Summary : MTW Pond E Farmer - Deterministic Run - NO COVER
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\MTW\MTW_POND_E_FARMER-DET_NC.RAD

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Part I: Mixture Sums and Single Radionuclide Guidelines

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	Ac-228 (Source: FGR 12)	5.978E+00	5.978E+00	DCF1(2)
A-1	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	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-212 (Source: FGR 12)	1.171E+00	1.171E+00	DCF1(6)
A-1	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	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	Pa-234 (Source: FGR 12)	1.155E+01	1.155E+01	DCF1(10)
A-1	Pa-234m (Source: FGR 12)	8.967E-02	8.967E-02	DCF1(11)
A-1	Pb-210 (Source: FGR 12)	2.447E-03	2.447E-03	DCF1(12)
A-1	Pb-211 (Source: FGR 12)	3.064E-01	3.064E-01	DCF1(13)
A-1	Pb-212 (Source: FGR 12)	7.043E-01	7.043E-01	DCF1(14)
A-1	Pb-214 (Source: FGR 12)	1.341E+00	1.341E+00	DCF1(15)
A-1	Po-210 (Source: FGR 12)	5.231E-05	5.231E-05	DCF1(16)
A-1	Po-211 (Source: FGR 12)	4.764E-02	4.764E-02	DCF1(17)
A-1	Po-212 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1(18)
A-1	Po-214 (Source: FGR 12)	5.138E-04	5.138E-04	DCF1(19)
A-1	Po-215 (Source: FGR 12)	1.016E-03	1.016E-03	DCF1(20)
A-1	Po-216 (Source: FGR 12)	1.042E-04	1.042E-04	DCF1(21)
A-1	Po-218 (Source: FGR 12)	5.642E-05	5.642E-05	DCF1(22)
A-1	Ra-223 (Source: FGR 12)	6.034E-01	6.034E-01	DCF1(23)
A-1	Ra-224 (Source: FGR 12)	5.119E-02	5.119E-02	DCF1(24)
A-1	Ra-226 (Source: FGR 12)	3.176E-02	3.176E-02	DCF1(25)
A-1	Ra-228 (Source: FGR 12)	0.000E+00	0.000E+00	DCF1(26)
A-1	Rn-219 (Source: FGR 12)	3.083E-01	3.083E-01	DCF1(27)
A-1	Rn-220 (Source: FGR 12)	2.298E-03	2.298E-03	DCF1(28)
A-1	Rn-222 (Source: FGR 12)	2.354E-03	2.354E-03	DCF1(29)
A-1	Th-227 (Source: FGR 12)	5.212E-01	5.212E-01	DCF1(30)
A-1	Th-228 (Source: FGR 12)	7.940E-03	7.940E-03	DCF1(31)
A-1	Th-230 (Source: FGR 12)	1.209E-03	1.209E-03	DCF1(32)
A-1	Th-231 (Source: FGR 12)	3.643E-02	3.643E-02	DCF1(33)
A-1	Th-232 (Source: FGR 12)	5.212E-04	5.212E-04	DCF1(34)
A-1	Th-234 (Source: FGR 12)	2.410E-02	2.410E-02	DCF1(35)
A-1	Tl-207 (Source: FGR 12)	1.980E-02	1.980E-02	DCF1(36)
A-1	Tl-208 (Source: FGR 12)	2.298E+01	2.298E+01	DCF1(37)
A-1	Tl-210 (Source: no data)	0.000E+00	-2.000E+00	DCF1(38)
A-1	U-234 (Source: FGR 12)	4.017E-04	4.017E-04	DCF1(39)
A-1	U-235 (Source: FGR 12)	7.211E-01	7.211E-01	DCF1(40)
A-1	U-236 (Source: FGR 12)	2.148E-04	2.148E-04	DCF1(41)
A-1	U-238 (Source: FGR 12)	1.031E-04	1.031E-04	DCF1(42)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.724E+00	6.700E+00	DCF2(1)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(2)
B-1	Pb-210+D	2.320E-02	1.360E-02	DCF2(3)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(4)
B-1	Ra-228+D	5.078E-03	4.770E-03	DCF2(5)

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

Menu	Parameter	Current Value#	Base Case*	Parameter Name
B-1	Th-228+D	3.454E-01	3.420E-01	DCF2(6)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(7)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(8)
B-1	U-234	1.320E-01	1.320E-01	DCF2(9)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(10)
B-1	U-236	1.250E-01	1.250E-01	DCF2(11)
B-1	U-238	1.180E-01	1.180E-01	DCF2(12)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(13)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.410E-02	DCF3(1)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(2)
D-1	Pb-210+D	7.276E-03	5.370E-03	DCF3(3)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(4)
D-1	Ra-228+D	1.442E-03	1.440E-03	DCF3(5)
D-1	Th-228+D	8.086E-04	3.960E-04	DCF3(6)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(7)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(8)
D-1	U-234	2.830E-04	2.830E-04	DCF3(9)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(10)
D-1	U-236	2.690E-04	2.690E-04	DCF3(11)
D-1	U-238	2.550E-04	2.550E-04	DCF3(12)
D-1	U-238+D	2.687E-04	2.550E-04	DCF3(13)
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	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(2,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(2,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(2,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(3,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(3,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(3,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(4,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(5,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(5,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(5,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(6,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(6,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(6,3)
D-34				

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

Menu	Parameter	Current Value#	Base Case*	Parameter Name
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(7,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(7,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(7,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(8,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(8,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(8,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(9,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(9,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(9,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(10,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(10,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(10,3)
D-34				
D-34	U-236 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(11,1)
D-34	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(11,2)
D-34	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(11,3)
D-34				
D-34	U-238 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(12,1)
D-34	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(12,2)
D-34	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(12,3)
D-34				
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(13,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(13,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(13,3)
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	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(2,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(2,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(3,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(3,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(4,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(4,2)
D-5				
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(5,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(5,2)
D-5				
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(6,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(6,2)
D-5				
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(7,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(7,2)
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	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(8,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(8,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(9,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(9,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(10,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(10,2)
D-5				
D-5	U-236 , fish	1.000E+01	1.000E+01	BIOFAC(11,1)
D-5	U-236 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(11,2)
D-5				
D-5	U-238 , fish	1.000E+01	1.000E+01	BIOFAC(12,1)
D-5	U-238 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(12,2)
D-5				
D-5	U-238+D , fish	1.000E+01	1.000E+01	BIOFAC(13,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(13,2)

#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)	1.200E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	3.453E+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)	1.650E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	2.500E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Pa-231	7.000E-02	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Ra-226	3.400E-01	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): Th-228	3.000E-02	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Th-230	8.300E-01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Th-232	3.000E-02	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): U-234	1.186E+02	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): U-235	5.110E+00	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): U-236	2.910E+00	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): U-238	1.227E+02	0.000E+00	---	S1(12)
R012	Concentration in groundwater (pCi/L): Pa-231	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Ra-226	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): U-236	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(12)
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)	1.438E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	3.490E-05	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.100E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.600E+00	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	1.350E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.300E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	6.200E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	1.250E+00	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R013	Runoff coefficient	4.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	2.778E+05	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)	1.510E+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	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.500E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	4.800E-03	2.000E-02	---	HGWT
R014	Saturated zone b parameter	9.700E-01	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)	1.050E+02	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.500E+03	2.500E+02	---	UW
R015	Number of unsaturated zone strata	5	1	---	NS
R015	Unsat. zone 1, thickness (m)	6.860E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.695E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	3.600E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.890E-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	9.870E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.262E+02	1.000E+01	---	HCUZ(1)
R015	Unsat. zone 2, thickness (m)	1.710E+00	0.000E+00	---	H(2)
R015	Unsat. zone 2, soil density (g/cm**3)	1.563E+00	1.500E+00	---	DENSUZ(2)
R015	Unsat. zone 2, total porosity	4.090E-01	4.000E-01	---	TPUZ(2)
R015	Unsat. zone 2, effective porosity	3.500E-01	2.000E-01	---	EPUZ(2)
R015	Unsat. zone 2, field capacity	2.000E-01	2.000E-01	---	FCUZ(2)
R015	Unsat. zone 2, soil-specific b parameter	1.350E+00	5.300E+00	---	BUZ(2)
R015	Unsat. zone 2, hydraulic conductivity (m/yr)	1.025E+03	1.000E+01	---	HCUZ(2)
R015	Unsat. zone 3, thickness (m)	1.710E+00	0.000E+00	---	H(3)
R015	Unsat. zone 3, soil density (g/cm**3)	1.510E+00	1.500E+00	---	DENSUZ(3)
R015	Unsat. zone 3, total porosity	4.300E-01	4.000E-01	---	TPUZ(3)
R015	Unsat. zone 3, effective porosity	3.830E-01	2.000E-01	---	EPUZ(3)
R015	Unsat. zone 3, field capacity	2.000E-01	2.000E-01	---	FCUZ(3)
R015	Unsat. zone 3, soil-specific b parameter	9.700E-01	5.300E+00	---	BUZ(3)
R015	Unsat. zone 3, hydraulic conductivity (m/yr)	2.495E+03	1.000E+01	---	HCUZ(3)
R015	Unsat. zone 4, thickness (m)	4.000E+00	0.000E+00	---	H(4)
R015	Unsat. zone 4, soil density (g/cm**3)	1.562E+00	1.500E+00	---	DENSUZ(4)
R015	Unsat. zone 4, total porosity	3.890E-01	4.000E-01	---	TPUZ(4)
R015	Unsat. zone 4, effective porosity	3.180E-01	2.000E-01	---	EPUZ(4)
R015	Unsat. zone 4, field capacity	2.000E-01	2.000E-01	---	FCUZ(4)
R015	Unsat. zone 4, soil-specific b parameter	1.350E+00	5.300E+00	---	BUZ(4)
R015	Unsat. zone 4, hydraulic conductivity (m/yr)	1.021E+03	1.000E+01	---	HCUZ(4)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 5, thickness (m)	1.140E+00	0.000E+00	---	H(5)
R015	Unsat. zone 5, soil density (g/cm**3)	1.510E+00	1.500E+00	---	DENSUZ(5)
R015	Unsat. zone 5, total porosity	4.300E-01	4.000E-01	---	TPUZ(5)
R015	Unsat. zone 5, effective porosity	3.830E-01	2.000E-01	---	EPUZ(5)
R015	Unsat. zone 5, field capacity	2.000E-01	2.000E-01	---	FCUZ(5)
R015	Unsat. zone 5, soil-specific b parameter	9.700E-01	5.300E+00	---	BUZ(5)
R015	Unsat. zone 5, hydraulic conductivity (m/yr)	2.494E+03	1.000E+01	---	HCUZ(5)
R016	Distribution coefficients for Pa-231				
R016	Contaminated zone (cm**3/g)	3.743E+02	5.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	3.707E+02	5.000E+01	---	DCNUCU(2,1)
R016	Unsaturated zone 2 (cm**3/g)	3.751E+02	5.000E+01	---	DCNUCU(2,2)
R016	Unsaturated zone 3 (cm**3/g)	3.753E+02	5.000E+01	---	DCNUCU(2,3)
R016	Unsaturated zone 4 (cm**3/g)	3.782E+02	5.000E+01	---	DCNUCU(2,4)
R016	Unsaturated zone 5 (cm**3/g)	3.756E+02	5.000E+01	---	DCNUCU(2,5)
R016	Saturated zone (cm**3/g)	3.784E+02	5.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.533E-04	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for Ra-226				
R016	Contaminated zone (cm**3/g)	3.501E+03	7.000E+01	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	3.507E+03	7.000E+01	---	DCNUCU(4,1)
R016	Unsaturated zone 2 (cm**3/g)	3.506E+03	7.000E+01	---	DCNUCU(4,2)
R016	Unsaturated zone 3 (cm**3/g)	3.523E+03	7.000E+01	---	DCNUCU(4,3)
R016	Unsaturated zone 4 (cm**3/g)	3.485E+03	7.000E+01	---	DCNUCU(4,4)
R016	Unsaturated zone 5 (cm**3/g)	3.496E+03	7.000E+01	---	DCNUCU(4,5)
R016	Saturated zone (cm**3/g)	3.529E+03	7.000E+01	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.640E-05	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for Th-228				
R016	Contaminated zone (cm**3/g)	5.883E+03	6.000E+04	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	5.736E+03	6.000E+04	---	DCNUCU(6,1)
R016	Unsaturated zone 2 (cm**3/g)	5.825E+03	6.000E+04	---	DCNUCU(6,2)
R016	Unsaturated zone 3 (cm**3/g)	5.786E+03	6.000E+04	---	DCNUCU(6,3)
R016	Unsaturated zone 4 (cm**3/g)	5.775E+03	6.000E+04	---	DCNUCU(6,4)
R016	Unsaturated zone 5 (cm**3/g)	5.784E+03	6.000E+04	---	DCNUCU(6,5)
R016	Saturated zone (cm**3/g)	5.828E+03	6.000E+04	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.759E-06	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for Th-230				
R016	Contaminated zone (cm**3/g)	5.771E+03	6.000E+04	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	5.843E+03	6.000E+04	---	DCNUCU(7,1)
R016	Unsaturated zone 2 (cm**3/g)	5.843E+03	6.000E+04	---	DCNUCU(7,2)
R016	Unsaturated zone 3 (cm**3/g)	5.882E+03	6.000E+04	---	DCNUCU(7,3)
R016	Unsaturated zone 4 (cm**3/g)	5.779E+03	6.000E+04	---	DCNUCU(7,4)
R016	Unsaturated zone 5 (cm**3/g)	5.860E+03	6.000E+04	---	DCNUCU(7,5)
R016	Saturated zone (cm**3/g)	5.849E+03	6.000E+04	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.949E-06	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Th-232				
R016	Contaminated zone (cm**3/g)	5.771E+03	6.000E+04	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	5.809E+03	6.000E+04	---	DCNUCU(8,1)
R016	Unsaturated zone 2 (cm**3/g)	5.744E+03	6.000E+04	---	DCNUCU(8,2)
R016	Unsaturated zone 3 (cm**3/g)	5.769E+03	6.000E+04	---	DCNUCU(8,3)
R016	Unsaturated zone 4 (cm**3/g)	5.779E+03	6.000E+04	---	DCNUCU(8,4)
R016	Unsaturated zone 5 (cm**3/g)	5.823E+03	6.000E+04	---	DCNUCU(8,5)
R016	Saturated zone (cm**3/g)	5.864E+03	6.000E+04	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.949E-06	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	1.235E+02	5.000E+01	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	1.261E+02	5.000E+01	---	DCNUCU(9,1)
R016	Unsaturated zone 2 (cm**3/g)	1.242E+02	5.000E+01	---	DCNUCU(9,2)
R016	Unsaturated zone 3 (cm**3/g)	1.242E+02	5.000E+01	---	DCNUCU(9,3)
R016	Unsaturated zone 4 (cm**3/g)	1.247E+02	5.000E+01	---	DCNUCU(9,4)
R016	Unsaturated zone 5 (cm**3/g)	1.257E+02	5.000E+01	---	DCNUCU(9,5)
R016	Saturated zone (cm**3/g)	1.264E+02	5.000E+01	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.641E-04	ALEACH(9)
R016	Solubility constant	2.940E-06	0.000E+00	Sol. Kd =-1.831E-01 not used	SOLUBK(9)
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	1.520E+01	5.000E+01	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	1.258E+02	5.000E+01	---	DCNUCU(10,1)
R016	Unsaturated zone 2 (cm**3/g)	1.233E+02	5.000E+01	---	DCNUCU(10,2)
R016	Unsaturated zone 3 (cm**3/g)	1.259E+02	5.000E+01	---	DCNUCU(10,3)
R016	Unsaturated zone 4 (cm**3/g)	1.249E+02	5.000E+01	---	DCNUCU(10,4)
R016	Unsaturated zone 5 (cm**3/g)	1.247E+02	5.000E+01	---	DCNUCU(10,5)
R016	Saturated zone (cm**3/g)	1.244E+02	5.000E+01	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.726E-03	ALEACH(10)
R016	Solubility constant	2.940E-06	0.000E+00	Sol. Kd = 3.211E+00 not used	SOLUBK(10)
R016	Distribution coefficients for U-236				
R016	Contaminated zone (cm**3/g)	1.239E+02	5.000E+01	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	1.240E+02	5.000E+01	---	DCNUCU(11,1)
R016	Unsaturated zone 2 (cm**3/g)	1.238E+02	5.000E+01	---	DCNUCU(11,2)
R016	Unsaturated zone 3 (cm**3/g)	1.239E+02	5.000E+01	---	DCNUCU(11,3)
R016	Unsaturated zone 4 (cm**3/g)	1.240E+02	5.000E+01	---	DCNUCU(11,4)
R016	Unsaturated zone 5 (cm**3/g)	1.259E+02	5.000E+01	---	DCNUCU(11,5)
R016	Saturated zone (cm**3/g)	1.258E+02	5.000E+01	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.626E-04	ALEACH(11)
R016	Solubility constant	2.940E-06	0.000E+00	Sol. Kd =-1.459E-01 not used	SOLUBK(11)

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-238				
R016	Contaminated zone (cm**3/g)	1.240E+02	5.000E+01	5.214E+02	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	1.238E+02	5.000E+01	5.214E+02	DCNUCU(12,1)
R016	Unsaturated zone 2 (cm**3/g)	1.245E+02	5.000E+01	5.214E+02	DCNUCU(12,2)
R016	Unsaturated zone 3 (cm**3/g)	1.234E+02	5.000E+01	5.214E+02	DCNUCU(12,3)
R016	Unsaturated zone 4 (cm**3/g)	1.240E+02	5.000E+01	5.214E+02	DCNUCU(12,4)
R016	Unsaturated zone 5 (cm**3/g)	1.262E+02	5.000E+01	5.214E+02	DCNUCU(12,5)
R016	Saturated zone (cm**3/g)	1.243E+02	5.000E+01	5.214E+02	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.101E-04	ALEACH(12)
R016	Solubility constant	2.940E-06	0.000E+00	Sol. Kd = 5.214E+02 used	SOLUBK(12)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	8.245E+02	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	8.184E+02	2.000E+01	---	DCNUCU(1,1)
R016	Unsaturated zone 2 (cm**3/g)	8.284E+02	2.000E+01	---	DCNUCU(1,2)
R016	Unsaturated zone 3 (cm**3/g)	8.251E+02	2.000E+01	---	DCNUCU(1,3)
R016	Unsaturated zone 4 (cm**3/g)	8.097E+02	2.000E+01	---	DCNUCU(1,4)
R016	Unsaturated zone 5 (cm**3/g)	8.147E+02	2.000E+01	---	DCNUCU(1,5)
R016	Saturated zone (cm**3/g)	8.104E+02	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.962E-05	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	2.374E+03	1.000E+02	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	2.347E+03	1.000E+02	---	DCNUCU(3,1)
R016	Unsaturated zone 2 (cm**3/g)	2.362E+03	1.000E+02	---	DCNUCU(3,2)
R016	Unsaturated zone 3 (cm**3/g)	2.357E+03	1.000E+02	---	DCNUCU(3,3)
R016	Unsaturated zone 4 (cm**3/g)	2.352E+03	1.000E+02	---	DCNUCU(3,4)
R016	Unsaturated zone 5 (cm**3/g)	2.380E+03	1.000E+02	---	DCNUCU(3,5)
R016	Saturated zone (cm**3/g)	2.360E+03	1.000E+02	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.419E-05	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for daughter Ra-228				
R016	Contaminated zone (cm**3/g)	3.490E+03	7.000E+01	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	3.507E+03	7.000E+01	---	DCNUCU(5,1)
R016	Unsaturated zone 2 (cm**3/g)	3.522E+03	7.000E+01	---	DCNUCU(5,2)
R016	Unsaturated zone 3 (cm**3/g)	3.513E+03	7.000E+01	---	DCNUCU(5,3)
R016	Unsaturated zone 4 (cm**3/g)	3.505E+03	7.000E+01	---	DCNUCU(5,4)
R016	Unsaturated zone 5 (cm**3/g)	3.484E+03	7.000E+01	---	DCNUCU(5,5)
R016	Saturated zone (cm**3/g)	3.521E+03	7.000E+01	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.645E-05	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	2.350E-05	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	5.470E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	2.690E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	-1 shows non-circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	7.667E+00	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	1.533E+01	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	2.300E+01	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	3.067E+01	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	3.833E+01	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	4.600E+01	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	5.367E+01	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	6.133E+01	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	6.900E+01	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	7.667E+01	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	8.433E+01	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	9.200E+01	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	1.000E+00	1.000E+00	---	FRACA(1)
R017	Ring 2	1.000E+00	2.732E-01	---	FRACA(2)
R017	Ring 3	1.000E+00	0.000E+00	---	FRACA(3)
R017	Ring 4	9.800E-01	0.000E+00	---	FRACA(4)
R017	Ring 5	9.800E-01	0.000E+00	---	FRACA(5)
R017	Ring 6	6.800E-01	0.000E+00	---	FRACA(6)
R017	Ring 7	5.300E-01	0.000E+00	---	FRACA(7)
R017	Ring 8	4.400E-01	0.000E+00	---	FRACA(8)
R017	Ring 9	3.900E-01	0.000E+00	---	FRACA(9)
R017	Ring 10	3.300E-01	0.000E+00	---	FRACA(10)
R017	Ring 11	2.800E-01	0.000E+00	---	FRACA(11)
R017	Ring 12	5.700E-02	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)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	4.785E+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	3.900E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	1.000E+00	-1	---	FPLANT
R018	Contamination fraction of meat	1.000E+00	-1	---	FMEAT
R018	Contamination fraction of milk	1.000E+00	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	2.710E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	6.320E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.060E+01	5.000E+01	---	LWI5

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R019	Livestock water intake for milk (L/day)	3.000E+01	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	4.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	2.310E-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)	2.889E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.887E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	2.460E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	1.230E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.200E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	3.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	3.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	3.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	3.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	3.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	3.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	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

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
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	1024	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	1	---	---	KYMAX

Summary of Pathway Selections

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

Summary : MTW Pond E Farmer - Deterministic Run - NO COVER
File : C:\RESRAD_FAMILY\RESRAD\6.5\USERFILES\MTW\MTW_POND_E_FARMER-DET_NC.RAD

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	12000.00 square meters	Pa-231	7.000E-02
Thickness:	3.45 meters	Ra-226	3.400E-01
Cover Depth:	0.00 meters	Th-228	3.000E-02
		Th-230	8.300E-01
		Th-232	3.000E-02
		U-234	1.186E+02
		U-235	5.110E+00
		U-236	2.910E+00
		U-238	1.227E+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):	4.615E+01	4.627E+01	4.652E+01	4.729E+01	4.856E+01	4.933E+01	4.833E+01	4.808E+01
M(t):	1.846E+00	1.851E+00	1.861E+00	1.892E+00	1.942E+00	1.973E+00	1.933E+00	1.923E+00

Maximum TDOSE(t): 4.934E+01 mrem/yr at t = 86.8 ± 0.2 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 = 8.677E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	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.
Pa-231	5.211E-02	0.0011	7.261E-03	0.0001	0.000E+00	0.0000	1.293E+00	0.0262	1.844E-01	0.0037	3.918E-03	0.0001	4.627E-02	0.0009
Ra-226	1.318E+00	0.0267	1.381E-04	0.0000	0.000E+00	0.0000	5.296E+00	0.1073	1.352E-01	0.0027	4.839E-01	0.0098	7.330E-02	0.0015
Th-228	2.057E-15	0.0000	2.672E-18	0.0000	0.000E+00	0.0000	6.037E-17	0.0000	1.548E-18	0.0000	2.968E-19	0.0000	1.236E-17	0.0000
Th-230	1.243E-01	0.0025	3.752E-03	0.0001	0.000E+00	0.0000	4.736E-01	0.0096	1.170E-02	0.0002	4.071E-02	0.0008	1.757E-02	0.0004
Th-232	1.750E-01	0.0035	8.265E-04	0.0000	0.000E+00	0.0000	2.448E-01	0.0050	4.797E-03	0.0001	3.022E-02	0.0006	4.087E-03	0.0001
U-234	2.385E-02	0.0005	2.086E-01	0.0042	0.000E+00	0.0000	1.076E+01	0.2181	4.051E-01	0.0082	2.969E+00	0.0602	8.835E-01	0.0179
U-235	1.025E+00	0.0208	6.942E-03	0.0001	0.000E+00	0.0000	4.687E-01	0.0095	3.372E-02	0.0007	9.127E-02	0.0018	3.155E-02	0.0006
U-236	2.238E-04	0.0000	4.840E-03	0.0001	0.000E+00	0.0000	2.505E-01	0.0051	9.439E-03	0.0002	6.924E-02	0.0014	2.058E-02	0.0004
U-238	6.663E+00	0.1350	1.987E-01	0.0040	0.000E+00	0.0000	1.088E+01	0.2205	4.101E-01	0.0083	3.008E+00	0.0610	8.941E-01	0.0181
Total	9.382E+00	0.1901	4.311E-01	0.0087	0.000E+00	0.0000	2.967E+01	0.6013	1.194E+00	0.0242	6.697E+00	0.1357	1.971E+00	0.0399

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 8.677E+01 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.587E+00	0.0322
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	7.306E+00	0.1481
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.134E-15	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.717E-01	0.0136
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.596E-01	0.0093
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	1.525E+01	0.3091
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	1.658E+00	0.0336
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.548E-01	0.0072
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	2.206E+01	0.4470
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	4.934E+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 = 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.
Pa-231	5.639E-03	0.0001	1.344E-03	0.0000	0.000E+00	0.0000	9.936E-01	0.0215	1.864E-01	0.0040	1.037E-03	0.0000	2.076E-02	0.0004
Ra-226	1.370E+00	0.0297	4.215E-05	0.0000	0.000E+00	0.0000	2.448E+00	0.0531	4.833E-02	0.0010	3.211E-01	0.0070	1.333E-02	0.0003
Th-228	9.266E-02	0.0020	1.204E-04	0.0000	0.000E+00	0.0000	2.720E-03	0.0001	6.976E-05	0.0000	1.337E-05	0.0000	5.570E-04	0.0000
Th-230	1.093E-03	0.0000	3.748E-03	0.0001	0.000E+00	0.0000	6.201E-02	0.0013	1.579E-03	0.0000	4.385E-04	0.0000	1.246E-02	0.0003
Th-232	4.465E-03	0.0001	6.826E-04	0.0000	0.000E+00	0.0000	2.363E-02	0.0005	4.803E-04	0.0000	1.502E-03	0.0000	2.315E-03	0.0001
U-234	1.760E-02	0.0004	2.168E-01	0.0047	0.000E+00	0.0000	1.118E+01	0.2422	4.212E-01	0.0091	3.090E+00	0.0670	9.184E-01	0.0199
U-235	1.411E+00	0.0306	8.692E-03	0.0002	0.000E+00	0.0000	4.551E-01	0.0099	1.725E-02	0.0004	1.256E-01	0.0027	3.734E-02	0.0008
U-236	2.329E-04	0.0000	5.038E-03	0.0001	0.000E+00	0.0000	2.607E-01	0.0057	9.826E-03	0.0002	7.208E-02	0.0016	2.142E-02	0.0005
U-238	6.727E+00	0.1458	2.006E-01	0.0043	0.000E+00	0.0000	1.098E+01	0.2380	4.139E-01	0.0090	3.036E+00	0.0658	9.024E-01	0.0196
Total	9.629E+00	0.2087	4.370E-01	0.0095	0.000E+00	0.0000	2.641E+01	0.5722	1.099E+00	0.0238	6.648E+00	0.1441	1.929E+00	0.0418

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.209E+00	0.0262
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	4.201E+00	0.0910
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.614E-02	0.0021
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.133E-02	0.0018
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.307E-02	0.0007
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	1.584E+01	0.3433
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	2.055E+00	0.0445
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.693E-01	0.0080
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	2.226E+01	0.4824
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	4.615E+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+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.
Pa-231	7.214E-03	0.0002	1.545E-03	0.0000	0.000E+00	0.0000	1.004E+00	0.0217	1.865E-01	0.0040	1.136E-03	0.0000	2.163E-02	0.0005
Ra-226	1.369E+00	0.0296	4.542E-05	0.0000	0.000E+00	0.0000	2.548E+00	0.0551	5.140E-02	0.0011	3.270E-01	0.0071	1.537E-02	0.0003
Th-228	6.450E-02	0.0014	8.380E-05	0.0000	0.000E+00	0.0000	1.893E-03	0.0000	4.856E-05	0.0000	9.306E-06	0.0000	3.877E-04	0.0000
Th-230	2.542E-03	0.0001	3.748E-03	0.0001	0.000E+00	0.0000	6.464E-02	0.0014	1.631E-03	0.0000	7.763E-04	0.0000	1.247E-02	0.0003
Th-232	1.505E-02	0.0003	6.876E-04	0.0000	0.000E+00	0.0000	4.839E-02	0.0010	9.551E-04	0.0000	4.716E-03	0.0001	2.464E-03	0.0001
U-234	1.759E-02	0.0004	2.167E-01	0.0047	0.000E+00	0.0000	1.117E+01	0.2415	4.210E-01	0.0091	3.088E+00	0.0667	9.180E-01	0.0198
U-235	1.405E+00	0.0304	8.662E-03	0.0002	0.000E+00	0.0000	4.549E-01	0.0098	1.747E-02	0.0004	1.251E-01	0.0027	3.724E-02	0.0008
U-236	2.328E-04	0.0000	5.035E-03	0.0001	0.000E+00	0.0000	2.606E-01	0.0056	9.821E-03	0.0002	7.205E-02	0.0016	2.141E-02	0.0005
U-238	6.726E+00	0.1454	2.006E-01	0.0043	0.000E+00	0.0000	1.098E+01	0.2373	4.138E-01	0.0089	3.036E+00	0.0656	9.023E-01	0.0195
Total	9.608E+00	0.2076	4.371E-01	0.0094	0.000E+00	0.0000	2.654E+01	0.5735	1.103E+00	0.0238	6.655E+00	0.1438	1.931E+00	0.0417

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.222E+00	0.0264
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	4.311E+00	0.0932
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.692E-02	0.0014
Th-230	0.000E+00	0.0000	0.000E+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	0.0019
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.227E-02	0.0016
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	1.583E+01	0.3422
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	2.049E+00	0.0443
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.692E-01	0.0080
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	2.226E+01	0.4811
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	4.627E+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+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.
Pa-231	1.022E-02	0.0002	1.927E-03	0.0000	0.000E+00	0.0000	1.024E+00	0.0220	1.864E-01	0.0040	1.322E-03	0.0000	2.329E-02	0.0005
Ra-226	1.368E+00	0.0294	5.166E-05	0.0000	0.000E+00	0.0000	2.735E+00	0.0588	5.706E-02	0.0012	3.380E-01	0.0073	1.925E-02	0.0004
Th-228	3.125E-02	0.0007	4.060E-05	0.0000	0.000E+00	0.0000	9.173E-04	0.0000	2.353E-05	0.0000	4.509E-06	0.0000	1.879E-04	0.0000
Th-230	5.437E-03	0.0001	3.748E-03	0.0001	0.000E+00	0.0000	7.023E-02	0.0015	1.745E-03	0.0000	1.480E-03	0.0000	1.251E-02	0.0003
Th-232	3.966E-02	0.0009	7.049E-04	0.0000	0.000E+00	0.0000	9.022E-02	0.0019	1.772E-03	0.0000	1.018E-02	0.0002	2.754E-03	0.0001
U-234	1.759E-02	0.0004	2.165E-01	0.0047	0.000E+00	0.0000	1.116E+01	0.2399	4.206E-01	0.0090	3.085E+00	0.0663	9.171E-01	0.0197
U-235	1.395E+00	0.0300	8.603E-03	0.0002	0.000E+00	0.0000	4.547E-01	0.0098	1.791E-02	0.0004	1.242E-01	0.0027	3.703E-02	0.0008
U-236	2.326E-04	0.0000	5.031E-03	0.0001	0.000E+00	0.0000	2.604E-01	0.0056	9.812E-03	0.0002	7.198E-02	0.0015	2.139E-02	0.0005
U-238	6.724E+00	0.1446	2.005E-01	0.0043	0.000E+00	0.0000	1.098E+01	0.2360	4.138E-01	0.0089	3.035E+00	0.0652	9.021E-01	0.0194
Total	9.592E+00	0.2062	4.371E-01	0.0094	0.000E+00	0.0000	2.678E+01	0.5756	1.109E+00	0.0238	6.668E+00	0.1433	1.936E+00	0.0416

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.247E+00	0.0268
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	4.517E+00	0.0971
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.242E-02	0.0007
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.515E-02	0.0020
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.453E-01	0.0031
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	1.582E+01	0.3401
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	2.037E+00	0.0438
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.688E-01	0.0079
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	2.226E+01	0.4784
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	4.652E+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+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.
Pa-231	1.933E-02	0.0004	3.089E-03	0.0001	0.000E+00	0.0000	1.085E+00	0.0229	1.863E-01	0.0039	1.888E-03	0.0000	2.832E-02	0.0006
Ra-226	1.364E+00	0.0288	7.063E-05	0.0000	0.000E+00	0.0000	3.303E+00	0.0698	7.425E-02	0.0016	3.712E-01	0.0078	3.104E-02	0.0007
Th-228	2.474E-03	0.0001	3.214E-06	0.0000	0.000E+00	0.0000	7.261E-05	0.0000	1.862E-06	0.0000	3.569E-07	0.0000	1.487E-05	0.0000
Th-230	1.555E-02	0.0003	3.748E-03	0.0001	0.000E+00	0.0000	9.264E-02	0.0020	2.234E-03	0.0000	4.109E-03	0.0001	1.270E-02	0.0003
Th-232	1.114E-01	0.0024	7.674E-04	0.0000	0.000E+00	0.0000	1.782E-01	0.0038	3.494E-03	0.0001	2.161E-02	0.0005	3.482E-03	0.0001
U-234	1.762E-02	0.0004	2.158E-01	0.0046	0.000E+00	0.0000	1.113E+01	0.2353	4.193E-01	0.0089	3.075E+00	0.0650	9.143E-01	0.0193
U-235	1.359E+00	0.0287	8.408E-03	0.0002	0.000E+00	0.0000	4.542E-01	0.0096	1.944E-02	0.0004	1.210E-01	0.0026	3.635E-02	0.0008
U-236	2.318E-04	0.0000	5.014E-03	0.0001	0.000E+00	0.0000	2.595E-01	0.0055	9.781E-03	0.0002	7.175E-02	0.0015	2.133E-02	0.0005
U-238	6.719E+00	0.1421	2.004E-01	0.0042	0.000E+00	0.0000	1.097E+01	0.2320	4.134E-01	0.0087	3.033E+00	0.0641	9.015E-01	0.0191
Total	9.609E+00	0.2032	4.373E-01	0.0092	0.000E+00	0.0000	2.747E+01	0.5808	1.128E+00	0.0239	6.700E+00	0.1417	1.949E+00	0.0412

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.324E+00	0.0280
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	5.143E+00	0.1088
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.567E-03	0.0001
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.310E-01	0.0028
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.190E-01	0.0067
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	1.577E+01	0.3334
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	1.999E+00	0.0423
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.676E-01	0.0078
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	2.224E+01	0.4702
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	4.729E+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+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.
Pa-231	3.644E-02	0.0008	5.269E-03	0.0001	0.000E+00	0.0000	1.197E+00	0.0246	1.859E-01	0.0038	2.951E-03	0.0001	3.775E-02	0.0008
Ra-226	1.352E+00	0.0278	1.063E-04	0.0000	0.000E+00	0.0000	4.367E+00	0.0899	1.066E-01	0.0022	4.330E-01	0.0089	5.327E-02	0.0011
Th-228	1.763E-06	0.0000	2.290E-09	0.0000	0.000E+00	0.0000	5.175E-08	0.0000	1.327E-09	0.0000	2.544E-10	0.0000	1.060E-08	0.0000
Th-230	4.426E-02	0.0009	3.749E-03	0.0001	0.000E+00	0.0000	1.749E-01	0.0036	4.181E-03	0.0001	1.268E-02	0.0003	1.361E-02	0.0003
Th-232	1.692E-01	0.0035	8.214E-04	0.0000	0.000E+00	0.0000	2.389E-01	0.0049	4.682E-03	0.0001	2.946E-02	0.0006	4.034E-03	0.0001
U-234	1.823E-02	0.0004	2.139E-01	0.0044	0.000E+00	0.0000	1.103E+01	0.2271	4.154E-01	0.0086	3.047E+00	0.0628	9.061E-01	0.0187
U-235	1.262E+00	0.0260	7.933E-03	0.0002	0.000E+00	0.0000	4.558E-01	0.0094	2.359E-02	0.0005	1.124E-01	0.0023	3.474E-02	0.0007
U-236	2.297E-04	0.0000	4.968E-03	0.0001	0.000E+00	0.0000	2.572E-01	0.0053	9.690E-03	0.0002	7.109E-02	0.0015	2.113E-02	0.0004
U-238	6.704E+00	0.1381	2.000E-01	0.0041	0.000E+00	0.0000	1.095E+01	0.2255	4.126E-01	0.0085	3.026E+00	0.0623	8.995E-01	0.0185
Total	9.587E+00	0.1974	4.367E-01	0.0090	0.000E+00	0.0000	2.866E+01	0.5903	1.163E+00	0.0239	6.735E+00	0.1387	1.970E+00	0.0406

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.465E+00	0.0302
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	6.312E+00	0.1300
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.829E-06	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.534E-01	0.0052
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.472E-01	0.0092
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	1.563E+01	0.3218
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	1.897E+00	0.0391
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.643E-01	0.0075
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	2.219E+01	0.4570
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	4.856E+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+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.
Pa-231	5.307E-02	0.0011	7.383E-03	0.0001	0.000E+00	0.0000	1.297E+00	0.0263	1.839E-01	0.0037	3.977E-03	0.0001	4.676E-02	0.0009
Ra-226	1.310E+00	0.0266	1.397E-04	0.0000	0.000E+00	0.0000	5.337E+00	0.1082	1.366E-01	0.0028	4.854E-01	0.0098	7.437E-02	0.0015
Th-228	1.703E-17	0.0000	2.213E-20	0.0000	0.000E+00	0.0000	5.000E-19	0.0000	1.282E-20	0.0000	2.458E-21	0.0000	1.024E-19	0.0000
Th-230	1.427E-01	0.0029	3.753E-03	0.0001	0.000E+00	0.0000	5.479E-01	0.0111	1.360E-02	0.0003	4.749E-02	0.0010	1.860E-02	0.0004
Th-232	1.749E-01	0.0035	8.263E-04	0.0000	0.000E+00	0.0000	2.447E-01	0.0050	4.796E-03	0.0001	3.021E-02	0.0006	4.086E-03	0.0001
U-234	2.597E-02	0.0005	2.073E-01	0.0042	0.000E+00	0.0000	1.070E+01	0.2170	4.029E-01	0.0082	2.952E+00	0.0598	8.784E-01	0.0178
U-235	9.772E-01	0.0198	6.754E-03	0.0001	0.000E+00	0.0000	4.719E-01	0.0096	3.577E-02	0.0007	8.696E-02	0.0018	3.096E-02	0.0006
U-236	2.224E-04	0.0000	4.810E-03	0.0001	0.000E+00	0.0000	2.490E-01	0.0050	9.382E-03	0.0002	6.882E-02	0.0014	2.046E-02	0.0004
U-238	6.653E+00	0.1349	1.985E-01	0.0040	0.000E+00	0.0000	1.087E+01	0.2203	4.095E-01	0.0083	3.004E+00	0.0609	8.928E-01	0.0181
Total	9.337E+00	0.1893	4.295E-01	0.0087	0.000E+00	0.0000	2.972E+01	0.6025	1.196E+00	0.0243	6.678E+00	0.1354	1.966E+00	0.0399

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.593E+00	0.0323
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	7.344E+00	0.1489
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.767E-17	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.740E-01	0.0157
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.596E-01	0.0093
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	1.517E+01	0.3075
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	1.610E+00	0.0326
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.526E-01	0.0071
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	2.202E+01	0.4465
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	4.933E+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.
Pa-231	5.326E-02	0.0011	7.385E-03	0.0002	0.000E+00	0.0000	1.266E+00	0.0262	1.777E-01	0.0037	3.965E-03	0.0001	4.627E-02	0.0010
Ra-226	1.198E+00	0.0248	1.321E-04	0.0000	0.000E+00	0.0000	5.012E+00	0.1037	1.289E-01	0.0027	4.516E-01	0.0093	7.072E-02	0.0015
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	4.067E-01	0.0084	3.768E-03	0.0001	0.000E+00	0.0000	1.648E+00	0.0341	4.187E-02	0.0009	1.468E-01	0.0030	3.405E-02	0.0007
Th-232	1.746E-01	0.0036	8.247E-04	0.0000	0.000E+00	0.0000	2.442E-01	0.0051	4.787E-03	0.0001	3.015E-02	0.0006	4.078E-03	0.0001
U-234	9.212E-02	0.0019	1.898E-01	0.0039	0.000E+00	0.0000	1.002E+01	0.2073	3.738E-01	0.0077	2.713E+00	0.0561	8.066E-01	0.0167
U-235	4.756E-01	0.0098	4.832E-03	0.0001	0.000E+00	0.0000	5.037E-01	0.0104	5.627E-02	0.0012	4.215E-02	0.0009	2.490E-02	0.0005
U-236	2.029E-04	0.0000	4.385E-03	0.0001	0.000E+00	0.0000	2.270E-01	0.0047	8.552E-03	0.0002	6.274E-02	0.0013	1.865E-02	0.0004
U-238	6.508E+00	0.1346	1.943E-01	0.0040	0.000E+00	0.0000	1.064E+01	0.2200	4.008E-01	0.0083	2.940E+00	0.0608	8.739E-01	0.0181
Total	8.908E+00	0.1843	4.054E-01	0.0084	0.000E+00	0.0000	2.956E+01	0.6116	1.193E+00	0.0247	6.390E+00	0.1322	1.879E+00	0.0389

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.555E+00	0.0322
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	6.861E+00	0.1419
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.281E+00	0.0472
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.587E-01	0.0095
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	1.420E+01	0.2937
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	1.107E+00	0.0229
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.215E-01	0.0067
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	2.155E+01	0.4459
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	4.833E+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.
Pa-231	4.714E-02	0.0010	6.536E-03	0.0001	0.000E+00	0.0000	1.121E+00	0.0233	1.572E-01	0.0033	3.509E-03	0.0001	4.095E-02	0.0009
Ra-226	8.744E-01	0.0182	9.645E-05	0.0000	0.000E+00	0.0000	3.659E+00	0.0761	9.408E-02	0.0020	3.297E-01	0.0069	5.163E-02	0.0011
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	1.157E+00	0.0241	3.802E-03	0.0001	0.000E+00	0.0000	4.788E+00	0.0996	1.226E-01	0.0025	4.297E-01	0.0089	7.821E-02	0.0016
Th-232	1.734E-01	0.0036	8.190E-04	0.0000	0.000E+00	0.0000	2.425E-01	0.0050	4.754E-03	0.0001	2.994E-02	0.0006	4.050E-03	0.0001
U-234	6.983E-01	0.0145	1.398E-01	0.0029	0.000E+00	0.0000	9.831E+00	0.2044	3.361E-01	0.0070	2.190E+00	0.0455	6.266E-01	0.0130
U-235	5.383E-02	0.0011	2.962E-03	0.0001	0.000E+00	0.0000	4.840E-01	0.0101	6.684E-02	0.0014	4.505E-03	0.0001	1.816E-02	0.0004
U-236	1.473E-04	0.0000	3.172E-03	0.0001	0.000E+00	0.0000	1.642E-01	0.0034	6.186E-03	0.0001	4.538E-02	0.0009	1.349E-02	0.0003
U-238	6.026E+00	0.1253	1.802E-01	0.0037	0.000E+00	0.0000	9.866E+00	0.2052	3.717E-01	0.0077	2.727E+00	0.0567	8.105E-01	0.0169
Total	9.030E+00	0.1878	3.373E-01	0.0070	0.000E+00	0.0000	3.015E+01	0.6271	1.160E+00	0.0241	5.759E+00	0.1198	1.644E+00	0.0342

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.
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.376E+00	0.0286
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	5.009E+00	0.1042
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.579E+00	0.1368
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.555E-01	0.0095
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	1.382E+01	0.2874
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	6.303E-01	0.0131
U-236	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.325E-01	0.0048
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	1.998E+01	0.4155
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	4.808E+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
Pa-231	Pa-231	1.000E+00	1.715E+01	1.715E+01	1.714E+01	1.712E+01	1.706E+01	1.686E+01	1.628E+01	1.441E+01
Pa-231	Ac-227+D	1.000E+00	1.166E-01	3.114E-01	6.767E-01	1.785E+00	3.868E+00	5.896E+00	5.937E+00	5.255E+00
Pa-231	∑DSR(j)		1.727E+01	1.746E+01	1.782E+01	1.891E+01	2.093E+01	2.275E+01	2.221E+01	1.966E+01
Ra-226+D	Ra-226+D	1.000E+00	1.216E+01	1.215E+01	1.214E+01	1.211E+01	1.200E+01	1.163E+01	1.063E+01	7.757E+00
Ra-226+D	Pb-210+D	1.000E+00	1.957E-01	5.247E-01	1.142E+00	3.021E+00	6.567E+00	9.975E+00	9.554E+00	6.975E+00
Ra-226+D	∑DSR(j)		1.236E+01	1.268E+01	1.329E+01	1.513E+01	1.856E+01	2.160E+01	2.018E+01	1.473E+01
Th-228+D	Th-228+D	1.000E+00	3.205E+00	2.231E+00	1.081E+00	8.555E-02	6.097E-05	5.891E-16	0.000E+00	0.000E+00
Th-230	Th-230	1.000E+00	9.545E-02	9.545E-02	9.544E-02	9.543E-02	9.540E-02	9.527E-02	9.491E-02	9.366E-02
Th-230	Ra-226+D	1.000E+00	2.509E-03	7.754E-03	1.828E-02	5.504E-02	1.594E-01	5.171E-01	1.477E+00	4.202E+00
Th-230	Pb-210+D	1.000E+00	3.065E-05	1.882E-04	9.133E-04	7.331E-03	5.048E-02	3.202E-01	1.177E+00	3.630E+00
Th-230	∑DSR(j)		9.799E-02	1.034E-01	1.146E-01	1.578E-01	3.053E-01	9.326E-01	2.748E+00	7.926E+00
Th-232	Th-232	1.000E+00	4.737E-01	4.737E-01	4.737E-01	4.737E-01	4.736E-01	4.732E-01	4.723E-01	4.690E-01
Th-232	Ra-228+D	1.000E+00	6.012E-01	1.775E+00	3.749E+00	7.875E+00	1.071E+01	1.098E+01	1.096E+01	1.088E+01
Th-232	Th-228+D	1.000E+00	2.742E-02	1.599E-01	6.200E-01	2.284E+00	3.724E+00	3.868E+00	3.860E+00	3.833E+00
Th-232	∑DSR(j)		1.102E+00	2.409E+00	4.843E+00	1.063E+01	1.491E+01	1.532E+01	1.529E+01	1.518E+01
U-234	U-234	1.000E+00	1.336E-01	1.335E-01	1.334E-01	1.330E-01	1.317E-01	1.275E-01	1.161E-01	8.375E-02
U-234	Th-230	1.000E+00	4.604E-07	1.324E-06	3.041E-06	9.035E-06	2.605E-05	8.431E-05	2.402E-04	6.798E-04
U-234	Ra-226+D	1.000E+00	7.301E-09	5.338E-08	2.876E-07	2.594E-06	2.182E-05	2.320E-04	1.951E-03	1.747E-02
U-234	Pb-210+D	1.000E+00	7.309E-11	9.529E-10	1.006E-08	2.396E-07	4.968E-06	1.153E-04	1.411E-03	1.466E-02
U-234	∑DSR(j)		1.336E-01	1.335E-01	1.334E-01	1.330E-01	1.318E-01	1.279E-01	1.197E-01	1.166E-01
U-235+D	U-235+D	1.000E+00	4.019E-01	4.004E-01	3.974E-01	3.872E-01	3.594E-01	2.769E-01	1.314E-01	9.683E-03
U-235+D	Pa-231	1.000E+00	1.710E-04	5.308E-04	1.250E-03	3.722E-03	1.042E-02	3.013E-02	6.362E-02	8.337E-02
U-235+D	Ac-227+D	1.000E+00	8.980E-07	5.462E-06	2.634E-05	2.090E-04	1.397E-03	7.966E-03	2.168E-02	3.030E-02
U-235+D	∑DSR(j)		4.021E-01	4.009E-01	3.987E-01	3.911E-01	3.712E-01	3.150E-01	2.167E-01	1.234E-01
U-236	U-236	1.000E+00	1.269E-01	1.269E-01	1.267E-01	1.263E-01	1.252E-01	1.212E-01	1.105E-01	7.991E-02
U-236	Th-232	1.000E+00	1.253E-11	3.603E-11	8.271E-11	2.458E-10	7.087E-10	2.295E-09	6.547E-09	1.862E-08
U-236	Ra-228+D	1.000E+00	9.614E-12	6.864E-11	3.449E-10	2.447E-09	1.206E-08	4.889E-08	1.479E-07	4.290E-07
U-236	Th-228+D	1.000E+00	3.557E-13	4.559E-12	4.168E-11	5.613E-10	3.760E-09	1.673E-08	5.167E-08	1.508E-07
U-236	∑DSR(j)		1.269E-01	1.269E-01	1.267E-01	1.263E-01	1.252E-01	1.212E-01	1.105E-01	7.991E-02
U-238	U-238	5.400E-05	6.496E-06	6.495E-06	6.494E-06	6.489E-06	6.474E-06	6.425E-06	6.285E-06	5.819E-06
U-238+D	U-238+D	9.999E-01	1.814E-01	1.814E-01	1.814E-01	1.812E-01	1.809E-01	1.795E-01	1.756E-01	1.625E-01
U-238+D	U-234	9.999E-01	1.894E-07	5.680E-07	1.325E-06	3.966E-06	1.145E-05	3.698E-05	1.044E-04	2.855E-04
U-238+D	Th-230	9.999E-01	4.545E-13	2.993E-12	1.537E-11	1.352E-10	1.129E-09	1.207E-08	1.037E-07	1.004E-06
U-238+D	Ra-226+D	9.999E-01	5.046E-15	7.985E-14	9.570E-13	2.573E-11	6.292E-10	2.214E-08	5.622E-07	1.735E-05
U-238+D	Pb-210+D	9.999E-01	4.343E-17	1.163E-15	2.622E-14	1.833E-12	1.126E-10	9.230E-09	3.717E-07	1.409E-05
U-238+D	∑DSR(j)		1.814E-01	1.814E-01	1.814E-01	1.813E-01	1.809E-01	1.795E-01	1.757E-01	1.629E-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	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pa-231	1.448E+00	1.432E+00	1.403E+00	1.322E+00	1.194E+00	1.099E+00	1.125E+00	1.272E+00
Ra-226	2.023E+00	1.972E+00	1.882E+00	1.653E+00	1.347E+00	1.157E+00	1.239E+00	1.697E+00
Th-228	7.801E+00	1.121E+01	2.313E+01	2.922E+02	4.100E+05	*8.195E+14	*8.195E+14	*8.195E+14
Th-230	2.551E+02	2.418E+02	2.181E+02	1.584E+02	8.189E+01	2.681E+01	9.096E+00	3.154E+00
Th-232	2.268E+01	1.038E+01	5.162E+00	2.351E+00	1.677E+00	1.632E+00	1.635E+00	1.647E+00
U-234	1.871E+02	1.872E+02	1.874E+02	1.880E+02	1.897E+02	1.954E+02	2.088E+02	2.145E+02
U-235	6.218E+01	6.235E+01	6.270E+01	6.392E+01	6.735E+01	7.937E+01	1.154E+02	2.027E+02
U-236	1.970E+02	1.971E+02	1.972E+02	1.979E+02	1.997E+02	2.063E+02	2.263E+02	3.128E+02
U-238	1.378E+02	1.378E+02	1.378E+02	1.379E+02	1.382E+02	1.393E+02	1.423E+02	1.535E+02

*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 = 86.8 ± 0.2 years

Nuclide (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Pa-231	7.000E-02	121.8 ± 0.2	2.279E+01	1.097E+00	2.267E+01	1.103E+00
Ra-226	3.400E-01	113.1 ± 0.2	2.163E+01	1.156E+00	2.149E+01	1.163E+00
Th-228	3.000E-02	0.000E+00	3.205E+00	7.801E+00	7.113E-14	3.515E+14
Th-230	8.300E-01	1.000E+03	7.926E+00	3.154E+00	8.092E-01	3.089E+01
Th-232	3.000E-02	78.1 ± 0.2	1.532E+01	1.632E+00	1.532E+01	1.632E+00
U-234	1.186E+02	0.000E+00	1.336E-01	1.871E+02	1.286E-01	1.944E+02
U-235	5.110E+00	0.000E+00	4.021E-01	6.218E+01	3.244E-01	7.707E+01
U-236	2.910E+00	0.000E+00	1.269E-01	1.970E+02	1.219E-01	2.050E+02
U-238	1.227E+02	0.000E+00	1.815E-01	1.378E+02	1.798E-01	1.391E+02

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

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pa-231	Pa-231	1.000E+00	1.201E+00	1.200E+00	1.200E+00	1.199E+00	1.194E+00	1.180E+00	1.139E+00	1.008E+00
Pa-231	U-235	1.000E+00	8.737E-04	2.712E-03	6.386E-03	1.902E-02	5.327E-02	1.540E-01	3.251E-01	4.260E-01
Pa-231	∑DOSE(j)		1.202E+00	1.203E+00	1.206E+00	1.218E+00	1.248E+00	1.334E+00	1.464E+00	1.434E+00
Ac-227	Pa-231	1.000E+00	8.163E-03	2.180E-02	4.737E-02	1.250E-01	2.707E-01	4.127E-01	4.156E-01	3.679E-01
Ac-227	U-235	1.000E+00	4.589E-06	2.791E-05	1.346E-04	1.068E-03	7.139E-03	4.070E-02	1.108E-01	1.548E-01
Ac-227	∑DOSE(j)		8.168E-03	2.183E-02	4.750E-02	1.260E-01	2.779E-01	4.534E-01	5.264E-01	5.227E-01
Ra-226	Ra-226	1.000E+00	4.134E+00	4.133E+00	4.129E+00	4.116E+00	4.079E+00	3.953E+00	3.613E+00	2.637E+00
Ra-226	Th-230	1.000E+00	2.082E-03	6.436E-03	1.517E-02	4.569E-02	1.323E-01	4.292E-01	1.226E+00	3.488E+00
Ra-226	U-234	1.000E+00	8.656E-07	6.329E-06	3.410E-05	3.076E-04	2.587E-03	2.751E-02	2.313E-01	2.072E+00
Ra-226	U-238	9.999E-01	6.191E-13	9.797E-12	1.174E-10	3.156E-09	7.720E-08	2.717E-06	6.898E-05	2.128E-03
Ra-226	∑DOSE(j)		4.137E+00	4.139E+00	4.144E+00	4.162E+00	4.214E+00	4.409E+00	5.070E+00	8.199E+00
Pb-210	Ra-226	1.000E+00	6.654E-02	1.784E-01	3.884E-01	1.027E+00	2.233E+00	3.392E+00	3.248E+00	2.371E+00
Pb-210	Th-230	1.000E+00	2.544E-05	1.562E-04	7.580E-04	6.085E-03	4.190E-02	2.657E-01	9.768E-01	3.013E+00
Pb-210	U-234	1.000E+00	8.667E-09	1.130E-07	1.193E-06	2.841E-05	5.891E-04	1.367E-02	1.673E-01	1.738E+00
Pb-210	U-238	9.999E-01	5.329E-15	1.427E-13	3.216E-12	2.249E-10	1.382E-08	1.132E-06	4.560E-05	1.729E-03
Pb-210	∑DOSE(j)		6.656E-02	1.786E-01	3.892E-01	1.033E+00	2.275E+00	3.671E+00	4.392E+00	7.124E+00
Th-228	Th-228	1.000E+00	9.614E-02	6.692E-02	3.242E-02	2.567E-03	1.829E-06	1.767E-17	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00	8.226E-04	4.796E-03	1.860E-02	6.852E-02	1.117E-01	1.160E-01	1.158E-01	1.150E-01
Th-228	U-236	1.000E+00	1.035E-12	1.327E-11	1.213E-10	1.633E-09	1.094E-08	4.869E-08	1.504E-07	4.389E-07
Th-228	∑DOSE(j)		9.697E-02	7.172E-02	5.102E-02	7.109E-02	1.117E-01	1.160E-01	1.158E-01	1.150E-01
Th-230	Th-230	1.000E+00	7.922E-02	7.922E-02	7.922E-02	7.921E-02	7.918E-02	7.907E-02	7.877E-02	7.774E-02
Th-230	U-234	1.000E+00	5.459E-05	1.570E-04	3.605E-04	1.071E-03	3.089E-03	9.997E-03	2.848E-02	8.061E-02
Th-230	U-238	9.999E-01	5.576E-11	3.672E-10	1.885E-09	1.658E-08	1.386E-07	1.481E-06	1.272E-05	1.232E-04
Th-230	∑DOSE(j)		7.928E-02	7.938E-02	7.958E-02	8.028E-02	8.227E-02	8.907E-02	1.073E-01	1.585E-01
Th-232	Th-232	1.000E+00	1.421E-02	1.421E-02	1.421E-02	1.421E-02	1.421E-02	1.420E-02	1.417E-02	1.407E-02
Th-232	U-236	1.000E+00	3.645E-11	1.048E-10	2.407E-10	7.152E-10	2.062E-09	6.678E-09	1.905E-08	5.418E-08
Th-232	∑DOSE(j)		1.421E-02	1.421E-02	1.421E-02	1.421E-02	1.421E-02	1.420E-02	1.417E-02	1.407E-02
Ra-228	Th-232	1.000E+00	1.804E-02	5.326E-02	1.125E-01	2.363E-01	3.212E-01	3.294E-01	3.287E-01	3.264E-01
Ra-228	U-236	1.000E+00	2.798E-11	1.997E-10	1.004E-09	7.121E-09	3.510E-08	1.423E-07	4.305E-07	1.249E-06
Ra-228	∑DOSE(j)		1.804E-02	5.326E-02	1.125E-01	2.363E-01	3.212E-01	3.294E-01	3.287E-01	3.264E-01
U-234	U-234	1.000E+00	1.584E+01	1.583E+01	1.582E+01	1.577E+01	1.562E+01	1.512E+01	1.377E+01	9.931E+00
U-234	U-238	9.999E-01	2.323E-05	6.968E-05	1.625E-04	4.865E-04	1.405E-03	4.538E-03	1.281E-02	3.503E-02
U-234	∑DOSE(j)		1.584E+01	1.583E+01	1.582E+01	1.577E+01	1.562E+01	1.512E+01	1.378E+01	9.966E+00
U-235	U-235	1.000E+00	2.054E+00	2.046E+00	2.031E+00	1.979E+00	1.836E+00	1.415E+00	6.716E-01	4.948E-02
U-236	U-236	1.000E+00	3.693E-01	3.692E-01	3.688E-01	3.676E-01	3.643E-01	3.526E-01	3.215E-01	2.325E-01
U-238	U-238	5.400E-05	7.970E-04	7.969E-04	7.967E-04	7.961E-04	7.943E-04	7.882E-04	7.711E-04	7.139E-04
U-238	U-238	9.999E-01	2.226E+01	2.226E+01	2.225E+01	2.224E+01	2.219E+01	2.202E+01	2.154E+01	1.994E+01
U-238	∑DOSE(j)		2.226E+01	2.226E+01	2.226E+01	2.224E+01	2.219E+01	2.202E+01	2.154E+01	1.994E+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	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pa-231	Pa-231	1.000E+00	7.000E-02	6.999E-02	6.996E-02	6.988E-02	6.963E-02	6.879E-02	6.643E-02	5.879E-02
Pa-231	U-235	1.000E+00	0.000E+00	1.079E-04	3.225E-04	1.060E-03	3.061E-03	8.943E-03	1.894E-02	2.484E-02
Pa-231	∑S(j):		7.000E-02	7.010E-02	7.029E-02	7.094E-02	7.270E-02	7.773E-02	8.537E-02	8.363E-02
Ac-227	Pa-231	1.000E+00	0.000E+00	2.193E-03	6.374E-03	1.906E-02	4.290E-02	6.613E-02	6.664E-02	5.899E-02
Ac-227	U-235	1.000E+00	0.000E+00	1.701E-06	1.495E-05	1.531E-04	1.107E-03	6.479E-03	1.774E-02	2.483E-02
Ac-227	∑S(j):		0.000E+00	2.195E-03	6.389E-03	1.922E-02	4.400E-02	7.261E-02	8.439E-02	8.381E-02
Ra-226	Ra-226	1.000E+00	3.400E-01	3.398E-01	3.395E-01	3.385E-01	3.354E-01	3.251E-01	2.971E-01	2.169E-01
Ra-226	Th-230	1.000E+00	0.000E+00	3.595E-04	1.078E-03	3.587E-03	1.071E-02	3.513E-02	1.006E-01	2.867E-01
Ra-226	U-234	1.000E+00	0.000E+00	2.311E-07	2.079E-06	2.305E-05	2.061E-04	2.241E-03	1.896E-02	1.702E-01
Ra-226	U-238	9.999E-01	0.000E+00	2.260E-13	6.099E-12	2.255E-10	6.056E-09	2.202E-07	5.645E-06	1.748E-04
Ra-226	∑S(j):		3.400E-01	3.402E-01	3.406E-01	3.421E-01	3.464E-01	3.624E-01	4.167E-01	6.739E-01
Pb-210	Ra-226	1.000E+00	0.000E+00	1.040E-02	3.025E-02	9.061E-02	2.045E-01	3.142E-01	3.012E-01	2.199E-01
Pb-210	Th-230	1.000E+00	0.000E+00	5.530E-06	4.874E-05	5.043E-04	3.752E-03	2.443E-02	9.036E-02	2.791E-01
Pb-210	U-234	1.000E+00	0.000E+00	2.376E-09	6.315E-08	2.215E-06	5.164E-05	1.248E-03	1.544E-02	1.609E-01
Pb-210	U-238	9.999E-01	0.000E+00	1.745E-15	1.396E-13	1.649E-11	1.186E-09	1.027E-07	4.200E-06	1.600E-04
Pb-210	∑S(j):		0.000E+00	1.041E-02	3.030E-02	9.112E-02	2.083E-01	3.399E-01	4.070E-01	6.601E-01
Th-228	Th-228	1.000E+00	3.000E-02	2.088E-02	1.012E-02	8.009E-04	5.707E-07	5.514E-18	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00	0.000E+00	5.593E-04	3.730E-03	1.693E-02	2.878E-02	2.997E-02	2.991E-02	2.970E-02
Th-228	U-236	1.000E+00	0.000E+00	9.281E-13	2.001E-11	3.772E-10	2.753E-09	1.250E-08	3.876E-08	1.133E-07
Th-228	∑S(j):		3.000E-02	2.144E-02	1.385E-02	1.773E-02	2.878E-02	2.997E-02	2.991E-02	2.970E-02
Th-230	Th-230	1.000E+00	8.300E-01	8.300E-01	8.300E-01	8.298E-01	8.295E-01	8.284E-01	8.253E-01	8.144E-01
Th-230	U-234	1.000E+00	0.000E+00	1.067E-03	3.200E-03	1.065E-02	3.179E-02	1.042E-01	2.979E-01	8.442E-01
Th-230	U-238	9.999E-01	0.000E+00	1.565E-09	1.408E-08	1.562E-07	1.401E-06	1.535E-05	1.328E-04	1.289E-03
Th-230	∑S(j):		8.300E-01	8.311E-01	8.332E-01	8.405E-01	8.613E-01	9.326E-01	1.123E+00	1.660E+00
Th-232	Th-232	1.000E+00	3.000E-02	3.000E-02	3.000E-02	3.000E-02	2.999E-02	2.997E-02	2.991E-02	2.970E-02
Th-232	U-236	1.000E+00	0.000E+00	1.435E-10	4.304E-10	1.432E-09	4.276E-09	1.402E-08	4.015E-08	1.143E-07
Th-232	∑S(j):		3.000E-02	3.000E-02	3.000E-02	3.000E-02	2.999E-02	2.997E-02	2.991E-02	2.970E-02
Ra-228	Th-232	1.000E+00	0.000E+00	3.407E-03	9.104E-03	2.101E-02	2.918E-02	2.997E-02	2.991E-02	2.970E-02
Ra-228	U-236	1.000E+00	0.000E+00	8.314E-12	6.925E-11	6.004E-10	3.130E-09	1.288E-08	3.911E-08	1.136E-07
Ra-228	∑S(j):		0.000E+00	3.407E-03	9.104E-03	2.101E-02	2.918E-02	2.997E-02	2.991E-02	2.970E-02
U-234	U-234	1.000E+00	1.186E+02	1.185E+02	1.184E+02	1.180E+02	1.169E+02	1.132E+02	1.031E+02	7.433E+01
U-234	U-238	9.999E-01	0.000E+00	3.477E-04	1.043E-03	3.468E-03	1.034E-02	3.379E-02	9.573E-02	2.620E-01
U-234	∑S(j):		1.186E+02	1.185E+02	1.184E+02	1.180E+02	1.169E+02	1.132E+02	1.032E+02	7.459E+01
U-235	U-235	1.000E+00	5.110E+00	5.091E+00	5.053E+00	4.923E+00	4.570E+00	3.521E+00	1.671E+00	1.231E-01
U-236	U-236	1.000E+00	2.910E+00	2.909E+00	2.906E+00	2.897E+00	2.870E+00	2.778E+00	2.533E+00	1.832E+00
U-238	U-238	5.400E-05	6.625E-03	6.625E-03	6.623E-03	6.618E-03	6.603E-03	6.553E-03	6.410E-03	5.935E-03
U-238	U-238	9.999E-01	1.227E+02	1.227E+02	1.226E+02	1.225E+02	1.223E+02	1.213E+02	1.187E+02	1.099E+02
U-238	∑S(j):		1.227E+02	1.227E+02	1.226E+02	1.226E+02	1.223E+02	1.213E+02	1.187E+02	1.099E+02

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

RESCALC.EXE execution time = 28.64 seconds