Summary : RESRAD Default Parameters
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\707_SU_19 BACKFILL.RAD

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Dose Conversion Factor (and Related) Parameter Summary
Dose Library: FGR 12 & 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-227 (Source: FGR 12)	4.951E-04	4.951E-04	DCF1(1)
A-1	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	DCF1(2)
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(3)
A-1	Bi-210 (Source: FGR 12)	3.606E-03	3.606E-03	DCF1(4)
A-1	Bi-211 (Source: FGR 12)	2.559E-01	2.559E-01	DCF1(5)
A-1	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	DCF1(6)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(7)
A-1	Fr-223 (Source: FGR 12)	1.980E-01	1.980E-01	DCF1(8)
A-1	Pa-231 (Source: FGR 12)	1.906E-01	1.906E-01	DCF1(9)
A-1	Pb-210 (Source: FGR 12)	2.447E-03	2.447E-03	DCF1(10)
A-1	Pb-211 (Source: FGR 12)	3.064E-01	3.064E-01	DCF1(11)
A-1	Pb-214 (Source: FGR 12)	1.341E+00	1.341E+00	DCF1(12)
A-1	Po-210 (Source: FGR 12)	5.231E-05	5.231E-05	DCF1(13)
A-1	Po-211 (Source: FGR 12)	4.764E-02	4.764E-02	DCF1(14)
A-1	Po-214 (Source: FGR 12)	5.138E-04	5.138E-04	DCF1(15)
A-1	Po-215 (Source: FGR 12)	1.016E-03	1.016E-03	DCF1(16)
A-1	Po-218 (Source: FGR 12)	5.642E-05	5.642E-05	DCF1(17)
A-1	Pu-239 (Source: FGR 12)	2.952E-04	2.952E-04	DCF1(18)
A-1	Ra-223 (Source: FGR 12)	6.034E-01	6.034E-01	DCF1(19)
A-1	Ra-226 (Source: FGR 12)	3.176E-02	3.176E-02	DCF1(20)
A-1	Rn-219 (Source: FGR 12)	3.083E-01	3.083E-01	DCF1(21)
A-1	Rn-222 (Source: FGR 12)	2.354E-03	2.354E-03	DCF1(22)
A-1	Sr-90 (Source: FGR 12)	7.043E-04	7.043E-04	DCF1(23)
A-1	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCF1(24)
A-1	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCF1(25)
A-1	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCF1(26)
A-1	Tl-210 (Source: no data)	0.000E+00	-2.000E+00	DCF1(27)
A-1	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCF1(28)
A-1	Y-90 (Source: FGR 12)	2.391E-02	2.391E-02	DCF1(29)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.724E+00	6.700E+00	DCF2(1)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(2)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(3)
B-1	Pb-210+D	2.320E-02	1.360E-02	DCF2(4)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(5)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(6)
B-1	Sr-90+D	1.308E-03	1.300E-03	DCF2(7)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(8)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.410E-02	DCF3(1)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(2)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(3)
D-1	Pb-210+D	7.276E-03	5.370E-03	DCF3(4)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(5)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(6)
D-1	Sr-90+D	1.528E-04	1.420E-04	DCF3(7)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(8)

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: FGR 12 & FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
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	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(2,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(2,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(2,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(3,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(3,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(3,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(4,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(4,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(4,3)
D-34				
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(5,2)
D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(5,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(6,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(6,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(6,3)
D-34				
D-34	Sr-90+D , plant/soil concentration ratio, dimensionless	3.000E-01	3.000E-01	RTF(7,1)
D-34	Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-03	8.000E-03	RTF(7,2)
D-34	Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(7,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(8,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(8,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(8,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5				
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(2,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(2,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(3,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(3,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(4,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5				
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(5,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(5,2)
D-5				

Dose Conversion Factor (and Related) Parameter Summary (continued)
Dose Library: FGR 12 & FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(6,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(6,2)
D-5				
D-5	Sr-90+D , fish	6.000E+01	6.000E+01	BIOFAC(7,1)
D-5	Sr-90+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(8,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(8,2)

#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)	8.530E+02	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.000E+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)	2.921E+01	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	4.500E-02	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Pb-210	5.700E-02	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.300E-02	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Ra-226	5.700E-02	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Sr-90	1.490E-01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): U-235	8.800E-02	0.000E+00	---	S1(8)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Pb-210	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Ra-226	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Sr-90	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(8)
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)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	2.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	1.000E+00	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.000E-01	4.000E-01	---	TPSZ

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	1.000E-03	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	1.000E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.500E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS
R015	Unsat. zone 1, thickness (m)	4.000E+00	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	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.623E-05	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Pb-210				
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.663E-03	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	2.000E+03	2.000E+03	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.332E-05	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Ra-226				
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.374E-03	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Sr-90				
R016	Contaminated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCU(7,1)
R016	Saturated zone (cm**3/g)	3.000E+01	3.000E+01	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.516E-03	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.319E-03	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
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	8.245E-03	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)	5.000E+01	5.000E+01	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(3,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.319E-03	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	7.000E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.500E-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)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	9.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	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)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+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	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.427E+00	FPLANT
R018	Contamination fraction of meat	-1	-1	0.426E-01	FMEAT
R018	Contamination fraction of milk	-1	-1	0.426E-01	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	5.500E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	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)	7.000E-01	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)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	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	2.500E-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	2.000E+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
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	32	---	---	NPTS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	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	active
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	suppressed

Summary : RESRAD Default Parameters

File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\707_SU_19 BACKFILL.RAD

Contaminated Zone Dimensions	
Area:	853.00 square meters
Thickness:	2.00 meters
Cover Depth:	0.00 meters

Initial Soil Concentrations, pCi/g	
Cs-137	4.500E-02
Pb-210	5.700E-02
Pu-239	1.300E-02
Ra-226	5.700E-02
Sr-90	1.490E-01
U-235	8.800E-02

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):	1.537E+00	1.518E+00	1.481E+00	1.365E+00	1.123E+00	7.512E-01	4.156E-01	7.550E-01
M(t):	6.147E-02	6.071E-02	5.924E-02	5.461E-02	4.492E-02	3.005E-02	1.662E-02	3.020E-02

Maximum TDOSE(t): 1.537E+00 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.
Cs-137	8.040E-02	0.0523	7.034E-08	0.0000	0.000E+00	0.0000	6.602E-03	0.0043	5.774E-04	0.0004	1.885E-04	0.0001	5.194E-05	0.0000
Pb-210	1.864E-04	0.0001	6.448E-05	0.0000	0.000E+00	0.0000	3.029E-01	0.1971	1.035E-03	0.0007	5.045E-04	0.0003	9.528E-03	0.0062
Pu-239	2.099E-06	0.0000	2.764E-04	0.0002	0.000E+00	0.0000	3.418E-03	0.0022	7.026E-06	0.0000	1.002E-07	0.0000	1.075E-03	0.0007
Ra-226	3.407E-01	0.2217	2.526E-05	0.0000	0.000E+00	0.0000	2.288E-01	0.1489	6.765E-04	0.0004	8.076E-04	0.0005	1.904E-03	0.0012
Sr-90	1.928E-03	0.0013	9.523E-06	0.0000	0.000E+00	0.0000	4.996E-01	0.3251	1.009E-02	0.0066	2.995E-03	0.0019	5.239E-04	0.0003
U-235	3.644E-02	0.0237	5.357E-04	0.0003	0.000E+00	0.0000	4.367E-03	0.0028	1.451E-05	0.0000	3.527E-05	0.0000	5.487E-04	0.0004
Total	4.597E-01	0.2991	9.115E-04	0.0006	0.000E+00	0.0000	1.046E+00	0.6804	1.240E-02	0.0081	4.531E-03	0.0029	1.363E-02	0.0089

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.
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	8.782E-02	0.0571
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.142E-01	0.2044
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	4.778E-03	0.0031
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.729E-01	0.3728
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	5.151E-01	0.3352
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	4.194E-02	0.0273
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	1.537E+00	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.
Cs-137	7.856E-02	0.0518	6.873E-08	0.0000	0.000E+00	0.0000	6.451E-03	0.0043	5.641E-04	0.0004	1.842E-04	0.0001	5.075E-05	0.0000
Pb-210	1.804E-04	0.0001	6.240E-05	0.0000	0.000E+00	0.0000	2.931E-01	0.1931	1.002E-03	0.0007	4.882E-04	0.0003	9.221E-03	0.0061
Pu-239	2.099E-06	0.0000	2.764E-04	0.0002	0.000E+00	0.0000	3.418E-03	0.0023	7.026E-06	0.0000	1.002E-07	0.0000	1.074E-03	0.0007
Ra-226	3.398E-01	0.2239	2.715E-05	0.0000	0.000E+00	0.0000	2.376E-01	0.1565	7.079E-04	0.0005	8.212E-04	0.0005	2.190E-03	0.0014
Sr-90	1.872E-03	0.0012	9.248E-06	0.0000	0.000E+00	0.0000	4.852E-01	0.3197	9.798E-03	0.0065	2.909E-03	0.0019	5.088E-04	0.0003
U-235	3.632E-02	0.0239	5.341E-04	0.0004	0.000E+00	0.0000	4.367E-03	0.0029	1.477E-05	0.0000	3.515E-05	0.0000	5.474E-04	0.0004
Total	4.567E-01	0.3009	9.093E-04	0.0006	0.000E+00	0.0000	1.030E+00	0.6787	1.209E-02	0.0080	4.438E-03	0.0029	1.359E-02	0.0090

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.
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	8.581E-02	0.0565
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.041E-01	0.2003
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	4.778E-03	0.0031
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.811E-01	0.3828
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	5.003E-01	0.3296
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	4.182E-02	0.0276
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	1.518E+00	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 = 3.000E+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.
Cs-137	7.501E-02	0.0506	6.562E-08	0.0000	0.000E+00	0.0000	6.160E-03	0.0042	5.386E-04	0.0004	1.759E-04	0.0001	4.845E-05	0.0000
Pb-210	1.689E-04	0.0001	5.844E-05	0.0000	0.000E+00	0.0000	2.745E-01	0.1854	9.385E-04	0.0006	4.573E-04	0.0003	8.637E-03	0.0058
Pu-239	2.098E-06	0.0000	2.763E-04	0.0002	0.000E+00	0.0000	3.417E-03	0.0023	7.024E-06	0.0000	1.002E-07	0.0000	1.074E-03	0.0007
Ra-226	3.379E-01	0.2282	3.075E-05	0.0000	0.000E+00	0.0000	2.538E-01	0.1714	7.641E-04	0.0005	8.459E-04	0.0006	2.731E-03	0.0018
Sr-90	1.766E-03	0.0012	8.722E-06	0.0000	0.000E+00	0.0000	4.575E-01	0.3090	9.240E-03	0.0062	2.743E-03	0.0019	4.798E-04	0.0003
U-235	3.608E-02	0.0244	5.309E-04	0.0004	0.000E+00	0.0000	4.368E-03	0.0029	1.530E-05	0.0000	3.492E-05	0.0000	5.447E-04	0.0004
Total	4.509E-01	0.3045	9.052E-04	0.0006	0.000E+00	0.0000	9.998E-01	0.6751	1.150E-02	0.0078	4.257E-03	0.0029	1.351E-02	0.0091

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-	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.
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	8.193E-02	0.0553
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.848E-01	0.1923
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	4.777E-03	0.0032
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.961E-01	0.4025
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	4.718E-01	0.3186
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	4.158E-02	0.0281
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	1.481E+00	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+01 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.
Cs-137	6.379E-02	0.0467	5.581E-08	0.0000	0.000E+00	0.0000	5.238E-03	0.0038	4.581E-04	0.0003	1.496E-04	0.0001	4.121E-05	0.0000
Pb-210	1.343E-04	0.0001	4.647E-05	0.0000	0.000E+00	0.0000	2.183E-01	0.1599	7.463E-04	0.0005	3.636E-04	0.0003	6.867E-03	0.0050
Pu-239	2.097E-06	0.0000	2.761E-04	0.0002	0.000E+00	0.0000	3.414E-03	0.0025	7.018E-06	0.0000	1.001E-07	0.0000	1.073E-03	0.0008
Ra-226	3.313E-01	0.2427	4.140E-05	0.0000	0.000E+00	0.0000	3.017E-01	0.2210	9.299E-04	0.0007	9.175E-04	0.0007	4.340E-03	0.0032
Sr-90	1.438E-03	0.0011	7.103E-06	0.0000	0.000E+00	0.0000	3.727E-01	0.2730	7.526E-03	0.0055	2.234E-03	0.0016	3.908E-04	0.0003
U-235	3.526E-02	0.0258	5.203E-04	0.0004	0.000E+00	0.0000	4.373E-03	0.0032	1.707E-05	0.0000	3.412E-05	0.0000	5.362E-04	0.0004
Total	4.320E-01	0.3164	8.914E-04	0.0007	0.000E+00	0.0000	9.057E-01	0.6634	9.684E-03	0.0071	3.699E-03	0.0027	1.325E-02	0.0097

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-	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.
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	6.968E-02	0.0510
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.264E-01	0.1659
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	4.773E-03	0.0035
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.393E-01	0.4683
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.842E-01	0.2815
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	4.074E-02	0.0298
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	1.365E+00	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 = 3.000E+01 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.
Cs-137	4.016E-02	0.0358	3.513E-08	0.0000	0.000E+00	0.0000	3.298E-03	0.0029	2.884E-04	0.0003	9.416E-05	0.0001	2.594E-05	0.0000
Pb-210	6.979E-05	0.0001	2.414E-05	0.0000	0.000E+00	0.0000	1.134E-01	0.1010	3.877E-04	0.0003	1.889E-04	0.0002	3.567E-03	0.0032
Pu-239	2.092E-06	0.0000	2.755E-04	0.0002	0.000E+00	0.0000	3.407E-03	0.0030	7.003E-06	0.0000	9.991E-08	0.0000	1.071E-03	0.0010
Ra-226	3.133E-01	0.2790	5.969E-05	0.0001	0.000E+00	0.0000	3.818E-01	0.3399	1.209E-03	0.0011	1.028E-03	0.0009	7.140E-03	0.0064
Sr-90	8.000E-04	0.0007	3.952E-06	0.0000	0.000E+00	0.0000	2.073E-01	0.1846	4.187E-03	0.0037	1.243E-03	0.0011	2.174E-04	0.0002
U-235	3.301E-02	0.0294	4.940E-04	0.0004	0.000E+00	0.0000	4.399E-03	0.0039	2.165E-05	0.0000	3.195E-05	0.0000	5.153E-04	0.0005
Total	3.874E-01	0.3449	8.573E-04	0.0008	0.000E+00	0.0000	7.136E-01	0.6354	6.101E-03	0.0054	2.586E-03	0.0023	1.254E-02	0.0112

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-	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.
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	4.386E-02	0.0391
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.176E-01	0.1047
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	4.762E-03	0.0042
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.045E-01	0.6273
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.138E-01	0.1904
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	3.848E-02	0.0343
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	1.123E+00	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+02 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.
Cs-137	7.948E-03	0.0106	6.953E-09	0.0000	0.000E+00	0.0000	6.527E-04	0.0009	5.707E-05	0.0001	1.864E-05	0.0000	5.134E-06	0.0000
Pb-210	7.051E-06	0.0000	2.439E-06	0.0000	0.000E+00	0.0000	1.146E-02	0.0153	3.917E-05	0.0001	1.909E-05	0.0000	3.605E-04	0.0005
Pu-239	2.076E-06	0.0000	2.733E-04	0.0004	0.000E+00	0.0000	3.380E-03	0.0045	6.948E-06	0.0000	9.913E-08	0.0000	1.063E-03	0.0014
Ra-226	2.575E-01	0.3428	6.710E-05	0.0001	0.000E+00	0.0000	3.985E-01	0.5305	1.283E-03	0.0017	9.861E-04	0.0013	8.535E-03	0.0114
Sr-90	1.027E-04	0.0001	5.075E-07	0.0000	0.000E+00	0.0000	2.663E-02	0.0354	5.377E-04	0.0007	1.596E-04	0.0002	2.792E-05	0.0000
U-235	2.626E-02	0.0350	4.213E-04	0.0006	0.000E+00	0.0000	4.417E-03	0.0059	3.292E-05	0.0000	2.540E-05	0.0000	4.562E-04	0.0006
Total	2.918E-01	0.3884	7.647E-04	0.0010	0.000E+00	0.0000	4.450E-01	0.5924	1.957E-03	0.0026	1.209E-03	0.0016	1.045E-02	0.0139

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-	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.
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	8.681E-03	0.0116
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.189E-02	0.0158
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	4.725E-03	0.0063
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.668E-01	0.8877
Sr-90	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.745E-02	0.0365
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	3.161E-02	0.0421
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	7.512E-01	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 = 3.000E+02 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.
Cs-137	7.766E-05	0.0002	6.795E-11	0.0000	0.000E+00	0.0000	6.378E-06	0.0000	5.577E-07	0.0000	1.821E-07	0.0000	5.017E-08	0.0000
Pb-210	1.009E-08	0.0000	3.491E-09	0.0000	0.000E+00	0.0000	1.640E-05	0.0000	5.607E-08	0.0000	2.732E-08	0.0000	5.159E-07	0.0000
Pu-239	2.031E-06	0.0000	2.673E-04	0.0006	0.000E+00	0.0000	3.305E-03	0.0080	6.794E-06	0.0000	9.693E-08	0.0000	1.039E-03	0.0025
Ra-226	1.469E-01	0.3534	3.972E-05	0.0001	0.000E+00	0.0000	2.341E-01	0.5633	7.552E-04	0.0018	5.738E-04	0.0014	5.082E-03	0.0122
Sr-90	2.918E-07	0.0000	1.442E-09	0.0000	0.000E+00	0.0000	7.563E-05	0.0002	1.527E-06	0.0000	4.534E-07	0.0000	7.930E-08	0.0000
U-235	1.366E-02	0.0329	2.650E-04	0.0006	0.000E+00	0.0000	3.676E-03	0.0088	4.006E-05	0.0001	1.319E-05	0.0000	3.095E-04	0.0007
Total	1.606E-01	0.3865	5.720E-04	0.0014	0.000E+00	0.0000	2.412E-01	0.5803	8.042E-04	0.0019	5.877E-04	0.0014	6.431E-03	0.0155

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-	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.
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	8.483E-05	0.0002
Pb-210	0.000E+00	0.0000	0.000E+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-05	0.0000
Pu-239	2.317E-11	0.0000	2.600E-14	0.0000	0.000E+00	0.0000	1.517E-12	0.0000	4.194E-16	0.0000	9.231E-16	0.0000	4.620E-03	0.0111
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.874E-01	0.9322
Sr-90	5.176E-05	0.0001	2.454E-08	0.0000	0.000E+00	0.0000	3.659E-06	0.0000	3.802E-07	0.0000	2.075E-07	0.0000	1.340E-04	0.0003
U-235	5.014E-03	0.0121	5.627E-06	0.0000	0.000E+00	0.0000	3.284E-04	0.0008	9.079E-08	0.0000	1.998E-07	0.0000	2.331E-02	0.0561
Total	5.065E-03	0.0122	5.651E-06	0.0000	0.000E+00	0.0000	3.321E-04	0.0008	4.710E-07	0.0000	4.073E-07	0.0000	4.156E-01	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+03 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.
Cs-137	7.164E-12	0.0000	6.268E-18	0.0000	0.000E+00	0.0000	5.884E-13	0.0000	5.145E-14	0.0000	1.680E-14	0.0000	4.628E-15	0.0000
Pb-210	1.120E-18	0.0000	3.873E-19	0.0000	0.000E+00	0.0000	1.819E-15	0.0000	6.219E-18	0.0000	3.030E-18	0.0000	5.723E-17	0.0000
Pu-239	1.878E-06	0.0000	2.471E-04	0.0003	0.000E+00	0.0000	3.056E-03	0.0040	6.281E-06	0.0000	8.962E-08	0.0000	9.606E-04	0.0013
Ra-226	2.059E-02	0.0273	5.568E-06	0.0000	0.000E+00	0.0000	3.282E-02	0.0435	1.059E-04	0.0001	8.043E-05	0.0001	7.124E-04	0.0009
Sr-90	3.563E-16	0.0000	1.760E-18	0.0000	0.000E+00	0.0000	9.234E-14	0.0000	1.865E-15	0.0000	5.536E-16	0.0000	9.683E-17	0.0000
U-235	1.387E-03	0.0018	4.231E-05	0.0001	0.000E+00	0.0000	8.364E-04	0.0011	1.177E-05	0.0000	1.332E-06	0.0000	5.572E-05	0.0001
Total	2.198E-02	0.0291	2.950E-04	0.0004	0.000E+00	0.0000	3.671E-02	0.0486	1.239E-04	0.0002	8.185E-05	0.0001	1.729E-03	0.0023

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-	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.
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	7.826E-12	0.0000
Pb-210	8.406E-15	0.0000	1.646E-17	0.0000	0.000E+00	0.0000	5.526E-16	0.0000	6.141E-18	0.0000	5.040E-18	0.0000	1.087E-14	0.0000
Pu-239	1.510E-08	0.0000	1.052E-11	0.0000	0.000E+00	0.0000	9.910E-10	0.0000	1.306E-11	0.0000	5.197E-12	0.0000	4.272E-03	0.0057
Ra-226	4.211E-01	0.5578	7.042E-04	0.0009	0.000E+00	0.0000	2.774E-02	0.0367	3.242E-04	0.0004	3.737E-04	0.0005	5.046E-01	0.6683
Sr-90	3.670E-13	0.0000	1.740E-16	0.0000	0.000E+00	0.0000	2.595E-14	0.0000	2.701E-15	0.0000	1.472E-15	0.0000	4.925E-13	0.0000
U-235	2.284E-01	0.3025	1.593E-04	0.0002	0.000E+00	0.0000	1.499E-02	0.0199	2.261E-04	0.0003	7.081E-05	0.0001	2.461E-01	0.3260
Total	6.495E-01	0.8603	8.635E-04	0.0011	0.000E+00	0.0000	4.273E-02	0.0566	5.503E-04	0.0007	4.445E-04	0.0006	7.550E-01	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 (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
Cs-137+D	Cs-137+D	1.000E+00	1.952E+00	1.907E+00	1.821E+00	1.548E+00	9.747E-01	1.929E-01	1.885E-03	1.739E-10
Pb-210+D	Pb-210+D	1.000E+00	5.512E+00	5.334E+00	4.996E+00	3.973E+00	2.064E+00	2.085E-01	2.985E-04	1.908E-13
Pu-239	Pu-239	1.000E+00	3.676E-01	3.675E-01	3.674E-01	3.672E-01	3.663E-01	3.635E-01	3.554E-01	3.286E-01
Pu-239	U-235+D	1.000E+00	2.339E-10	7.022E-10	1.634E-09	4.847E-09	1.361E-08	3.993E-08	8.766E-08	4.565E-07
Pu-239	Pa-231	1.000E+00	2.708E-14	1.977E-13	1.061E-12	9.438E-12	7.634E-11	7.105E-10	4.144E-09	2.223E-07
Pu-239	Ac-227+D	1.000E+00	1.534E-16	2.060E-15	2.216E-14	5.244E-13	1.023E-11	1.954E-10	3.465E-09	7.050E-07
Pu-239	∑DSR(j)		3.676E-01	3.675E-01	3.674E-01	3.672E-01	3.663E-01	3.635E-01	3.554E-01	3.286E-01
Ra-226+D	Ra-226+D	1.000E+00	9.950E+00	9.922E+00	9.867E+00	9.675E+00	9.147E+00	7.515E+00	4.287E+00	2.223E+00
Ra-226+D	Pb-210+D	1.000E+00	1.015E-01	2.721E-01	5.907E-01	1.541E+00	3.213E+00	4.184E+00	2.510E+00	6.629E+00
Ra-226+D	∑DSR(j)		1.005E+01	1.019E+01	1.046E+01	1.122E+01	1.236E+01	1.170E+01	6.797E+00	8.852E+00
Sr-90+D	Sr-90+D	1.000E+00	3.457E+00	3.358E+00	3.166E+00	2.579E+00	1.435E+00	1.843E-01	8.994E-04	3.306E-12
U-235+D	U-235+D	1.000E+00	4.765E-01	4.750E-01	4.718E-01	4.610E-01	4.314E-01	3.419E-01	1.761E-01	6.767E-01
U-235+D	Pa-231	1.000E+00	8.510E-05	2.620E-04	6.137E-04	1.808E-03	4.922E-03	1.285E-02	1.975E-02	5.557E-01
U-235+D	Ac-227+D	1.000E+00	5.943E-07	3.759E-06	1.846E-05	1.451E-04	9.148E-04	4.395E-03	6.911E-02	1.565E+00
U-235+D	∑DSR(j)		4.766E-01	4.752E-01	4.725E-01	4.629E-01	4.372E-01	3.592E-01	2.649E-01	2.797E+00

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	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cs-137	1.281E+01	1.311E+01	1.373E+01	1.615E+01	2.565E+01	1.296E+02	1.326E+04	1.438E+11
Pb-210	4.536E+00	4.687E+00	5.004E+00	6.293E+00	1.211E+01	1.199E+02	8.376E+04	*7.634E+13
Pu-239	6.801E+01	6.802E+01	6.804E+01	6.809E+01	6.824E+01	6.878E+01	7.034E+01	7.608E+01
Ra-226	2.487E+00	2.452E+00	2.391E+00	2.229E+00	2.023E+00	2.137E+00	3.678E+00	2.824E+00
Sr-90	7.231E+00	7.446E+00	7.896E+00	9.694E+00	1.743E+01	1.357E+02	2.780E+04	7.563E+12
U-235	5.245E+01	5.261E+01	5.291E+01	5.400E+01	5.718E+01	6.960E+01	9.437E+01	8.938E+00

*At specific activity limit

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)
Cs-137	4.500E-02	0.000E+00	1.952E+00	1.281E+01	1.952E+00	1.281E+01
Pb-210	5.700E-02	0.000E+00	5.512E+00	4.536E+00	5.512E+00	4.536E+00
Pu-239	1.300E-02	0.000E+00	3.676E-01	6.801E+01	3.676E-01	6.801E+01
Ra-226	5.700E-02	48.20 ± 0.10	1.260E+01	1.984E+00	1.005E+01	2.487E+00
Sr-90	1.490E-01	0.000E+00	3.457E+00	7.231E+00	3.457E+00	7.231E+00
U-235	8.800E-02	895 ± 2	3.533E+00	7.076E+00	4.766E-01	5.245E+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	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cs-137	Cs-137	1.000E+00	8.782E-02	8.581E-02	8.193E-02	6.968E-02	4.386E-02	8.681E-03	8.483E-05	7.826E-12
Pb-210	Pb-210	1.000E+00	3.142E-01	3.041E-01	2.848E-01	2.264E-01	1.176E-01	1.189E-02	1.701E-05	1.087E-14
Pb-210	Ra-226	1.000E+00	5.785E-03	1.551E-02	3.367E-02	8.783E-02	1.832E-01	2.385E-01	1.431E-01	3.779E-01
Pb-210	∑DOSE(j)		3.200E-01	3.196E-01	3.184E-01	3.143E-01	3.008E-01	2.504E-01	1.431E-01	3.779E-01
Pu-239	Pu-239	1.000E+00	4.778E-03	4.778E-03	4.777E-03	4.773E-03	4.762E-03	4.725E-03	4.620E-03	4.272E-03
U-235	Pu-239	1.000E+00	3.041E-12	9.129E-12	2.125E-11	6.301E-11	1.770E-10	5.192E-10	1.140E-09	5.934E-09
U-235	U-235	1.000E+00	4.194E-02	4.180E-02	4.152E-02	4.057E-02	3.796E-02	3.009E-02	1.549E-02	5.955E-02
U-235	∑DOSE(j)		4.194E-02	4.180E-02	4.152E-02	4.057E-02	3.796E-02	3.009E-02	1.549E-02	5.955E-02
Pa-231	Pu-239	1.000E+00	3.520E-16	2.570E-15	1.379E-14	1.227E-13	9.924E-13	9.236E-12	5.387E-11	2.890E-09
Pa-231	U-235	1.000E+00	7.489E-06	2.306E-05	5.401E-05	1.591E-04	4.331E-04	1.131E-03	1.738E-03	4.890E-02
Pa-231	∑DOSE(j)		7.489E-06	2.306E-05	5.401E-05	1.591E-04	4.331E-04	1.131E-03	1.738E-03	4.890E-02
Ac-227	Pu-239	1.000E+00	1.995E-18	2.677E-17	2.881E-16	6.817E-15	1.331E-13	2.541E-12	4.504E-11	9.165E-09
Ac-227	U-235	1.000E+00	5.230E-08	3.308E-07	1.624E-06	1.277E-05	8.050E-05	3.868E-04	6.082E-03	1.377E-01
Ac-227	∑DOSE(j)		5.230E-08	3.308E-07	1.624E-06	1.277E-05	8.050E-05	3.868E-04	6.082E-03	1.377E-01
Ra-226	Ra-226	1.000E+00	5.672E-01	5.656E-01	5.624E-01	5.515E-01	5.214E-01	4.284E-01	2.443E-01	1.267E-01
Sr-90	Sr-90	1.000E+00	5.151E-01	5.003E-01	4.718E-01	3.842E-01	2.138E-01	2.745E-02	1.340E-04	4.925E-13

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	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Cs-137	Cs-137	1.000E+00	4.500E-02	4.397E-02	4.198E-02	3.570E-02	2.248E-02	4.448E-03	4.347E-05	4.010E-12
Pb-210	Pb-210	1.000E+00	5.700E-02	5.516E-02	5.167E-02	4.108E-02	2.134E-02	2.156E-03	3.086E-06	3.424E-16
Pb-210	Ra-226	1.000E+00	0.000E+00	1.741E-03	5.041E-03	1.489E-02	3.224E-02	4.246E-02	2.549E-02	3.574E-03
Pb-210	∑S(j):		5.700E-02	5.690E-02	5.671E-02	5.597E-02	5.358E-02	4.461E-02	2.549E-02	3.574E-03
Pu-239	Pu-239	1.000E+00	1.300E-02	1.300E-02	1.300E-02	1.299E-02	1.296E-02	1.286E-02	1.257E-02	1.162E-02
U-235	Pu-239	1.000E+00	0.000E+00	1.278E-11	3.821E-11	1.259E-10	3.650E-10	1.083E-09	2.385E-09	3.424E-09
U-235	U-235	1.000E+00	8.800E-02	8.771E-02	8.713E-02	8.513E-02	7.966E-02	6.314E-02	3.251E-02	3.184E-03
U-235	∑S(j):		8.800E-02	8.771E-02	8.713E-02	8.513E-02	7.966E-02	6.314E-02	3.251E-02	3.184E-03
Pa-231	Pu-239	1.000E+00	0.000E+00	1.351E-16	1.211E-15	1.324E-14	1.140E-13	1.084E-12	6.362E-12	1.944E-11
Pa-231	U-235	1.000E+00	0.000E+00	1.856E-06	5.530E-06	1.801E-05	5.055E-05	1.335E-04	2.057E-04	6.666E-05
Pa-231	∑S(j):		0.000E+00	1.856E-06	5.530E-06	1.801E-05	5.055E-05	1.335E-04	2.057E-04	6.666E-05
Ac-227	Pu-239	1.000E+00	0.000E+00	1.421E-18	3.748E-17	1.282E-15	2.794E-14	5.541E-13	4.478E-12	1.528E-11
Ac-227	U-235	1.000E+00	0.000E+00	2.918E-08	2.546E-07	2.546E-06	1.726E-05	8.495E-05	1.620E-04	5.618E-05
Ac-227	∑S(j):		0.000E+00	2.918E-08	2.546E-07	2.546E-06	1.726E-05	8.495E-05	1.620E-04	5.618E-05
Ra-226	Ra-226	1.000E+00	5.700E-02	5.684E-02	5.652E-02	5.542E-02	5.240E-02	4.305E-02	2.456E-02	3.442E-03
Sr-90	Sr-90	1.000E+00	1.490E-01	1.447E-01	1.365E-01	1.111E-01	6.183E-02	7.941E-03	2.255E-05	2.754E-14

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

RESCALC.EXE execution time = 1.20 seconds