.427E-01	2.655E-01	1.204E-02
U-233	Am-241	1.000E+00	0.000E+00	7.066E-13	6.330E-12	6.922E-11	5.952E-10	5.648E-09	3.288E-08	9.267E-08
U-233	Np-237	1.000E+00	0.000E+00	4.362E-06	1.302E-05	4.260E-05	1.213E-04	3.384E-04	6.274E-04	5.210E-04
U-233	Pu-241	1.000E+00	0.000E+00	3.734E-16	9.812E-15	3.312E-13	6.992E-12	1.298E-10	9.915E-10	3.071E-09
U-233	Pu-241	2.450E-05	0.000E+00	1.705E-17	1.481E-16	1.460E-15	9.612E-15	4.607E-14	1.007E-13	8.709E-14
U-233	ΣS(j):		0.000E+00	4.362E-06	1.302E-05	4.260E-05	1.213E-04	3.384E-04	6.274E-04	5.210E-04
Th-229	Am-241	1.000E+00	0.000E+00	2.226E-17	5.988E-16	2.191E-14	5.714E-13	1.878E-11	3.652E-10	4.917E-09
Th-229	Np-237	1.000E+00	0.000E+00	2.061E-10	1.849E-09	2.029E-08	1.763E-07	1.736E-06	1.133E-05	5.042E-05
Th-229	Pu-241	1.000E+00	0.000E+00	8.841E-21	7.006E-19	8.027E-17	5.327E-15	3.713E-13	1.023E-11	1.580E-10
Th-229	Pu-241	2.450E-05	0.000E+00	5.390E-22	1.417E-20	4.797E-19	1.021E-17	1.961E-16	1.671E-15	8.150E-15
Th-229	ΣS(j):		0.000E+00	2.061E-10	1.849E-09	2.029E-08	1.763E-07	1.736E-06	1.133E-05	5.042E-05
C-14	C-14	1.000E+00	1.000E+00	1.305E-03	2.156E-09	9.067E-30	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Ce-144	Ce-144	1.000E+00	1.000E+00	4.104E-01	6.914E-02	1.357E-04	2.498E-12	2.114E-39	0.000E+00	0.000E+00
Cm-243	Cm-243	2.400E-03	2.400E-03	2.342E-03	2.231E-03	1.882E-03	1.157E-03	2.108E-04	1.626E-06	6.559E-14
Cm-243	Cm-243	9.976E-01	9.976E-01	9.736E-01	9.274E-01	7.822E-01	4.809E-01	8.762E-02	6.760E-04	2.726E-11
Cm-243	ΣS(j):		1.000E+00	9.760E-01	9.296E-01	7.841E-01	4.821E-01	8.783E-02	6.776E-04	2.733E-11
Am-243	Cm-243	2.400E-03	0.000E+00	2.225E-07	6.501E-07	1.979E-06	4.633E-06	7.323E-06	5.372E-06	1.222E-06
Pu-239	Cm-243	2.400E-03	0.000E+00	3.218E-12	2.846E-11	2.976E-10	2.271E-09	1.534E-08	5.237E-08	1.046E-07
Pu-239	Cm-243	9.976E-01	0.000E+00	2.839E-05	8.312E-05	2.550E-04	6.111E-04	1.072E-03	1.159E-03	1.103E-03
Pu-239	Pu-239	1.000E+00	1.000E+00	9.999E-01	9.998E-01	9.993E-01	9.979E-01	9.929E-01	9.787E-01	9.309E-01
Pu-239	ΣS(j):		1.000E+00	1.000E+00	9.999E-01	9.995E-01	9.985E-01	9.939E-01	9.799E-01	9.320E-01
U-235	Cm-243	2.400E-03	0.000E+00	1.058E-21	2.819E-20	9.964E-19	2.365E-17	5.888E-16	6.944E-15	5.007E-14
U-235	Cm-243	9.976E-01	0.000E+00	1.403E-14	1.242E-13	1.303E-12	1.003E-11	7.027E-11	2.683E-10	7.448E-10
U-235	Pu-239	1.000E+00	0.000E+00	9.844E-10	2.951E-09	9.805E-09	2.916E-08	9.424E-08	2.592E-07	6.472E-07
U-235	ΣS(j):		0.000E+00	9.844E-10	2.951E-09	9.806E-09	2.917E-08	9.431E-08	2.595E-07	6.480E-07
Pa-231	Cm-243	2.400E-03	0.000E+00	5.606E-27	4.490E-25	5.332E-23	3.881E-21	3.422E-19	1.328E-17	3.423E-16
Pa-231	Cm-243	9.976E-01	0.000E+00	9.915E-20	2.643E-18	9.360E-17	2.237E-15	5.708E-14	7.255E-13	6.630E-12
Pa-231	Pu-239	1.000E+00	0.000E+00	1.041E-14	9.361E-14	1.036E-12	9.217E-12	9.840E-11	7.906E-10	5.968E-09
Pa-231	ΣS(j):		0.000E+00	1.041E-14	9.361E-14	1.036E-12	9.220E-12	9.846E-11	7.914E-10	5.975E-09
Ac-227	Cm-243	2.400E-03	0.000E+00	3.552E-29	8.457E-27	3.241E-24	6.470E-22	1.438E-19	9.368E-18	3.009E-16
Ac-227	Cm-243	9.976E-01	0.000E+00	7.848E-22	6.207E-20	7.058E-18	4.559E-16	2.802E-14	5.546E-13	5.952E-12

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

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	1.000E+00	0.000E+00	1.096E-16	2.907E-15	1.014E-13	2.327E-12	5.394E-11	6.198E-10	5.371E-09	
Ac-227	ΣS(j):		0.000E+00	1.096E-16	2.907E-15	1.014E-13	2.327E-12	5.397E-11	6.203E-10	5.377E-09	
Cm-244	Cm-244	1.350E-06	1.350E-06	1.299E-06	1.204E-06	9.207E-07	4.282E-07	2.938E-08	1.391E-11	3.214E-23	
Cm-244	Cm-244	4.950E-08	4.950E-08	4.764E-08	4.413E-08	3.376E-08	1.570E-08	1.077E-09	5.101E-13	1.179E-24	
Cm-244	ΣS(j):		1.399E-06	1.347E-06	1.248E-06	9.544E-07	4.439E-07	3.045E-08	1.442E-11	3.332E-23	
Pu-240	Cm-244	4.950E-08	0.000E+00	5.149E-12	1.487E-11	4.358E-11	9.338E-11	1.326E-10	1.316E-10	1.186E-10	
Pu-240	Pu-240	4.950E-08	4.950E-08	4.949E-08	4.948E-08	4.943E-08	4.928E-08	4.877E-08	4.734E-08	4.265E-08	
Pu-240	ΣS(j):		4.950E-08	4.950E-08	4.949E-08	4.947E-08	4.937E-08	4.890E-08	4.747E-08	4.277E-08	
Cm-244	Cm-244	1.000E+00	1.000E+00	9.624E-01	8.915E-01	6.820E-01	3.172E-01	2.176E-02	1.030E-05	2.381E-17	
Pu-240	Cm-244	1.000E+00	0.000E+00	1.040E-04	3.005E-04	8.803E-04	1.887E-03	2.679E-03	2.660E-03	2.396E-03	
U-236	Cm-244	1.000E+00	0.000E+00	1.549E-12	1.359E-11	1.382E-10	9.869E-10	5.869E-09	1.969E-08	5.084E-08	
U-236	Pu-240	1.000E+00	0.000E+00	2.959E-08	8.868E-08	2.946E-07	8.754E-07	2.822E-06	7.700E-06	1.863E-05	
U-236	ΣS(j):		0.000E+00	2.959E-08	8.869E-08	2.947E-07	8.764E-07	2.828E-06	7.719E-06	1.868E-05	
Th-232	Cm-244	1.000E+00	0.000E+00	2.556E-23	6.768E-22	2.346E-20	5.312E-19	1.203E-17	1.402E-16	1.424E-15	
Th-232	Pu-240	1.000E+00	0.000E+00	7.300E-19	6.566E-18	7.279E-17	6.509E-16	7.073E-15	5.977E-14	5.377E-13	
Th-232	ΣS(j):		0.000E+00	7.300E-19	6.566E-18	7.281E-17	6.514E-16	7.085E-15	5.991E-14	5.392E-13	
Ra-228	Cm-244	1.000E+00	0.000E+00	7.534E-25	5.732E-23	5.743E-21	2.771E-19	9.840E-18	1.317E-16	1.397E-15	
Ra-228	Pu-240	1.000E+00	0.000E+00	2.847E-20	7.247E-19	2.218E-17	3.873E-16	5.985E-15	5.643E-14	5.277E-13	
Ra-228	ΣS(j):		0.000E+00	2.847E-20	7.247E-19	2.219E-17	3.876E-16	5.995E-15	5.657E-14	5.290E-13	
Th-228	Cm-244	1.000E+00	0.000E+00	5.172E-26	1.066E-23	2.619E-21	2.082E-19	9.155E-18	1.292E-16	1.390E-15	
Th-228	Pu-240	1.000E+00	0.000E+00	2.416E-21	1.633E-19	1.162E-17	3.107E-16	5.644E-15	5.542E-14	5.251E-13	
Th-228	ΣS(j):		0.000E+00	2.416E-21	1.633E-19	1.162E-17	3.109E-16	5.653E-15	5.555E-14	5.265E-13	
Co-58	Co-58	1.000E+00	1.000E+00	2.799E-02	2.193E-05	2.952E-16	0.000E+00	0.000E+00	0.000E+00	0.000E+00	
Co-60	Co-60	1.000E+00	1.000E+00	8.768E-01	6.740E-01	2.684E-01	1.935E-02	1.944E-06	7.341E-18	0.000E+00	
Cs-134	Cs-134	1.000E+00	1.000E+00	7.145E-01	3.648E-01	3.468E-02	4.170E-05	2.515E-15	1.541E-44	0.000E+00	
Cs-137	Cs-137	1.000E+00	1.000E+00	9.771E-01	9.330E-01	7.936E-01	4.998E-01	9.910E-02	9.732E-04	9.133E-11	
Eu-152	Eu-152	7.208E-01	7.208E-01	6.843E-01	6.167E-01	4.285E-01	1.514E-01	3.974E-03	1.208E-07	1.873E-23	
Eu-152	Eu-152	2.792E-01	2.792E-01	2.651E-01	2.389E-01	1.660E-01	5.866E-02	1.540E-03	4.681E-08	7.254E-24	
Eu-152	ΣS(j):		1.000E+00	9.493E-01	8.555E-01	5.945E-01	2.101E-01	5.514E-03	1.676E-07	2.598E-23	
Gd-152	Eu-152	2.792E-01	0.000E+00	1.746E-15	4.977E-15	1.397E-14	2.719E-14	3.413E-14	3.398E-14	3.282E-14	
Eu-154	Eu-154	1.000E+00	1.000E+00	9.243E-01	7.895E-01	4.549E-01	9.412E-02	3.793E-04	5.456E-11	6.160E-35	
Eu-155	Eu-155	1.000E+00	1.000E+00	8.696E-01	6.575E-01	2.472E-01	1.511E-02	8.523E-07	6.192E-19	0.000E+00	
Fe-55	Fe-55	1.000E+00	1.000E+00	7.735E-01	4.629E-01	7.671E-02	4.515E-04	7.059E-12	3.518E-34	0.000E+00	

Summary : RESRAD Default Parameters

File : C:\USERS\DNF\DOCUMENTS\FT CALHOUN\RESRAD INPUT FILES\SOIL DCGL\FCS SOIL DCGL 1M.RAD

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	
H-3	H-3	1.000E+00	1.000E+00	2.401E-01	1.376E-02	5.856E-07	1.147E-19	0.000E+00	0.000E+00	0.000E+00	
Ni-59	Ni-59	1.000E+00	1.000E+00	9.998E-01	9.993E-01	9.976E-01	9.929E-01	9.766E-01	9.313E-01	7.889E-01	
Ni-63	Ni-63	1.000E+00	1.000E+00	9.927E-01	9.783E-01	9.296E-01	8.034E-01	4.821E-01	1.120E-01	6.776E-04	
Pu-238	Pu-238	1.840E-09	1.840E-09	1.825E-09	1.797E-09	1.700E-09	1.450E-09	8.315E-10	1.698E-10	6.536E-13	
Pu-238	Pu-238	1.000E+00	1.000E+00	9.921E-01	9.765E-01	9.236E-01	7.880E-01	4.519E-01	9.229E-02	3.552E-04	
Pu-238	ΣS(j):		1.000E+00	9.921E-01	9.765E-01	9.236E-01	7.880E-01	4.519E-01	9.229E-02	3.552E-04	
U-234	Pu-238	1.000E+00	0.000E+00	2.823E-06	8.394E-06	2.714E-05	7.472E-05	1.868E-04	2.747E-04	1.757E-04	
Th-230	Pu-238	1.000E+00	0.000E+00	1.272E-11	1.138E-10	1.239E-09	1.053E-08	9.673E-08	5.430E-07	1.987E-06	
Ra-226	Pu-238	1.000E+00	0.000E+00	1.838E-15	4.939E-14	1.798E-12	4.627E-11	1.457E-09	2.591E-08	3.183E-07	
Pb-210	Pu-238	1.000E+00	0.000E+00	1.420E-17	1.132E-15	1.320E-13	9.147E-12	6.952E-10	1.989E-08	2.975E-07	
Po-210	Pu-238	1.000E+00	0.000E+00	3.950E-18	6.239E-16	1.076E-13	8.531E-12	6.811E-10	1.975E-08	2.966E-07	
Pu-240	Pu-240	1.000E+00	1.000E+00	9.999E-01	9.996E-01	9.985E-01	9.955E-01	9.852E-01	9.563E-01	8.617E-01	
Pu-241	Pu-241	1.000E+00	1.000E+00	9.529E-01	8.654E-01	6.177E-01	2.357E-01	8.084E-03	5.284E-07	1.193E-21	
Pu-241	Pu-241	2.450E-05	2.450E-05	2.335E-05	2.120E-05	1.513E-05	5.774E-06	1.981E-07	1.295E-11	2.922E-26	
Pu-241	ΣS(j):		1.000E+00	9.530E-01	8.654E-01	6.177E-01	2.357E-01	8.085E-03	5.284E-07	1.193E-21	
Sb-125	Sb-125	7.720E-01	7.720E-01	6.009E-01	3.641E-01	6.302E-02	4.200E-04	1.015E-11	1.752E-33	0.000E+00	
Sb-125	Sb-125	2.280E-01	2.280E-01	1.775E-01	1.075E-01	1.861E-02	1.240E-04	2.996E-12	5.175E-34	0.000E+00	
Sb-125	ΣS(j):		1.000E+00	7.784E-01	4.716E-01	8.163E-02	5.440E-04	1.314E-11	2.270E-33	0.000E+00	
Te-125m	Sb-125	2.280E-01	0.000E+00	1.764E-01	1.083E-01	1.875E-02	1.249E-04	3.018E-12	5.213E-34	0.000E+00	
Sr-90	Sr-90	1.000E+00	1.000E+00	9.762E-01	9.304E-01	7.863E-01	4.861E-01	9.030E-02	7.364E-04	3.606E-11	
Tc-99	Tc-99	1.000E+00	1.000E+00	8.848E-01	6.927E-01	2.941E-01	2.543E-02	4.837E-06	1.131E-16	0.000E+00	

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

RESCALC.EXE execution time = 24.33 seconds

Total water/soil iteration failures = 1.