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Dose Conversion Factor (and Related) Parameter Summary
Dose Library: Hematite 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	At-217 (Source: FGR 12)	1.773E-03	1.773E-03	DCF1(5)
A-1	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	DCF1(6)
A-1	Bi-210 (Source: FGR 12)	3.606E-03	3.606E-03	DCF1(7)
A-1	Bi-211 (Source: FGR 12)	2.559E-01	2.559E-01	DCF1(8)
A-1	Bi-212 (Source: FGR 12)	1.171E+00	1.171E+00	DCF1(9)
A-1	Bi-213 (Source: FGR 12)	7.660E-01	7.660E-01	DCF1(10)
A-1	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	DCF1(11)
A-1	Fr-221 (Source: FGR 12)	1.536E-01	1.536E-01	DCF1(12)
A-1	Fr-223 (Source: FGR 12)	1.980E-01	1.980E-01	DCF1(13)
A-1	Np-237 (Source: FGR 12)	7.790E-02	7.790E-02	DCF1(14)
A-1	Pa-231 (Source: FGR 12)	1.906E-01	1.906E-01	DCF1(15)
A-1	Pa-233 (Source: FGR 12)	1.020E+00	1.020E+00	DCF1(16)
A-1	Pa-234 (Source: FGR 12)	1.155E+01	1.155E+01	DCF1(17)
A-1	Pa-234m (Source: FGR 12)	8.967E-02	8.967E-02	DCF1(18)
A-1	Pb-209 (Source: FGR 12)	7.734E-04	7.734E-04	DCF1(19)
A-1	Pb-210 (Source: FGR 12)	2.447E-03	2.447E-03	DCF1(20)
A-1	Pb-211 (Source: FGR 12)	3.064E-01	3.064E-01	DCF1(21)
A-1	Pb-212 (Source: FGR 12)	7.043E-01	7.043E-01	DCF1(22)
A-1	Pb-214 (Source: FGR 12)	1.341E+00	1.341E+00	DCF1(23)
A-1	Po-210 (Source: FGR 12)	5.231E-05	5.231E-05	DCF1(24)
A-1	Po-211 (Source: FGR 12)	4.764E-02	4.764E-02	DCF1(25)
A-1	Po-212 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1(26)
A-1	Po-213 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1(27)
A-1	Po-214 (Source: FGR 12)	5.138E-04	5.138E-04	DCF1(28)
A-1	Po-215 (Source: FGR 12)	1.016E-03	1.016E-03	DCF1(29)
A-1	Po-216 (Source: FGR 12)	1.042E-04	1.042E-04	DCF1(30)
A-1	Po-218 (Source: FGR 12)	5.642E-05	5.642E-05	DCF1(31)
A-1	Pu-239 (Source: FGR 12)	2.952E-04	2.952E-04	DCF1(32)
A-1	Pu-240 (Source: FGR 12)	1.467E-04	1.467E-04	DCF1(33)
A-1	Ra-223 (Source: FGR 12)	6.034E-01	6.034E-01	DCF1(34)
A-1	Ra-224 (Source: FGR 12)	5.119E-02	5.119E-02	DCF1(35)
A-1	Ra-225 (Source: FGR 12)	1.102E-02	1.102E-02	DCF1(36)
A-1	Ra-226 (Source: FGR 12)	3.176E-02	3.176E-02	DCF1(37)
A-1	Ra-228 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1(38)
A-1	Rn-219 (Source: FGR 12)	3.083E-01	3.083E-01	DCF1(39)
A-1	Rn-220 (Source: FGR 12)	2.298E-03	2.298E-03	DCF1(40)
A-1	Rn-222 (Source: FGR 12)	2.354E-03	2.354E-03	DCF1(41)
A-1	Tc-99 (Source: FGR 12)	1.255E-04	1.255E-04	DCF1(42)
A-1	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCF1(43)
A-1	Th-228 (Source: FGR 12)	7.940E-03	7.940E-03	DCF1(44)
A-1	Th-229 (Source: FGR 12)	3.213E-01	3.213E-01	DCF1(45)
A-1	Th-230 (Source: FGR 12)	1.209E-03	1.209E-03	DCF1(46)
A-1	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCF1(47)
A-1	Th-232 (Source: FGR 12)	5.212E-04	5.212E-04	DCF1(48)
A-1	Th-234 (Source: FGR 12)	2.410E-02	2.410E-02	DCF1(49)

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: Hematite Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCF1(50)
A-1	Tl-208 (Source: FGR 12)	2.298E+01	2.298E+01	DCF1(51)
A-1	Tl-209 (Source: FGR 12)	1.293E+01	1.293E+01	DCF1(52)
A-1	Tl-210 (Source: no data)	0.000E+00	-2.000E+00	DCF1(53)
A-1	U-233 (Source: FGR 12)	1.397E-03	1.397E-03	DCF1(54)
A-1	U-234 (Source: FGR 12)	4.017E-04	4.017E-04	DCF1(55)
A-1	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCF1(56)
A-1	U-236 (Source: FGR 12)	2.148E-04	2.148E-04	DCF1(57)
A-1	U-238 (Source: FGR 12)	1.031E-04	1.031E-04	DCF1(58)
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	Np-237+D	5.400E-01	5.400E-01	DCF2(3)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(4)
B-1	Pb-210+D	2.320E-02	1.360E-02	DCF2(5)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(6)
B-1	Pu-240	4.290E-01	4.290E-01	DCF2(7)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(9)
B-1	Ra-228+D	5.078E-03	4.770E-03	DCF2(10)
B-1	Tc-99	8.320E-06	8.320E-06	DCF2(11)
B-1	Th-228+D	3.454E-01	3.420E-01	DCF2(12)
B-1	Th-229+D	2.169E+00	2.150E+00	DCF2(13)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(14)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(15)
B-1	U-233	1.350E-01	1.350E-01	DCF2(16)
B-1	U-234	1.320E-01	1.320E-01	DCF2(17)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(18)
B-1	U-236	1.250E-01	1.250E-01	DCF2(19)
B-1	U-238	1.180E-01	1.180E-01	DCF2(20)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(21)
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	Np-237+D	4.444E-03	4.440E-03	DCF3(3)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(4)
D-1	Pb-210+D	7.276E-03	5.370E-03	DCF3(5)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(6)
D-1	Pu-240	3.540E-03	3.540E-03	DCF3(7)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(9)
D-1	Ra-228+D	1.442E-03	1.440E-03	DCF3(10)
D-1	Tc-99	1.460E-06	1.460E-06	DCF3(11)
D-1	Th-228+D	8.086E-04	3.960E-04	DCF3(12)
D-1	Th-229+D	4.027E-03	3.530E-03	DCF3(13)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(14)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(15)
D-1	U-233	2.890E-04	2.890E-04	DCF3(16)
D-1	U-234	2.830E-04	2.830E-04	DCF3(17)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(18)

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: Hematite Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-1	U-236	2.690E-04	2.690E-04	DCF3(19)
D-1	U-238	2.550E-04	2.550E-04	DCF3(20)
D-1	U-238+D	2.687E-04	2.550E-04	DCF3(21)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	1.000E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-05	RTF(1,3)
D-34				
D-34	Am-241 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(2,1)
D-34	Am-241 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-05	5.000E-05	RTF(2,2)
D-34	Am-241 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-06	2.000E-06	RTF(2,3)
D-34				
D-34	Np-237+D , plant/soil concentration ratio, dimensionless	2.000E-02	2.000E-02	RTF(3,1)
D-34	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(3,2)
D-34	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-05	5.000E-06	RTF(3,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-02	RTF(4,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-06	5.000E-03	RTF(4,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.900E-06	5.000E-06	RTF(4,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	7.400E-03	1.000E-02	RTF(5,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(5,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.570E-04	3.000E-04	RTF(5,3)
D-34				
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(6,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(6,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	9.900E-07	1.000E-06	RTF(6,3)
D-34				
D-34	Pu-240 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(7,2)
D-34	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	9.900E-07	1.000E-06	RTF(7,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	7.400E-02	4.000E-02	RTF(9,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(9,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-04	1.000E-03	RTF(9,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	7.400E-02	4.000E-02	RTF(10,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(10,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-04	1.000E-03	RTF(10,3)
D-34				
D-34	Tc-99 , plant/soil concentration ratio, dimensionless	9.270E+00	5.000E+00	RTF(11,1)
D-34	Tc-99 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.900E-05	1.000E-04	RTF(11,2)
D-34	Tc-99 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(11,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	9.930E-04	1.000E-03	RTF(12,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.900E-05	1.000E-04	RTF(12,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.900E-06	5.000E-06	RTF(12,3)
D-34				

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: Hematite Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Th-229+D , plant/soil concentration ratio, dimensionless	9.930E-04	1.000E-03	RTF(13,1)
D-34	Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.900E-05	1.000E-04	RTF(13,2)
D-34	Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.900E-06	5.000E-06	RTF(13,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	9.930E-04	1.000E-03	RTF(14,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.900E-05	1.000E-04	RTF(14,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.900E-06	5.000E-06	RTF(14,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	9.930E-04	1.000E-03	RTF(15,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	9.900E-05	1.000E-04	RTF(15,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	4.900E-06	5.000E-06	RTF(15,3)
D-34				
D-34	U-233 , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(16,1)
D-34	U-233 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(16,2)
D-34	U-233 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(16,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(17,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(17,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(17,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(18,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(18,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(18,3)
D-34				
D-34	U-236 , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(19,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(19,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(19,3)
D-34				
D-34	U-238 , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(20,1)
D-34	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(20,2)
D-34	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(20,3)
D-34				
D-34	U-238+D , plant/soil concentration ratio, dimensionless	3.700E-03	2.500E-03	RTF(21,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.300E-03	3.400E-04	RTF(21,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(21,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.480E+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	2.970E+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	Np-237+D , fish	2.940E+01	3.000E+01	BIOFAC(3,1)
D-5	Np-237+D , crustacea and mollusks	4.000E+02	4.000E+02	BIOFAC(3,2)
D-5				
D-5	Pa-231 , fish	9.900E+00	1.000E+01	BIOFAC(4,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(4,2)
D-5				

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: Hematite Plus FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Pb-210+D , fish	2.930E+02	3.000E+02	BIOFAC(5,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(5,2)
D-5				
D-5	Pu-239 , fish	2.980E+01	3.000E+01	BIOFAC(6,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(6,2)
D-5				
D-5	Pu-240 , fish	2.980E+01	3.000E+01	BIOFAC(7,1)
D-5	Pu-240 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5				
D-5	Ra-226+D , fish	4.930E+01	5.000E+01	BIOFAC(9,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(9,2)
D-5				
D-5	Ra-228+D , fish	4.930E+01	5.000E+01	BIOFAC(10,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(10,2)
D-5				
D-5	Tc-99 , fish	2.000E+01	2.000E+01	BIOFAC(11,1)
D-5	Tc-99 , crustacea and mollusks	5.000E+00	5.000E+00	BIOFAC(11,2)
D-5				
D-5	Th-228+D , fish	9.030E+01	1.000E+02	BIOFAC(12,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(12,2)
D-5				
D-5	Th-229+D , fish	9.030E+01	1.000E+02	BIOFAC(13,1)
D-5	Th-229+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(13,2)
D-5				
D-5	Th-230 , fish	9.030E+01	1.000E+02	BIOFAC(14,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(14,2)
D-5				
D-5	Th-232 , fish	9.030E+01	1.000E+02	BIOFAC(15,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(15,2)
D-5				
D-5	U-233 , fish	9.900E+00	1.000E+01	BIOFAC(16,1)
D-5	U-233 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(16,2)
D-5				
D-5	U-234 , fish	9.900E+00	1.000E+01	BIOFAC(17,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(17,2)
D-5				
D-5	U-235+D , fish	9.900E+00	1.000E+01	BIOFAC(18,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(18,2)
D-5				
D-5	U-236 , fish	9.900E+00	1.000E+01	BIOFAC(19,1)
D-5	U-236 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(19,2)
D-5				
D-5	U-238 , fish	9.900E+00	1.000E+01	BIOFAC(20,1)
D-5	U-238 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(20,2)
D-5				
D-5	U-238+D , fish	9.900E+00	1.000E+01	BIOFAC(21,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(21,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See ETFG table in Ground Pathway of Detailed Report.
*Base Case means Default.Lib w/o Associate Nuclide contributions.

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)	1.534E+05	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	5.200E+00	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	2.910E+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)	1.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	not used	3.000E+00	---	T(3)
R011	Times for calculations (yr)	not used	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	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): Np-237	1.000E+00	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+00	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Pu-240	1.000E+00	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Tc-99	1.000E+00	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+00	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+00	0.000E+00	---	S1(18)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+00	0.000E+00	---	S1(20)
R012	Concentration in groundwater (pCi/L): Am-241	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Np-237	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Pu-240	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Tc-99	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(17)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(18)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(20)
R013	Cover depth (m)	1.500E+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)	6.000E-04	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.690E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	6.000E-04	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	1.700E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.456E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	9.900E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	4.300E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	8.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	1.010E+00	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.400E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	4.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	9.989E+05	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Density of saturated zone (g/cm**3)	1.510E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.300E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	3.800E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	1.500E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.520E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	1.100E-02	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)	2.500E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	MB	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	3.338E+03	2.500E+02	---	UW
R015	Number of unsaturated zone strata	0	1	---	NS
R016	Distribution coefficients for Am-241				
R016	Contaminated zone (cm**3/g)	8.400E+03	2.000E+01	---	DCNUCC(2)
R016	Saturated zone (cm**3/g)	0.000E+00	2.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.021E-06	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Np-237				
R016	Contaminated zone (cm**3/g)	2.500E+01	-1.000E+00	---	DCNUCC(3)
R016	Saturated zone (cm**3/g)	0.000E+00	-1.000E+00	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.732E-04	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	1.200E+03	2.000E+03	---	DCNUCC(6)
R016	Saturated zone (cm**3/g)	0.000E+00	2.000E+03	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.415E-05	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for Pu-240				
R016	Contaminated zone (cm**3/g)	1.200E+03	2.000E+03	---	DCNUCC(7)
R016	Saturated zone (cm**3/g)	0.000E+00	2.000E+03	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.415E-05	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for Tc-99				
R016	Contaminated zone (cm**3/g)	1.060E+02	0.000E+00	---	DCNUCC(11)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.598E-04	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	1.750E+02	5.000E+01	---	DCNUCC(17)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.689E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	1.750E+02	5.000E+01	---	DCNUCC(18)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.689E-05	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
R016	Distribution coefficients for U-238				
R016	Contaminated zone (cm**3/g)	1.750E+02	5.000E+01	---	DCNUCC(20)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(20)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.689E-05	ALEACH(20)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(20)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	1.500E+03	2.000E+01	---	DCNUCC(1)
R016	Saturated zone (cm**3/g)	0.000E+00	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.132E-05	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for daughter Pa-231				
R016	Contaminated zone (cm**3/g)	1.800E+03	5.000E+01	---	DCNUCC(4)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.431E-06	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+02	---	DCNUCC(5)
R016	Saturated zone (cm**3/g)	0.000E+00	1.000E+02	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.086E-05	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for daughter Ra-226				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(9)
R016	Saturated zone (cm**3/g)	0.000E+00	7.000E+01	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.866E-06	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
R016	Distribution coefficients for daughter Ra-228				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(10)
R016	Saturated zone (cm**3/g)	0.000E+00	7.000E+01	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.866E-06	ALEACH(10)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
R016	Distribution coefficients for daughter Th-228				
R016	Contaminated zone (cm**3/g)	3.300E+03	6.000E+04	---	DCNUCC(12)
R016	Saturated zone (cm**3/g)	0.000E+00	6.000E+04	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.144E-06	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)

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)	3.300E+03	6.000E+04	---	DCNUCC(13)
R016	Saturated zone (cm**3/g)	0.000E+00	6.000E+04	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.144E-06	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
R016	Distribution coefficients for daughter Th-230				
R016	Contaminated zone (cm**3/g)	3.300E+03	6.000E+04	---	DCNUCC(14)
R016	Saturated zone (cm**3/g)	0.000E+00	6.000E+04	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.144E-06	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
R016	Distribution coefficients for daughter Th-232				
R016	Contaminated zone (cm**3/g)	3.300E+03	6.000E+04	---	DCNUCC(15)
R016	Saturated zone (cm**3/g)	0.000E+00	6.000E+04	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.144E-06	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
R016	Distribution coefficients for daughter U-233				
R016	Contaminated zone (cm**3/g)	1.750E+02	5.000E+01	---	DCNUCC(16)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.689E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)
R016	Distribution coefficients for daughter U-236				
R016	Contaminated zone (cm**3/g)	1.750E+02	5.000E+01	---	DCNUCC(19)
R016	Saturated zone (cm**3/g)	0.000E+00	5.000E+01	---	DCNUCS(19)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.689E-05	ALEACH(19)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(19)
R017	Inhalation rate (m**3/yr)	not used	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	not used	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	not used	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	not used	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	not used	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	not used	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	not used	1.000E+00	>0 shows circular AREA.	FS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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)	1.120E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	2.100E+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)	6.500E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	2.100E+01	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	not used	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	4.600E+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	1.000E+00	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
R018	Contamination fraction of milk	-1	-1	0.100E+01	FMILK
R019	Livestock fodder intake for meat (kg/day)	1.200E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	9.000E+00	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	3.700E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.050E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	4.500E-01	5.000E-01	---	LSI

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R019	Mass loading for foliar deposition (g/m**3)	2.300E-05	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	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)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	2.600E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	1.700E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	2.100E-01	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	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	6.000E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-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)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	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)
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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	5	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

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

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	153375.00 square meters	Am-241	1.000E+00
Thickness:	5.20 meters	Np-237	1.000E+00
Cover Depth:	1.50 meters	Pu-239	1.000E+00
		Pu-240	1.000E+00
		Tc-99	1.000E+00
		U-234	1.000E+00
		U-235	1.000E+00
		U-238	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
TDOSE(t):	1.182E+02	1.181E+02
M(t):	4.726E+00	4.723E+00

Maximum TDOSE(t): 1.182E+02 mrem/yr at t = 0.000E+00 years

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-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	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	0.000E+00	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
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
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total 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-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	1.992E-01	0.0017	1.013E-01	0.0009	0.000E+00	0.0000	9.161E-03	0.0001	6.858E-05	0.0000	2.296E-05	0.0000	3.098E-01	0.0026
Np-237	8.103E+01	0.6858	2.644E+01	0.2237	0.000E+00	0.0000	3.751E+00	0.0317	5.563E-01	0.0047	4.666E-02	0.0004	1.118E+02	0.9464
Pu-239	1.357E+00	0.0115	3.241E-01	0.0027	0.000E+00	0.0000	6.239E-02	0.0005	9.310E-04	0.0000	7.733E-05	0.0000	1.744E+00	0.0148
Pu-240	1.357E+00	0.0115	3.241E-01	0.0027	0.000E+00	0.0000	6.239E-02	0.0005	9.309E-04	0.0000	7.733E-05	0.0000	1.744E+00	0.0148
Tc-99	6.322E-03	0.0001	8.958E-04	0.0000	0.000E+00	0.0000	1.213E-03	0.0000	5.259E-06	0.0000	3.902E-04	0.0000	8.826E-03	0.0001
U-234	7.429E-01	0.0063	6.495E-02	0.0005	0.000E+00	0.0000	3.420E-02	0.0003	6.628E-03	0.0001	2.567E-02	0.0002	8.744E-01	0.0074
U-235	7.020E-01	0.0059	6.137E-02	0.0005	0.000E+00	0.0000	3.231E-02	0.0003	6.261E-03	0.0001	2.425E-02	0.0002	8.261E-01	0.0070
U-238	7.054E-01	0.0060	6.166E-02	0.0005	0.000E+00	0.0000	3.247E-02	0.0003	6.293E-03	0.0001	2.437E-02	0.0002	8.302E-01	0.0070
Total	8.610E+01	0.7287	2.737E+01	0.2317	0.000E+00	0.0000	3.985E+00	0.0337	5.774E-01	0.0049	1.215E-01	0.0010	1.182E+02	1.0000

*Sum of all water independent and dependent pathways.

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-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	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	0.000E+00	0.0000
Np-237	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pu-240	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
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
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total 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-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Am-241	1.989E-01	0.0017	1.012E-01	0.0009	0.000E+00	0.0000	9.147E-03	0.0001	6.865E-05	0.0000	2.293E-05	0.0000	3.093E-01	0.0026
Np-237	8.098E+01	0.6858	2.642E+01	0.2237	0.000E+00	0.0000	3.748E+00	0.0317	5.559E-01	0.0047	4.663E-02	0.0004	1.117E+02	0.9463
Pu-239	1.357E+00	0.0115	3.241E-01	0.0027	0.000E+00	0.0000	6.239E-02	0.0005	9.309E-04	0.0000	7.733E-05	0.0000	1.744E+00	0.0148
Pu-240	1.357E+00	0.0115	3.241E-01	0.0027	0.000E+00	0.0000	6.238E-02	0.0005	9.308E-04	0.0000	7.732E-05	0.0000	1.744E+00	0.0148
Tc-99	6.321E-03	0.0001	8.957E-04	0.0000	0.000E+00	0.0000	1.212E-03	0.0000	5.258E-06	0.0000	3.901E-04	0.0000	8.825E-03	0.0001
U-234	7.429E-01	0.0063	6.494E-02	0.0005	0.000E+00	0.0000	3.419E-02	0.0003	6.627E-03	0.0001	2.566E-02	0.0002	8.743E-01	0.0074
U-235	7.020E-01	0.0059	6.137E-02	0.0005	0.000E+00	0.0000	3.231E-02	0.0003	6.261E-03	0.0001	2.424E-02	0.0002	8.261E-01	0.0070
U-238	7.053E-01	0.0060	6.166E-02	0.0005	0.000E+00	0.0000	3.247E-02	0.0003	6.292E-03	0.0001	2.437E-02	0.0002	8.301E-01	0.0070
Total	8.605E+01	0.7287	2.736E+01	0.2317	0.000E+00	0.0000	3.982E+00	0.0337	5.771E-01	0.0049	1.215E-01	0.0010	1.181E+02	1.0000

*Sum of all water independent and dependent pathways.

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 0.000E+00	1.000E+00
Am-241	Am-241	1.000E+00	3.097E-01	3.092E-01
Am-241	Np-237+D	1.000E+00	5.229E-05	8.840E-05
Am-241	U-233	1.000E+00	2.289E-12	5.263E-12
Am-241	Th-229+D	1.000E+00	5.251E-12	6.107E-12
Am-241	∑DSR(j)		3.098E-01	3.093E-01
Np-237+D	Np-237+D	1.000E+00	1.118E+02	1.117E+02
Np-237+D	U-233	1.000E+00	7.256E-06	1.118E-05
Np-237+D	Th-229+D	1.000E+00	2.323E-06	2.323E-06
Np-237+D	∑DSR(j)		1.118E+02	1.117E+02
Pu-239	Pu-239	1.000E+00	1.744E+00	1.744E+00
Pu-239	U-235+D	1.000E+00	1.182E-09	1.996E-09
Pu-239	Pa-231	1.000E+00	5.436E-12	5.524E-12
Pu-239	Ac-227+D	1.000E+00	1.017E-11	1.017E-11
Pu-239	∑DSR(j)		1.744E+00	1.744E+00
Pu-240	Pu-240	4.950E-08	8.634E-08	8.633E-08
Pu-240	Pu-240	1.000E+00	1.744E+00	1.744E+00
Pu-240	U-236	1.000E+00	3.576E-08	6.035E-08
Pu-240	Th-232	1.000E+00	1.110E-17	1.339E-17
Pu-240	Ra-228+D	1.000E+00	3.468E-20	4.229E-20
Pu-240	Th-228+D	1.000E+00	4.339E-18	4.417E-18
Pu-240	∑DSR(j)		1.744E+00	1.744E+00
Tc-99	Tc-99	1.000E+00	8.826E-03	8.825E-03
U-234	U-234	1.000E+00	8.744E-01	8.743E-01
U-234	Th-230	1.000E+00	3.074E-06	4.337E-06
U-234	Ra-226+D	1.000E+00	7.666E-08	7.729E-08
U-234	Pb-210+D	1.000E+00	9.198E-07	9.196E-07
U-234	∑DSR(j)		8.744E-01	8.743E-01
U-235+D	U-235+D	1.000E+00	8.260E-01	8.259E-01
U-235+D	Pa-231	1.000E+00	1.320E-04	1.980E-04
U-235+D	Ac-227+D	1.000E+00	5.570E-06	1.408E-05
U-235+D	∑DSR(j)		8.261E-01	8.261E-01
U-238	U-238	5.400E-05	4.254E-05	4.254E-05
U-238+D	U-238+D	9.999E-01	8.302E-01	8.301E-01
U-238+D	U-234	9.999E-01	3.714E-06	6.189E-06
U-238+D	Th-230	9.999E-01	3.029E-08	3.029E-08
U-238+D	Ra-226+D	9.999E-01	5.955E-08	5.954E-08
U-238+D	Pb-210+D	9.999E-01	7.017E-07	7.016E-07
U-238+D	∑DSR(j)		8.302E-01	8.301E-01

The DSR includes contributions from associated (half-life ≤ 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 2.500E+01 mrem/yr

Nuclide (i)	t= 0.000E+00	1.000E+00
Am-241	8.071E+01	8.083E+01
Np-237	2.236E-01	2.237E-01
Pu-239	1.433E+01	1.433E+01
Pu-240	1.433E+01	1.433E+01
Tc-99	2.832E+03	2.833E+03
U-234	2.859E+01	2.860E+01
U-235	3.026E+01	3.026E+01
U-238	3.011E+01	3.012E+01

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	3.098E-01	8.071E+01	3.098E-01	8.071E+01
Np-237	1.000E+00	0.000E+00	1.118E+02	2.236E-01	1.118E+02	2.236E-01
Pu-239	1.000E+00	0.000E+00	1.744E+00	1.433E+01	1.744E+00	1.433E+01
Pu-240	1.000E+00	0.000E+00	1.744E+00	1.433E+01	1.744E+00	1.433E+01
Tc-99	1.000E+00	0.000E+00	8.826E-03	2.832E+03	8.826E-03	2.832E+03
U-234	1.000E+00	0.000E+00	8.744E-01	2.859E+01	8.744E-01	2.859E+01
U-235	1.000E+00	0.000E+00	8.261E-01	3.026E+01	8.261E-01	3.026E+01
U-238	1.000E+00	0.000E+00	8.302E-01	3.011E+01	8.302E-01	3.011E+01

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
Am-241	Am-241	1.000E+00	3.097E-01	3.092E-01
Np-237	Am-241	1.000E+00	5.229E-05	8.840E-05
Np-237	Np-237	1.000E+00	1.118E+02	1.117E+02
Np-237	∑DOSE(j)		1.118E+02	1.117E+02
U-233	Am-241	1.000E+00	2.289E-12	5.263E-12
U-233	Np-237	1.000E+00	7.256E-06	1.118E-05
U-233	∑DOSE(j)		7.256E-06	1.118E-05
Th-229	Am-241	1.000E+00	5.251E-12	6.107E-12
Th-229	Np-237	1.000E+00	2.323E-06	2.323E-06
Th-229	∑DOSE(j)		2.323E-06	2.323E-06
Pu-239	Pu-239	1.000E+00	1.744E+00	1.744E+00
U-235	Pu-239	1.000E+00	1.182E-09	1.996E-09
U-235	U-235	1.000E+00	8.260E-01	8.259E-01
U-235	∑DOSE(j)		8.260E-01	8.259E-01
Pa-231	Pu-239	1.000E+00	5.436E-12	5.524E-12
Pa-231	U-235	1.000E+00	1.320E-04	1.980E-04
Pa-231	∑DOSE(j)		1.320E-04	1.980E-04
Ac-227	Pu-239	1.000E+00	1.017E-11	1.017E-11
Ac-227	U-235	1.000E+00	5.570E-06	1.408E-05
Ac-227	∑DOSE(j)		5.570E-06	1.408E-05
Pu-240	Pu-240	4.950E-08	8.634E-08	8.633E-08
Pu-240	Pu-240	1.000E+00	1.744E+00	1.744E+00
Pu-240	∑DOSE(j)		1.744E+00	1.744E+00
U-236	Pu-240	1.000E+00	3.576E-08	6.035E-08
Th-232	Pu-240	1.000E+00	1.110E-17	1.339E-17
Ra-228	Pu-240	1.000E+00	3.468E-20	4.229E-20
Th-228	Pu-240	1.000E+00	4.339E-18	4.417E-18
Tc-99	Tc-99	1.000E+00	8.826E-03	8.825E-03
U-234	U-234	1.000E+00	8.744E-01	8.743E-01
U-234	U-238	9.999E-01	3.714E-06	6.189E-06
U-234	∑DOSE(j)		8.744E-01	8.743E-01
Th-230	U-234	1.000E+00	3.074E-06	4.337E-06
Th-230	U-238	9.999E-01	3.029E-08	3.029E-08
Th-230	∑DOSE(j)		3.105E-06	4.368E-06

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
Ra-226	U-234	1.000E+00	7.666E-08	7.729E-08
Ra-226	U-238	9.999E-01	5.955E-08	5.954E-08
Ra-226	∑DOSE(j)		1.362E-07	1.368E-07
Pb-210	U-234	1.000E+00	9.198E-07	9.196E-07
Pb-210	U-238	9.999E-01	7.017E-07	7.016E-07
Pb-210	∑DOSE(j)		1.621E-06	1.621E-06
U-238	U-238	5.400E-05	4.254E-05	4.254E-05
U-238	U-238	9.999E-01	8.302E-01	8.301E-01
U-238	∑DOSE(j)		8.302E-01	8.301E-01

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

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
Am-241	Am-241	1.000E+00	1.000E+00	9.984E-01
Np-237	Am-241	1.000E+00	0.000E+00	3.235E-07
Np-237	Np-237	1.000E+00	1.000E+00	9.993E-01
Np-237	∑S(j):		1.000E+00	9.993E-01
U-233	Am-241	1.000E+00	0.000E+00	7.077E-13
U-233	Np-237	1.000E+00	0.000E+00	4.371E-06
U-233	∑S(j):		0.000E+00	4.371E-06
Th-229	Am-241	1.000E+00	0.000E+00	2.228E-17
Th-229	Np-237	1.000E+00	0.000E+00	2.064E-10
Th-229	∑S(j):		0.000E+00	2.064E-10
Pu-239	Pu-239	1.000E+00	1.000E+00	1.000E+00
U-235	Pu-239	1.000E+00	0.000E+00	9.848E-10
U-235	U-235	1.000E+00	1.000E+00	9.999E-01
U-235	∑S(j):		1.000E+00	9.999E-01
Pa-231	Pu-239	1.000E+00	0.000E+00	1.042E-14
Pa-231	U-235	1.000E+00	0.000E+00	2.116E-05
Pa-231	∑S(j):		0.000E+00	2.116E-05
Ac-227	Pu-239	1.000E+00	0.000E+00	1.097E-16
Ac-227	U-235	1.000E+00	0.000E+00	3.332E-07
Ac-227	∑S(j):		0.000E+00	3.332E-07
Pu-240	Pu-240	4.950E-08	4.950E-08	4.949E-08
Pu-240	Pu-240	1.000E+00	1.000E+00	9.999E-01
Pu-240	∑S(j):		1.000E+00	9.999E-01
U-236	Pu-240	1.000E+00	0.000E+00	2.960E-08
Th-232	Pu-240	1.000E+00	0.000E+00	7.302E-19
Ra-228	Pu-240	1.000E+00	0.000E+00	2.848E-20
Th-228	Pu-240	1.000E+00	0.000E+00	2.417E-21
Tc-99	Tc-99	1.000E+00	1.000E+00	9.998E-01
U-234	U-234	1.000E+00	1.000E+00	9.999E-01
U-234	U-238	9.999E-01	0.000E+00	2.835E-06
U-234	∑S(j):		1.000E+00	9.999E-01
Th-230	U-234	1.000E+00	0.000E+00	9.001E-06
Th-230	U-238	9.999E-01	0.000E+00	1.276E-11
Th-230	∑S(j):		0.000E+00	9.001E-06

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
Ra-226	U-234	1.000E+00	0.000E+00	1.950E-09
Ra-226	U-238	9.999E-01	0.000E+00	1.842E-15
Ra-226	∑S(j):		0.000E+00	1.950E-09
Pb-210	U-234	1.000E+00	0.000E+00	2.004E-11
Pb-210	U-238	9.999E-01	0.000E+00	1.423E-17
Pb-210	∑S(j):		0.000E+00	2.004E-11
U-238	U-238	5.400E-05	5.400E-05	5.399E-05
U-238	U-238	9.999E-01	9.999E-01	9.998E-01
U-238	∑S(j):		1.000E+00	9.999E-01

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

RESCALC.EXE execution time = 55.00 seconds