

Index of RESRAD Runs for Response to 6-11-09 RAI Comment No.4
 Alternate Brookside Resident Scenario

Run Date	Description	Pages	File Name	Result (mrem)	
				Deterministic	Probabilistic
6/29/09	Cs-137, contaminated zone source, 93 m ² , layer No. 1, 6 in thick, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290901	Total: 4.161 E-01	Total: 3.77 ± 2.16 E-01
6/29/09	Cs-137, contaminated zone source, 93 m ² , layer No. 2, 9 in thick with 6 in. cover thickness, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290902	Total: 6.091 E-02	Total: 8.82 ± 10.09E-02
6/29/09	Cs-137, contaminated zone source, 93 m ² , layer No. 3, 9 in thick with 15 in. cover thickness, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290903	Total: 2.330 E-03	Total: 2.50 E-02 ± 7.62 E-02
6/29/09	Co-60, contaminated zone source, 93 m ² , layer No. 1, 6 in thick, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290904	Total: 1.744 E+00	Total: 1.59 ± 0.93 E+00
6/29/09	Co-60, contaminated zone source, 93 m ² , layer No. 2, 9 in thick with 6 in. cover thickness, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290905	Total: 3.894 E-01	Total: 4.80 ± 5.08 E-01
6/29/09	Co-60, contaminated zone source, 93 m ² , layer No. 3, 9 in thick with 15 in. cover thickness, OF = 0.25	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06290906	Total: 2.672 E-02	Total: 1.40 ± 3.51 E-01
6/30/09	Cs-137 elevated area source 3.14m ² , layer No. 1, 6 in thick	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300901	Total: 3.693 E-03	Total: 3.57 ± 2.26 E-03
6/30/09	Cs-137 elevated area source 3.14m ² , layer No. 2, 6 in thick with 6 in. thick cover	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300902	Total: 8.330 E-04	Total: 1.06 ± 1.17 E-03
6/30/09	Cs-137 elevated area source 3.14m ² , layer No. 3, 6 in thick with 12 in. cover	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300903	Total: 1.059 E-04	Total: 4.04 ± 8.58 E-04
6/30/09	Co-60 elevated area source 3.14m ² , layer No. 1, 6 in thick	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300904	Total: 1.516 E-02	Total: 1.48 ± 0.96 E-02
6/30/09	Co-60 elevated area source 3.14m ² , layer No. 2, 6 in thick with 6 in. thick cover	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300905	Total: 4.757 E-03	Total: 5.45 ± 5.28 E-03
6/30/09	Co-60 elevated area source 3.14m ² , layer No. 3, 6 in thick with 12 in. cover	Part I: 1-9, Part IV: 1-3, 5, 18, 23. 15 pp.	06300906	Total: 8.943 E-04	Total: 2.21 ± 3.86 E-03

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6/30/09	Cs-137 garden contaminated zone source, 9 in thick	Part I: 1-9, Part IV: 1-3, 5, 8, 18, 23. 16 pp.	06300907	Total: 8.217 E-02 Plant: 4.367 E-02	Total: 1.38 ± 1.36 E-01 Plant: 4.41 ± 3.24 E-02
6/30/09	Co-60 garden contaminated zone source, 9 in thick	Part I: 1-9, Part IV: 1-3, 5, 8, 18, 23. 16 pp.	06300908	Total: 2.126 E-01 Plant: 4.45 E-02	Total: 4.55 ± 5.68 E-01 Plant: 4.49 ± 3.31 E-02
Notes:	<ol style="list-style-type: none"> 1. All dose results are in units of mrem/y per pCi/g. 2. The plant food pathway is turned on only for the garden source. 3. Adjustments to parameter values for direct inhalation and ingestion pathways were not made to account for changed source areas and were not turned off for subsurface layer sources – because the dose contribution from these pathways is negligible. 				

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Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#For DCF1(XXX) only, factors are for infinite depth & area. See ETRG 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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICKO
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVERO
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.714E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET (1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET (2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET (3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET (4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET (5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET (6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV (1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV (2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV (3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE (1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE (2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	93.00 square meters	Cs-137	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	4.161E-01	4.056E-01	3.845E-01	0.000E+00
M(t):	1.664E-02	1.622E-02	1.538E-02	0.000E+00

Maximum TDOSE(t): 4.161E-01 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290901.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	4.160E-01	0.9999	2.745E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.102E-05	0.0001
Total	4.160E-01	0.9999	2.745E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.102E-05	0.0001

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
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	4.161E-01	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.161E-01	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.03E+00	1.03E+00	1.01E+00	9.60E-01	0.00E+00
Avg	0.00E+00	3.77E-01	3.77E-01	3.67E-01	3.48E-01	0.00E+00
Std	0.00E+00	2.16E-01	2.16E-01	2.11E-01	2.01E-01	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.03E+00	1.03E+00	1.01E+00	9.60E-01	0.00E+00
Avg	0.00E+00	3.77E-01	3.77E-01	3.67E-01	3.48E-01	0.00E+00
Std	0.00E+00	2.16E-01	2.16E-01	2.11E-01	2.01E-01	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.03E+00	1.01E+00	9.60E-01	0.00E+00
Avg	3.77E-01	3.67E-01	3.48E-01	0.00E+00
Std	2.16E-01	2.11E-01	2.01E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.03E+00	1.01E+00	9.60E-01	0.00E+00
Avg	3.77E-01	3.67E-01	3.48E-01	0.00E+00
Std	2.16E-01	2.11E-01	2.01E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	1.40E-02	1.37E-02	1.18E-02	0.00E+00
0.075	4.69E-02	4.53E-02	4.21E-02	0.00E+00
0.100	8.63E-02	8.39E-02	6.51E-02	0.00E+00
0.125	1.21E-01	1.17E-01	1.09E-01	0.00E+00
0.150	1.49E-01	1.41E-01	1.29E-01	0.00E+00
0.175	1.69E-01	1.64E-01	1.51E-01	0.00E+00
0.200	1.79E-01	1.71E-01	1.60E-01	0.00E+00
0.225	1.95E-01	1.88E-01	1.75E-01	0.00E+00
0.250	2.11E-01	2.03E-01	1.88E-01	0.00E+00
0.275	2.24E-01	2.18E-01	2.05E-01	0.00E+00
0.300	2.43E-01	2.33E-01	2.21E-01	0.00E+00
0.325	2.59E-01	2.52E-01	2.36E-01	0.00E+00
0.350	2.73E-01	2.65E-01	2.52E-01	0.00E+00
0.375	2.90E-01	2.81E-01	2.65E-01	0.00E+00
0.400	3.06E-01	2.96E-01	2.81E-01	0.00E+00
0.425	3.24E-01	3.15E-01	2.98E-01	0.00E+00
0.450	3.42E-01	3.33E-01	3.17E-01	0.00E+00
0.475	3.59E-01	3.49E-01	3.28E-01	0.00E+00
0.500	3.78E-01	3.69E-01	3.50E-01	0.00E+00
0.525	3.82E-01	3.73E-01	3.55E-01	0.00E+00
0.550	4.00E-01	3.87E-01	3.67E-01	0.00E+00
0.575	4.15E-01	4.01E-01	3.79E-01	0.00E+00
0.600	4.39E-01	4.26E-01	4.04E-01	0.00E+00
0.625	4.48E-01	4.37E-01	4.16E-01	0.00E+00
0.650	4.67E-01	4.56E-01	4.34E-01	0.00E+00
0.675	4.90E-01	4.76E-01	4.51E-01	0.00E+00
0.700	5.03E-01	4.91E-01	4.64E-01	0.00E+00
0.725	5.22E-01	5.10E-01	4.85E-01	0.00E+00
0.750	5.40E-01	5.27E-01	4.98E-01	0.00E+00
0.775	5.47E-01	5.32E-01	5.06E-01	0.00E+00
0.800	5.75E-01	5.61E-01	5.33E-01	0.00E+00
0.825	5.87E-01	5.73E-01	5.47E-01	0.00E+00
0.850	6.02E-01	5.86E-01	5.57E-01	0.00E+00
0.875	6.27E-01	6.11E-01	5.81E-01	0.00E+00
0.900	6.73E-01	6.56E-01	6.24E-01	0.00E+00
0.925	7.03E-01	6.83E-01	6.51E-01	0.00E+00
0.950	7.26E-01	7.08E-01	6.75E-01	0.00E+00
0.975	7.86E-01	7.64E-01	7.21E-01	0.00E+00
1.000	1.03E+00	1.01E+00	9.60E-01	0.00E+00

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Coefficients for peak All Pathways Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	3	3	3	3

Description of Probabilistic Variable	Sig Coeff		Sig Coeff		Sig Coeff		Sig Coeff	
Area of contaminated zone	4	0.21	4	0.06	4	0.11	4	0.04
Thickness of contaminated zone	2	0.81	2	0.41	2	0.74	2	0.37
Density of contaminated zone	3	0.25	3	0.08	3	0.26	3	0.09
Indoor time fraction	1	0.95	1	0.86	1	0.93	1	0.85
R-SQUARE	0.91		0.91		0.89		0.89	

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		
5	COVER0	NORMAL	.152	.076		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	DOSE(j,t), mrem/yr			
				0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.65E-01	6.65E-01	6.49E-01	6.16E-01	0.00E+00	0.00E+00
Avg	0.00E+00	8.82E-02	8.82E-02	8.71E-02	8.52E-02	0.00E+00	0.00E+00
Std	0.00E+00	1.09E-01	1.09E-01	1.08E-01	1.04E-01	0.00E+00	0.00E+00
ΣALL							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.65E-01	6.65E-01	6.49E-01	6.16E-01	0.00E+00	0.00E+00
Avg	0.00E+00	8.82E-02	8.82E-02	8.71E-02	8.52E-02	0.00E+00	0.00E+00
Std	0.00E+00	1.09E-01	1.09E-01	1.08E-01	1.04E-01	0.00E+00	0.00E+00

ΣALL is total dose summed for all nuclides.

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See EFTG 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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	SI(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	WI(1)
R013	Cover depth (m)	1.520E-01	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.121E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

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Site-Specific Parameter Summary (continued)

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

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

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Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
Area: 93.00 square meters	Cs-137 1.000E+00
Thickness: 0.23 meters	
Cover Depth: 0.15 meters	

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+03
TDOSE(t):	6.091E-02	6.034E-02	5.921E-02	0.000E+00
M(t):	2.436E-03	2.414E-03	2.368E-03	0.000E+00

Maximum TDOSE(t): 6.091E-02 mrem/yr at t = 0.000E+00 years

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	6.091E-02	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	6.091E-02	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
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	6.091E-02	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.091E-02	1.0000

*Sum of all water independent and dependent pathways.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.65E-01	6.49E-01	6.16E-01	0.00E+00
Avg	8.82E-02	8.71E-02	8.52E-02	0.00E+00
Std	1.09E-01	1.08E-01	1.04E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.65E-01	6.49E-01	6.16E-01	0.00E+00
Avg	8.82E-02	8.71E-02	8.52E-02	0.00E+00
Std	1.09E-01	1.08E-01	1.04E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	3.49E-03	3.46E-03	3.39E-03	0.00E+00
0.100	6.14E-03	6.08E-03	5.97E-03	0.00E+00
0.125	8.90E-03	8.81E-03	8.65E-03	0.00E+00
0.150	9.92E-03	9.82E-03	9.64E-03	0.00E+00
0.175	1.22E-02	1.21E-02	1.19E-02	0.00E+00
0.200	1.38E-02	1.36E-02	1.34E-02	0.00E+00
0.225	1.57E-02	1.55E-02	1.50E-02	0.00E+00
0.250	1.91E-02	1.88E-02	1.85E-02	0.00E+00
0.275	2.05E-02	2.02E-02	1.98E-02	0.00E+00
0.300	2.23E-02	2.21E-02	2.17E-02	0.00E+00
0.325	2.62E-02	2.60E-02	2.55E-02	0.00E+00
0.350	2.81E-02	2.78E-02	2.73E-02	0.00E+00
0.375	2.93E-02	2.90E-02	2.85E-02	0.00E+00
0.400	3.08E-02	3.05E-02	2.99E-02	0.00E+00
0.425	3.41E-02	3.37E-02	3.31E-02	0.00E+00
0.450	3.88E-02	3.84E-02	3.77E-02	0.00E+00
0.475	4.29E-02	4.25E-02	4.17E-02	0.00E+00
0.500	4.58E-02	4.54E-02	4.45E-02	0.00E+00
0.525	5.14E-02	5.10E-02	5.00E-02	0.00E+00
0.550	5.62E-02	5.55E-02	5.42E-02	0.00E+00
0.575	6.20E-02	6.15E-02	6.03E-02	0.00E+00
0.600	6.54E-02	6.47E-02	6.35E-02	0.00E+00
0.625	7.25E-02	7.18E-02	7.05E-02	0.00E+00
0.650	8.08E-02	8.00E-02	7.85E-02	0.00E+00
0.675	8.64E-02	8.56E-02	8.40E-02	0.00E+00
0.700	9.29E-02	9.20E-02	9.03E-02	0.00E+00
0.725	1.02E-01	1.01E-01	9.92E-02	0.00E+00
0.750	1.13E-01	1.12E-01	1.10E-01	0.00E+00
0.775	1.28E-01	1.26E-01	1.24E-01	0.00E+00
0.800	1.45E-01	1.44E-01	1.41E-01	0.00E+00
0.825	1.56E-01	1.54E-01	1.51E-01	0.00E+00
0.850	1.69E-01	1.68E-01	1.65E-01	0.00E+00
0.875	2.04E-01	2.02E-01	1.98E-01	0.00E+00
0.900	2.32E-01	2.30E-01	2.25E-01	0.00E+00
0.925	2.46E-01	2.43E-01	2.39E-01	0.00E+00
0.950	3.38E-01	3.35E-01	3.29E-01	0.00E+00
0.975	4.16E-01	4.06E-01	3.92E-01	0.00E+00
1.000	6.65E-01	6.49E-01	6.16E-01	0.00E+00

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Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	4	0.08	4	0.05	5	0.06	5	0.03
Thickness of contaminated zone	3	0.25	3	0.15	3	0.37	3	0.18
Density of contaminated zone	5	0.04	5	0.02	4	0.10	4	0.04
Indoor time fraction	2	0.53	2	0.35	2	0.73	2	0.48
Cover depth	1	-0.80	1	-0.75	1	-0.85	1	-0.74
R-SQUARE		0.69		0.69		0.80		0.80

-Rank is set to zero if the dose is zero or the correlation matrix is singular.
 -R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Time = 1.000E+00	
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*Would this
 one for
 evaluation
 prob & detem
 results are too
 far apart?*

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See EFTG 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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICKO
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	3.810E-01	0.000E+00	---	COVERO
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.121E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290903.RAD

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	1	---	---	KYMAX

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290903.RAD

Contaminated Zone Dimensions

Initial Soil Concentrations, pCi/g

Area:	93.00 square meters	Cs-137	1.000E+00
Thickness:	0.23 meters		
Cover Depth:	0.38 meters		

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+03
TDOSE(t):	2.330E-03	2.309E-03	2.266E-03	0.000E+00
M(t):	9.322E-05	9.235E-05	9.064E-05	0.000E+00

Maximum TDOSE(t): 2.330E-03 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290903.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	2.330E-03	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.330E-03	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.330E-03	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.330E-03	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		
5	COVER0	NORMAL	.381	.191		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.48E-01	6.48E-01	6.31E-01	5.99E-01	4.84E-11
Avg	0.00E+00	2.50E-02	2.50E-02	2.46E-02	2.39E-02	6.52E-13
Std	0.00E+00	7.62E-02	7.62E-02	7.48E-02	7.20E-02	4.03E-12
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.48E-01	6.48E-01	6.31E-01	5.99E-01	4.84E-11
Avg	0.00E+00	2.50E-02	2.50E-02	2.46E-02	2.39E-02	6.52E-13
Std	0.00E+00	7.62E-02	7.62E-02	7.48E-02	7.20E-02	4.03E-12

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.48E-01	6.31E-01	5.99E-01	4.84E-11
Avg	2.50E-02	2.46E-02	2.39E-02	6.52E-13
Std	7.62E-02	7.48E-02	7.20E-02	4.03E-12
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.48E-01	6.31E-01	5.99E-01	4.84E-11
Avg	2.50E-02	2.46E-02	2.39E-02	6.52E-13
Std	7.62E-02	7.48E-02	7.20E-02	4.03E-12

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	4.34E-06	4.30E-06	4.22E-06	0.00E+00
0.100	2.22E-05	2.20E-05	2.16E-05	0.00E+00
0.125	3.24E-05	3.21E-05	3.15E-05	0.00E+00
0.150	4.62E-05	4.58E-05	4.50E-05	0.00E+00
0.175	7.30E-05	7.23E-05	7.10E-05	0.00E+00
0.200	9.19E-05	9.10E-05	8.92E-05	0.00E+00
0.225	1.33E-04	1.32E-04	1.30E-04	0.00E+00
0.250	1.96E-04	1.94E-04	1.90E-04	0.00E+00
0.275	2.33E-04	2.30E-04	2.25E-04	0.00E+00
0.300	2.90E-04	2.88E-04	2.82E-04	0.00E+00
0.325	3.71E-04	3.68E-04	3.61E-04	0.00E+00
0.350	5.25E-04	5.20E-04	5.09E-04	0.00E+00
0.375	6.40E-04	6.33E-04	6.21E-04	0.00E+00
0.400	7.82E-04	7.75E-04	7.60E-04	0.00E+00
0.425	8.86E-04	8.77E-04	8.60E-04	0.00E+00
0.450	1.09E-03	1.08E-03	1.06E-03	0.00E+00
0.475	1.25E-03	1.24E-03	1.21E-03	0.00E+00
0.500	1.55E-03	1.54E-03	1.51E-03	0.00E+00
0.525	1.90E-03	1.89E-03	1.85E-03	0.00E+00
0.550	2.59E-03	2.57E-03	2.52E-03	0.00E+00
0.575	2.83E-03	2.80E-03	2.74E-03	0.00E+00
0.600	3.34E-03	3.30E-03	3.24E-03	0.00E+00
0.625	4.01E-03	3.97E-03	3.89E-03	0.00E+00
0.650	4.67E-03	4.63E-03	4.54E-03	0.00E+00
0.675	5.72E-03	5.67E-03	5.56E-03	0.00E+00
0.700	6.96E-03	6.89E-03	6.77E-03	0.00E+00
0.725	8.44E-03	8.36E-03	8.21E-03	0.00E+00
0.750	1.22E-02	1.21E-02	1.19E-02	0.00E+00
0.775	1.43E-02	1.42E-02	1.39E-02	0.00E+00
0.800	2.09E-02	2.07E-02	2.03E-02	0.00E+00
0.825	2.52E-02	2.50E-02	2.45E-02	0.00E+00
0.850	3.04E-02	3.01E-02	2.95E-02	0.00E+00
0.875	3.73E-02	3.70E-02	3.63E-02	0.00E+00
0.900	4.99E-02	4.88E-02	4.69E-02	0.00E+00
0.925	7.77E-02	7.69E-02	7.54E-02	0.00E+00
0.950	1.22E-01	1.21E-01	1.18E-01	0.00E+00
0.975	2.68E-01	2.66E-01	2.61E-01	9.73E-12
1.000	6.48E-01	6.31E-01	5.99E-01	4.84E-11

Title : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 9 in

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Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	2	0.16	2	0.14	4	0.07	4	0.04
Thickness of contaminated zone	4	0.10	4	0.08	3	0.16	3	0.09
Density of contaminated zone	5	-0.01	5	-0.01	5	0.02	5	0.01
Indoor time fraction	3	0.11	3	0.09	2	0.44	2	0.27
Cover depth	1	-0.52	1	-0.51	1	-0.82	1	-0.78
R-SQUARE		0.29		0.29		0.69		0.69

-Rank is set to zero if the dose is zero or the correlation matrix is singular.
 -R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See EFTG 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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T (4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T (5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T (6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T (7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T (8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T (9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.595E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET (1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET (2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET (3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET (4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET (5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET (6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV (1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV (2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV (3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE (1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE (2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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 (l/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (l/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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	93.00 square meters	Co-60	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	1.744E+00	1.518E+00	1.150E+00	0.000E+00
M(t):	6.976E-02	6.072E-02	4.600E-02	0.000E+00

Maximum TDOSE(t): 1.744E+00 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	1.744E+00	1.0000	1.778E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.067E-05	0.0000
Total	1.744E+00	1.0000	1.778E-06	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.067E-05	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.744E+00	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.744E+00	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.15	.075		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	DOSE(j,t), mrem/yr			
				0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.44E+00	4.44E+00	3.87E+00	2.95E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.59E+00	1.59E+00	1.38E+00	1.05E+00	0.00E+00	0.00E+00
Std	0.00E+00	9.28E-01	9.28E-01	8.12E-01	6.21E-01	0.00E+00	0.00E+00
ΣALL							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.44E+00	4.44E+00	3.87E+00	2.95E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.59E+00	1.59E+00	1.38E+00	1.05E+00	0.00E+00	0.00E+00
Std	0.00E+00	9.28E-01	9.28E-01	8.12E-01	6.21E-01	0.00E+00	0.00E+00

ΣALL is total dose summed for all nuclides.

Coefficients for peak of mean dose time Dose		PCC	SRC	PRCC	SRRC
Coefficient =		1	1	1	1
Repetition =					
Description of Probabilistic Variable		Sig Coeff	Sig Coeff	Sig Coeff	Sig Coeff
Area of contaminated zone	4	0.30	4 0.10	4 0.13	4 0.04
Thickness of contaminated zone	2	0.74	2 0.36	2 0.78	2 0.39
Density of contaminated zone	3	0.32	3 0.11	3 0.32	3 0.11
Indoor time fraction	1	0.93	1 0.85	1 0.94	1 0.87
R-SQUARE		0.89	0.89	0.90	0.90

-Rank is set to zero if the dose is zero or the correlation matrix is singular.
 -R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	6.04E-02	5.25E-02	3.18E-02	0.00E+00
0.075	1.85E-01	1.62E-01	1.24E-01	0.00E+00
0.100	3.56E-01	2.84E-01	1.78E-01	0.00E+00
0.125	4.91E-01	4.29E-01	3.27E-01	0.00E+00
0.150	5.84E-01	5.09E-01	3.77E-01	0.00E+00
0.175	6.77E-01	5.75E-01	4.31E-01	0.00E+00
0.200	7.11E-01	6.15E-01	4.50E-01	0.00E+00
0.225	7.97E-01	6.94E-01	5.00E-01	0.00E+00
0.250	8.45E-01	7.35E-01	5.60E-01	0.00E+00
0.275	9.34E-01	7.93E-01	6.01E-01	0.00E+00
0.300	9.69E-01	8.37E-01	6.32E-01	0.00E+00
0.325	1.05E+00	9.06E-01	6.88E-01	0.00E+00
0.350	1.11E+00	9.72E-01	7.37E-01	0.00E+00
0.375	1.21E+00	1.06E+00	7.89E-01	0.00E+00
0.400	1.27E+00	1.10E+00	8.38E-01	0.00E+00
0.425	1.36E+00	1.18E+00	9.00E-01	0.00E+00
0.450	1.45E+00	1.26E+00	9.57E-01	0.00E+00
0.475	1.49E+00	1.30E+00	9.83E-01	0.00E+00
0.500	1.57E+00	1.36E+00	1.03E+00	0.00E+00
0.525	1.62E+00	1.41E+00	1.06E+00	0.00E+00
0.550	1.67E+00	1.46E+00	1.12E+00	0.00E+00
0.575	1.80E+00	1.56E+00	1.18E+00	0.00E+00
0.600	1.84E+00	1.60E+00	1.21E+00	0.00E+00
0.625	1.90E+00	1.66E+00	1.26E+00	0.00E+00
0.650	2.00E+00	1.75E+00	1.32E+00	0.00E+00
0.675	2.07E+00	1.79E+00	1.37E+00	0.00E+00
0.700	2.14E+00	1.87E+00	1.42E+00	0.00E+00
0.725	2.20E+00	1.92E+00	1.46E+00	0.00E+00
0.750	2.26E+00	1.97E+00	1.50E+00	0.00E+00
0.775	2.35E+00	2.04E+00	1.56E+00	0.00E+00
0.800	2.40E+00	2.09E+00	1.58E+00	0.00E+00
0.825	2.52E+00	2.20E+00	1.67E+00	0.00E+00
0.850	2.57E+00	2.25E+00	1.71E+00	0.00E+00
0.875	2.64E+00	2.30E+00	1.74E+00	0.00E+00
0.900	2.81E+00	2.44E+00	1.84E+00	0.00E+00
0.925	2.96E+00	2.59E+00	1.98E+00	0.00E+00
0.950	3.12E+00	2.73E+00	2.08E+00	0.00E+00
0.975	3.27E+00	2.86E+00	2.17E+00	0.00E+00
1.000	4.44E+00	3.87E+00	2.95E+00	0.00E+00

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	4.44E+00	3.87E+00	2.95E+00	0.00E+00
Avg	1.59E+00	1.38E+00	1.05E+00	0.00E+00
Std	9.28E-01	8.12E-01	6.21E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	4.44E+00	3.87E+00	2.95E+00	0.00E+00
Avg	1.59E+00	1.38E+00	1.05E+00	0.00E+00
Std	9.28E-01	8.12E-01	6.21E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

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

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

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

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

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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	1.520E-01	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.355E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET (1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET (2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET (3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET (4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET (5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET (6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV (1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV (2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV (3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE (1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE (2)
R19B	Growing Season for Fodder (years)	not used	8.000E-02	---	TE (3)

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290905.RAD

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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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	---	TFFL
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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290905.RAD

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	1	---	---	KYMAX

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290905.RAD

Contaminated Zone DimensionsInitial Soil Concentrations, pCi/g

Area:	93.00 square meters	Co-60	1.000E+00
Thickness:	0.23 meters		
Cover Depth:	0.15 meters		

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+03
TDOSE(t):	3.894E-01	3.446E-01	2.698E-01	0.000E+00
M(t):	1.558E-02	1.378E-02	1.079E-02	0.000E+00

Maximum TDOSE(t): 3.894E-01 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290905.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	3.894E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	3.894E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.894E-01	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.894E-01	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		
5	COVER0	NORMAL	.152	.076		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.80E+00	2.80E+00	2.44E+00	1.85E+00	0.00E+00
Avg	0.00E+00	4.80E-01	4.80E-01	4.24E-01	3.31E-01	0.00E+00
Std	0.00E+00	5.08E-01	5.08E-01	4.48E-01	3.48E-01	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.80E+00	2.80E+00	2.44E+00	1.85E+00	0.00E+00
Avg	0.00E+00	4.80E-01	4.80E-01	4.24E-01	3.31E-01	0.00E+00
Std	0.00E+00	5.08E-01	5.08E-01	4.48E-01	3.48E-01	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr			
		0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60					
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	2.80E+00	2.44E+00	1.85E+00	0.00E+00	
Avg	4.80E-01	4.24E-01	3.31E-01	0.00E+00	
Std	5.08E-01	4.48E-01	3.48E-01	0.00E+00	
ΣALL					
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	2.80E+00	2.44E+00	1.85E+00	0.00E+00	
Avg	4.80E-01	4.24E-01	3.31E-01	0.00E+00	
Std	5.08E-01	4.48E-01	3.48E-01	0.00E+00	

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	2.94E-02	2.60E-02	2.03E-02	0.00E+00
0.100	4.74E-02	4.19E-02	3.28E-02	0.00E+00
0.125	7.18E-02	6.36E-02	4.99E-02	0.00E+00
0.150	7.85E-02	6.94E-02	5.36E-02	0.00E+00
0.175	9.34E-02	8.26E-02	6.48E-02	0.00E+00
0.200	1.02E-01	9.04E-02	7.06E-02	0.00E+00
0.225	1.07E-01	9.41E-02	7.33E-02	0.00E+00
0.250	1.33E-01	1.18E-01	9.25E-02	0.00E+00
0.275	1.43E-01	1.26E-01	9.86E-02	0.00E+00
0.300	1.54E-01	1.35E-01	1.05E-01	0.00E+00
0.325	1.71E-01	1.51E-01	1.19E-01	0.00E+00
0.350	1.81E-01	1.58E-01	1.23E-01	0.00E+00
0.375	2.04E-01	1.81E-01	1.42E-01	0.00E+00
0.400	2.23E-01	1.97E-01	1.54E-01	0.00E+00
0.425	2.33E-01	2.07E-01	1.62E-01	0.00E+00
0.450	2.49E-01	2.19E-01	1.71E-01	0.00E+00
0.475	2.65E-01	2.35E-01	1.84E-01	0.00E+00
0.500	2.91E-01	2.58E-01	2.01E-01	0.00E+00
0.525	3.33E-01	2.94E-01	2.31E-01	0.00E+00
0.550	3.69E-01	3.26E-01	2.55E-01	0.00E+00
0.575	3.91E-01	3.47E-01	2.69E-01	0.00E+00
0.600	4.24E-01	3.74E-01	2.90E-01	0.00E+00
0.625	4.37E-01	3.87E-01	3.04E-01	0.00E+00
0.650	4.78E-01	4.22E-01	3.29E-01	0.00E+00
0.675	5.16E-01	4.56E-01	3.57E-01	0.00E+00
0.700	5.54E-01	4.90E-01	3.84E-01	0.00E+00
0.725	6.04E-01	5.36E-01	4.20E-01	0.00E+00
0.750	6.90E-01	6.11E-01	4.77E-01	0.00E+00
0.775	7.11E-01	6.30E-01	4.92E-01	0.00E+00
0.800	7.89E-01	6.98E-01	5.47E-01	0.00E+00
0.825	8.60E-01	7.62E-01	5.97E-01	0.00E+00
0.850	9.19E-01	8.14E-01	6.34E-01	0.00E+00
0.875	1.02E+00	9.05E-01	7.08E-01	0.00E+00
0.900	1.19E+00	1.05E+00	8.25E-01	0.00E+00
0.925	1.32E+00	1.17E+00	9.17E-01	0.00E+00
0.950	1.68E+00	1.48E+00	1.14E+00	0.00E+00
0.975	1.90E+00	1.68E+00	1.31E+00	0.00E+00
1.000	2.80E+00	2.44E+00	1.85E+00	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in C

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290905.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig Coeff	Sig Coeff	Sig Coeff	Sig Coeff
Area of contaminated zone	4 0.09	4 0.05	5 0.06	5 0.03
Thickness of contaminated zone	3 0.35	3 0.19	3 0.45	3 0.22
Density of contaminated zone	5 0.06	5 0.03	4 0.12	4 0.05
Indoor time fraction	2 0.63	2 0.42	2 0.76	2 0.53
Cover depth	1 -0.82	1 -0.73	1 -0.84	1 -0.69
R-SQUARE	0.73	0.73	0.80	0.80

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290906.RAD

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Hold for
evaluation
Prob & Deten
results are too
far apart

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290906.RAD

Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

#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)	9.300E+01	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	3.810E-01	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.355E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	2.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LF15
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LF16
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290906.RAD

Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
------------------------------	------------------------------------

Area:	93.00 square meters	Co-60	1.000E+00
Thickness:	0.23 meters		
Cover Depth:	0.38 meters		

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+03
TDOSE(t):	2.672E-02	2.365E-02	1.852E-02	0.000E+00
M(t):	1.069E-03	9.460E-04	7.409E-04	0.000E+00

Maximum TDOSE(t): 2.672E-02 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	2.672E-02	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	2.672E-02	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.672E-02	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.672E-02	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	46	93	186	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.25	.125		
5	COVER0	NORMAL	.381	.191		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	DOSE(j,t), mrem/yr			
				0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.71E+00	2.71E+00	2.36E+00	1.79E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.40E-01	1.40E-01	1.23E-01	9.57E-02	0.00E+00	0.00E+00
Std	0.00E+00	3.51E-01	3.51E-01	3.08E-01	2.38E-01	0.00E+00	0.00E+00
ΣALL							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.71E+00	2.71E+00	2.36E+00	1.79E+00	0.00E+00	0.00E+00
Avg	0.00E+00	1.40E-01	1.40E-01	1.23E-01	9.57E-02	0.00E+00	0.00E+00
Std	0.00E+00	3.51E-01	3.51E-01	3.08E-01	2.38E-01	0.00E+00	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.71E+00	2.36E+00	1.79E+00	0.00E+00
Avg	1.40E-01	1.23E-01	9.57E-02	0.00E+00
Std	3.51E-01	3.08E-01	2.38E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.71E+00	2.36E+00	1.79E+00	0.00E+00
Avg	1.40E-01	1.23E-01	9.57E-02	0.00E+00
Std	3.51E-01	3.08E-01	2.38E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	1.45E-04	1.28E-04	9.67E-05	0.00E+00
0.100	4.26E-04	3.45E-04	2.70E-04	0.00E+00
0.125	6.94E-04	6.14E-04	4.79E-04	0.00E+00
0.150	9.70E-04	8.57E-04	6.69E-04	0.00E+00
0.175	1.44E-03	1.28E-03	9.99E-04	0.00E+00
0.200	1.68E-03	1.49E-03	1.17E-03	0.00E+00
0.225	2.40E-03	2.12E-03	1.66E-03	0.00E+00
0.250	3.07E-03	2.72E-03	2.14E-03	0.00E+00
0.275	3.78E-03	3.35E-03	2.62E-03	0.00E+00
0.300	4.82E-03	4.16E-03	3.11E-03	0.00E+00
0.325	5.83E-03	5.16E-03	4.04E-03	0.00E+00
0.350	7.79E-03	6.90E-03	5.40E-03	0.00E+00
0.375	8.68E-03	7.66E-03	5.96E-03	0.00E+00
0.400	1.00E-02	8.88E-03	6.97E-03	0.00E+00
0.425	1.23E-02	1.09E-02	8.17E-03	0.00E+00
0.450	1.36E-02	1.21E-02	9.45E-03	0.00E+00
0.475	1.57E-02	1.39E-02	1.09E-02	0.00E+00
0.500	1.86E-02	1.65E-02	1.29E-02	0.00E+00
0.525	2.14E-02	1.89E-02	1.48E-02	0.00E+00
0.550	2.70E-02	2.39E-02	1.88E-02	0.00E+00
0.575	3.18E-02	2.82E-02	2.21E-02	0.00E+00
0.600	3.42E-02	3.03E-02	2.36E-02	0.00E+00
0.625	3.71E-02	3.28E-02	2.56E-02	0.00E+00
0.650	4.59E-02	4.07E-02	3.19E-02	0.00E+00
0.675	5.11E-02	4.47E-02	3.48E-02	0.00E+00
0.700	6.62E-02	5.85E-02	4.58E-02	0.00E+00
0.725	7.70E-02	6.80E-02	5.31E-02	0.00E+00
0.750	1.05E-01	9.30E-02	7.24E-02	0.00E+00
0.775	1.15E-01	1.02E-01	7.91E-02	0.00E+00
0.800	1.49E-01	1.31E-01	1.03E-01	0.00E+00
0.825	1.92E-01	1.70E-01	1.33E-01	0.00E+00
0.850	2.25E-01	1.97E-01	1.50E-01	0.00E+00
0.875	2.45E-01	2.17E-01	1.70E-01	0.00E+00
0.900	3.46E-01	3.05E-01	2.37E-01	0.00E+00
0.925	4.65E-01	4.12E-01	3.22E-01	0.00E+00
0.950	7.08E-01	6.25E-01	4.87E-01	0.00E+00
0.975	1.41E+00	1.25E+00	9.80E-01	0.00E+00
1.000	2.71E+00	2.36E+00	1.79E+00	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 9 in C

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06290906.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	3	0.15	3	0.12	4	0.07	4	0.04
Thickness of contaminated zone	4	0.13	4	0.10	3	0.22	3	0.12
Density of contaminated zone	5	-0.01	5	0.00	5	0.04	5	0.02
Indoor time fraction	2	0.16	2	0.13	2	0.49	2	0.31
Cover depth	1	-0.57	1	-0.56	1	-0.81	1	-0.77
R-SQUARE		0.35		0.35		0.69		0.69

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#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)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(1)
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.714E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET (1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET (2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET (3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET (4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET (5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET (6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV (1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV (2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV (3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE (1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE (2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	3.14 square meters	Cs-137	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	3.693E-03	3.599E-03	3.404E-03	0.000E+00
M(t):	1.477E-04	1.439E-04	1.362E-04	0.000E+00

Maximum TDOSE(t): 3.693E-03 mrem/yr at t = 0.000E+00 years

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	3.693E-03	1.0000	6.397E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.385E-08	0.0000
Total	3.693E-03	1.0000	6.397E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.385E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.693E-03	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.693E-03	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.05E-02	1.05E-02	1.03E-02	9.77E-03	0.00E+00
Avg	0.00E+00	3.57E-03	3.57E-03	3.48E-03	3.29E-03	0.00E+00
Std	0.00E+00	2.26E-03	2.26E-03	2.21E-03	2.11E-03	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	1.05E-02	1.05E-02	1.03E-02	9.77E-03	0.00E+00
Avg	0.00E+00	3.57E-03	3.57E-03	3.48E-03	3.29E-03	0.00E+00
Std	0.00E+00	2.26E-03	2.26E-03	2.21E-03	2.11E-03	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.05E-02	1.03E-02	9.77E-03	0.00E+00
Avg	3.57E-03	3.48E-03	3.29E-03	0.00E+00
Std	2.26E-03	2.21E-03	2.11E-03	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.05E-02	1.03E-02	9.77E-03	0.00E+00
Avg	3.57E-03	3.48E-03	3.29E-03	0.00E+00
Std	2.26E-03	2.21E-03	2.11E-03	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : Alternate Brookside Resident Dose Assessment un-
 it Cs-137 DosFile: C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300901.RAD

Cumulative Probability Summary for: Total Dose Over Pathways

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	1.03E-04	1.01E-04	7.79E-05	0.00E+00
0.075	3.89E-04	3.77E-04	3.59E-04	0.00E+00
0.100	6.71E-04	6.54E-04	6.21E-04	0.00E+00
0.125	1.04E-03	1.02E-03	9.55E-04	0.00E+00
0.150	1.21E-03	1.16E-03	1.06E-03	0.00E+00
0.175	1.39E-03	1.34E-03	1.25E-03	0.00E+00
0.200	1.48E-03	1.44E-03	1.36E-03	0.00E+00
0.225	1.63E-03	1.58E-03	1.48E-03	0.00E+00
0.250	1.77E-03	1.72E-03	1.59E-03	0.00E+00
0.275	1.89E-03	1.84E-03	1.71E-03	0.00E+00
0.300	1.97E-03	1.90E-03	1.80E-03	0.00E+00
0.325	2.12E-03	2.05E-03	1.95E-03	0.00E+00
0.350	2.41E-03	2.34E-03	2.20E-03	0.00E+00
0.375	2.57E-03	2.49E-03	2.36E-03	0.00E+00
0.400	2.74E-03	2.66E-03	2.50E-03	0.00E+00
0.425	2.90E-03	2.83E-03	2.68E-03	0.00E+00
0.450	3.03E-03	2.96E-03	2.81E-03	0.00E+00
0.475	3.25E-03	3.17E-03	2.97E-03	0.00E+00
0.500	3.37E-03	3.28E-03	3.11E-03	0.00E+00
0.525	3.56E-03	3.46E-03	3.29E-03	0.00E+00
0.550	3.75E-03	3.65E-03	3.44E-03	0.00E+00
0.575	3.92E-03	3.82E-03	3.64E-03	0.00E+00
0.600	4.03E-03	3.93E-03	3.73E-03	0.00E+00
0.625	4.18E-03	4.08E-03	3.83E-03	0.00E+00
0.650	4.28E-03	4.17E-03	3.96E-03	0.00E+00
0.675	4.45E-03	4.34E-03	4.13E-03	0.00E+00
0.700	4.74E-03	4.60E-03	4.36E-03	0.00E+00
0.725	4.93E-03	4.81E-03	4.57E-03	0.00E+00
0.750	5.15E-03	5.02E-03	4.77E-03	0.00E+00
0.775	5.33E-03	5.20E-03	4.96E-03	0.00E+00
0.800	5.52E-03	5.39E-03	5.09E-03	0.00E+00
0.825	5.74E-03	5.60E-03	5.32E-03	0.00E+00
0.850	5.93E-03	5.79E-03	5.51E-03	0.00E+00
0.875	6.28E-03	6.13E-03	5.84E-03	0.00E+00
0.900	6.68E-03	6.52E-03	6.21E-03	0.00E+00
0.925	6.96E-03	6.76E-03	6.40E-03	0.00E+00
0.950	7.64E-03	7.45E-03	7.08E-03	0.00E+00
0.975	8.30E-03	8.10E-03	7.72E-03	0.00E+00
1.000	1.05E-02	1.03E-02	9.77E-03	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	PCC		SRC		PRCC		SRRC	
	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	3	0.69	3	0.32	3	0.57	3	0.24
Thickness of contaminated zone	2	0.75	2	0.39	2	0.79	2	0.44
Density of contaminated zone	4	0.26	4	0.09	4	0.26	4	0.09
Indoor time fraction	1	0.91	1	0.78	1	0.92	1	0.81
R-SQUARE		0.88		0.88		0.89		0.89

-Rank is set to zero if the dose is zero or the correlation matrix is singular.
 -R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#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.

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICKO
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T (4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T (5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T (6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T (7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T (8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T (9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	SI(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	WI(1)
R013	Cover depth (m)	1.520E-01	0.000E+00	---	COVERO
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.714E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LF15
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LF16
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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	1	---	---	KYMAX

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Contaminated Zone Dimensions	Initial Soil Concentrations, pCi/g
Area: 3.14 square meters	Cs-137 1.000E+00
Thickness: 0.15 meters	
Cover Depth: 0.15 meters	

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+03
TDOSE(t):	8.330E-04	8.243E-04	8.051E-04	0.000E+00
M(t):	3.332E-05	3.297E-05	3.220E-05	0.000E+00

Maximum TDOSE(t): 8.330E-04 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	8.330E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	8.330E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
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	8.330E-04	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.330E-04	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		
5	COVER0	NORMAL	.152	.076		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.79E-03	5.79E-03	5.69E-03	5.51E-03	0.00E+00
Avg	0.00E+00	1.06E-03	1.06E-03	1.05E-03	1.02E-03	0.00E+00
Std	0.00E+00	1.17E-03	1.17E-03	1.15E-03	1.11E-03	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.79E-03	5.79E-03	5.69E-03	5.51E-03	0.00E+00
Avg	0.00E+00	1.06E-03	1.06E-03	1.05E-03	1.02E-03	0.00E+00
Std	0.00E+00	1.17E-03	1.17E-03	1.15E-03	1.11E-03	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide	DOSE(i,j,t), mrem/yr				
	(j)	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137					
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.79E-03	5.69E-03	5.51E-03	0.00E+00
Avg		1.06E-03	1.05E-03	1.02E-03	0.00E+00
Std		1.17E-03	1.15E-03	1.11E-03	0.00E+00
ΣALL					
Min		0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max		5.79E-03	5.69E-03	5.51E-03	0.00E+00
Avg		1.06E-03	1.05E-03	1.02E-03	0.00E+00
Std		1.17E-03	1.15E-03	1.11E-03	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	5.92E-05	5.86E-05	5.75E-05	0.00E+00
0.100	8.07E-05	7.98E-05	7.80E-05	0.00E+00
0.125	1.24E-04	1.23E-04	1.20E-04	0.00E+00
0.150	1.51E-04	1.50E-04	1.43E-04	0.00E+00
0.175	1.67E-04	1.65E-04	1.61E-04	0.00E+00
0.200	1.86E-04	1.84E-04	1.80E-04	0.00E+00
0.225	2.11E-04	2.09E-04	2.04E-04	0.00E+00
0.250	2.43E-04	2.41E-04	2.36E-04	0.00E+00
0.275	2.78E-04	2.75E-04	2.69E-04	0.00E+00
0.300	3.24E-04	3.20E-04	3.12E-04	0.00E+00
0.325	3.53E-04	3.47E-04	3.40E-04	0.00E+00
0.350	3.74E-04	3.71E-04	3.63E-04	0.00E+00
0.375	4.19E-04	4.15E-04	4.07E-04	0.00E+00
0.400	4.40E-04	4.35E-04	4.27E-04	0.00E+00
0.425	4.82E-04	4.76E-04	4.65E-04	0.00E+00
0.450	5.38E-04	5.33E-04	5.22E-04	0.00E+00
0.475	5.73E-04	5.62E-04	5.46E-04	0.00E+00
0.500	6.34E-04	6.27E-04	6.11E-04	0.00E+00
0.525	6.96E-04	6.89E-04	6.73E-04	0.00E+00
0.550	7.42E-04	7.34E-04	7.19E-04	0.00E+00
0.575	8.22E-04	8.12E-04	7.89E-04	0.00E+00
0.600	8.72E-04	8.64E-04	8.43E-04	0.00E+00
0.625	9.67E-04	9.55E-04	9.32E-04	0.00E+00
0.650	1.07E-03	1.06E-03	1.04E-03	0.00E+00
0.675	1.12E-03	1.10E-03	1.08E-03	0.00E+00
0.700	1.21E-03	1.20E-03	1.17E-03	0.00E+00
0.725	1.33E-03	1.31E-03	1.27E-03	0.00E+00
0.750	1.41E-03	1.37E-03	1.33E-03	0.00E+00
0.775	1.52E-03	1.50E-03	1.47E-03	0.00E+00
0.800	1.74E-03	1.71E-03	1.67E-03	0.00E+00
0.825	1.96E-03	1.93E-03	1.89E-03	0.00E+00
0.850	2.10E-03	2.07E-03	2.02E-03	0.00E+00
0.875	2.34E-03	2.31E-03	2.25E-03	0.00E+00
0.900	2.72E-03	2.68E-03	2.62E-03	0.00E+00
0.925	3.17E-03	3.11E-03	2.94E-03	0.00E+00
0.950	3.57E-03	3.53E-03	3.44E-03	0.00E+00
0.975	4.82E-03	4.74E-03	4.56E-03	0.00E+00
1.000	5.79E-03	5.69E-03	5.51E-03	0.00E+00

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Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	4	0.31	4	0.18	4	0.31	4	0.15
Thickness of contaminated zone	3	0.39	3	0.24	3	0.51	3	0.27
Density of contaminated zone	5	0.07	5	0.04	5	0.14	5	0.06
Indoor time fraction	2	0.58	2	0.40	2	0.73	2	0.49
Cover depth	1	-0.77	1	-0.67	1	-0.83	1	-0.69
R-SQUARE		0.68		0.68		0.79		0.79

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

#For DCF1(XXX) only, factors are for infinite depth & area. See EFTG 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)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	3.050E-01	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	4.600E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.714E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
------------------------------	--	------------------------------------	--

Area:	3.14 square meters	Cs-137	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.31 meters		

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+03
TDOSE(t):	1.059E-04	1.048E-04	1.027E-04	0.000E+00
M(t):	4.237E-06	4.194E-06	4.108E-06	0.000E+00

Maximum TDOSE(t): 1.059E-04 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	1.059E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	1.059E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.059E-04	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.059E-04	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		
5	COVER0	NORMAL	.305	.152		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.47E-03	5.47E-03	5.38E-03	5.20E-03	0.00E+00
Avg	0.00E+00	4.04E-04	4.04E-04	3.98E-04	3.86E-04	0.00E+00
Std	0.00E+00	8.58E-04	8.58E-04	8.42E-04	8.09E-04	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	5.47E-03	5.47E-03	5.38E-03	5.20E-03	0.00E+00
Avg	0.00E+00	4.04E-04	4.04E-04	3.98E-04	3.86E-04	0.00E+00
Std	0.00E+00	8.58E-04	8.58E-04	8.42E-04	8.09E-04	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.47E-03	5.38E-03	5.20E-03	0.00E+00
Avg	4.04E-04	3.98E-04	3.86E-04	0.00E+00
Std	8.58E-04	8.42E-04	8.09E-04	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.47E-03	5.38E-03	5.20E-03	0.00E+00
Avg	4.04E-04	3.98E-04	3.86E-04	0.00E+00
Std	8.58E-04	8.42E-04	8.09E-04	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : Alternate Brookside Resident Dose Assessment un-
it Cs-137 DosFile: C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300903.RAD

Cumulative Probability Summary for: Total Dose Over Pathways

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	7.73E-07	7.30E-07	7.17E-07	0.00E+00
0.100	2.16E-06	2.14E-06	2.10E-06	0.00E+00
0.125	3.85E-06	3.81E-06	3.74E-06	0.00E+00
0.150	5.34E-06	5.29E-06	5.19E-06	0.00E+00
0.175	6.55E-06	6.47E-06	6.31E-06	0.00E+00
0.200	8.31E-06	8.23E-06	8.06E-06	0.00E+00
0.225	1.12E-05	1.11E-05	1.08E-05	0.00E+00
0.250	1.40E-05	1.38E-05	1.35E-05	0.00E+00
0.275	1.75E-05	1.73E-05	1.70E-05	0.00E+00
0.300	2.22E-05	2.20E-05	2.15E-05	0.00E+00
0.325	2.85E-05	2.82E-05	2.77E-05	0.00E+00
0.350	3.36E-05	3.32E-05	3.25E-05	0.00E+00
0.375	3.75E-05	3.71E-05	3.63E-05	0.00E+00
0.400	4.03E-05	3.90E-05	3.80E-05	0.00E+00
0.425	4.90E-05	4.84E-05	4.75E-05	0.00E+00
0.450	5.88E-05	5.82E-05	5.71E-05	0.00E+00
0.475	6.51E-05	6.44E-05	6.32E-05	0.00E+00
0.500	8.16E-05	8.08E-05	7.91E-05	0.00E+00
0.525	8.89E-05	8.80E-05	8.61E-05	0.00E+00
0.550	1.00E-04	9.80E-05	9.38E-05	0.00E+00
0.575	1.12E-04	1.11E-04	1.09E-04	0.00E+00
0.600	1.30E-04	1.28E-04	1.26E-04	0.00E+00
0.625	1.57E-04	1.55E-04	1.52E-04	0.00E+00
0.650	1.80E-04	1.79E-04	1.75E-04	0.00E+00
0.675	1.97E-04	1.95E-04	1.91E-04	0.00E+00
0.700	2.61E-04	2.58E-04	2.53E-04	0.00E+00
0.725	2.96E-04	2.93E-04	2.87E-04	0.00E+00
0.750	3.48E-04	3.44E-04	3.38E-04	0.00E+00
0.775	4.26E-04	4.22E-04	4.11E-04	0.00E+00
0.800	5.15E-04	5.10E-04	4.98E-04	0.00E+00
0.825	6.08E-04	6.02E-04	5.90E-04	0.00E+00
0.850	6.82E-04	6.75E-04	6.62E-04	0.00E+00
0.875	9.17E-04	9.08E-04	8.88E-04	0.00E+00
0.900	9.93E-04	9.82E-04	9.62E-04	0.00E+00
0.925	1.54E-03	1.52E-03	1.48E-03	0.00E+00
0.950	2.09E-03	2.07E-03	2.02E-03	0.00E+00
0.975	3.80E-03	3.75E-03	3.65E-03	0.00E+00
1.000	5.47E-03	5.38E-03	5.20E-03	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - 6 in

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300903.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig Coeff		Sig Coeff		Sig Coeff		Sig Coeff	
Area of contaminated zone	2	0.21	2	0.17	4	0.17	4	0.10
Thickness of contaminated zone	4	0.17	4	0.14	3	0.28	3	0.16
Density of contaminated zone	5	0.00	5	0.00	5	0.05	5	0.03
Indoor time fraction	3	0.21	3	0.16	2	0.49	2	0.31
Cover depth	1	-0.61	1	-0.59	1	-0.81	1	-0.76
R-SQUARE	0.41		0.41		0.69		0.69	

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

#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)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T (4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T (5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T (6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T (7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T (8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T (9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.548E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

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

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	3.14 square meters	Co-60	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	1.516E-02	1.321E-02	9.997E-03	0.000E+00
M(t):	6.065E-04	5.285E-04	3.999E-04	0.000E+00

Maximum TDOSE(t): 1.516E-02 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	1.516E-02	1.0000	4.157E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.215E-08	0.0000
Total	1.516E-02	1.0000	4.157E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.215E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.516E-02	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.516E-02	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	DOSE(j,t), mrem/yr			
				0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.42E-02	4.42E-02	3.86E-02	2.94E-02	0.00E+00	0.00E+00
Avg	0.00E+00	1.48E-02	1.48E-02	1.29E-02	9.76E-03	0.00E+00	0.00E+00
Std	0.00E+00	9.56E-03	9.56E-03	8.35E-03	6.38E-03	0.00E+00	0.00E+00
ΣALL							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	4.42E-02	4.42E-02	3.86E-02	2.94E-02	0.00E+00	0.00E+00
Avg	0.00E+00	1.48E-02	1.48E-02	1.29E-02	9.76E-03	0.00E+00	0.00E+00
Std	0.00E+00	9.56E-03	9.56E-03	8.35E-03	6.38E-03	0.00E+00	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	t=	DOSE(i,j,t), mrem/yr			
		0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60					
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	4.42E-02	3.86E-02	2.94E-02	0.00E+00	
Avg	1.48E-02	1.29E-02	9.76E-03	0.00E+00	
Std	9.56E-03	8.35E-03	6.38E-03	0.00E+00	
ΣALL					
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	4.42E-02	3.86E-02	2.94E-02	0.00E+00	
Avg	1.48E-02	1.29E-02	9.76E-03	0.00E+00	
Std	9.56E-03	8.35E-03	6.38E-03	0.00E+00	

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	4.34E-04	3.79E-04	2.13E-04	0.00E+00
0.075	1.64E-03	1.43E-03	1.09E-03	0.00E+00
0.100	2.76E-03	2.41E-03	1.80E-03	0.00E+00
0.125	4.28E-03	3.73E-03	2.83E-03	0.00E+00
0.150	4.72E-03	4.09E-03	2.99E-03	0.00E+00
0.175	5.63E-03	4.75E-03	3.45E-03	0.00E+00
0.200	6.07E-03	5.27E-03	3.97E-03	0.00E+00
0.225	6.47E-03	5.58E-03	4.10E-03	0.00E+00
0.250	7.21E-03	6.15E-03	4.60E-03	0.00E+00
0.275	7.64E-03	6.55E-03	4.85E-03	0.00E+00
0.300	7.92E-03	6.83E-03	5.14E-03	0.00E+00
0.325	8.73E-03	7.63E-03	5.78E-03	0.00E+00
0.350	9.94E-03	8.60E-03	6.44E-03	0.00E+00
0.375	1.06E-02	9.09E-03	6.91E-03	0.00E+00
0.400	1.12E-02	9.70E-03	7.34E-03	0.00E+00
0.425	1.19E-02	1.03E-02	7.75E-03	0.00E+00
0.450	1.28E-02	1.12E-02	8.50E-03	0.00E+00
0.475	1.32E-02	1.14E-02	8.67E-03	0.00E+00
0.500	1.40E-02	1.21E-02	9.22E-03	0.00E+00
0.525	1.48E-02	1.28E-02	9.75E-03	0.00E+00
0.550	1.54E-02	1.34E-02	1.01E-02	0.00E+00
0.575	1.61E-02	1.39E-02	1.05E-02	0.00E+00
0.600	1.66E-02	1.45E-02	1.10E-02	0.00E+00
0.625	1.74E-02	1.52E-02	1.16E-02	0.00E+00
0.650	1.80E-02	1.57E-02	1.19E-02	0.00E+00
0.675	1.87E-02	1.62E-02	1.23E-02	0.00E+00
0.700	1.97E-02	1.71E-02	1.29E-02	0.00E+00
0.725	2.03E-02	1.77E-02	1.35E-02	0.00E+00
0.750	2.13E-02	1.85E-02	1.42E-02	0.00E+00
0.775	2.25E-02	1.95E-02	1.47E-02	0.00E+00
0.800	2.31E-02	2.02E-02	1.55E-02	0.00E+00
0.825	2.38E-02	2.08E-02	1.58E-02	0.00E+00
0.850	2.47E-02	2.14E-02	1.63E-02	0.00E+00
0.875	2.64E-02	2.29E-02	1.74E-02	0.00E+00
0.900	2.79E-02	2.42E-02	1.85E-02	0.00E+00
0.925	2.90E-02	2.52E-02	1.93E-02	0.00E+00
0.950	3.19E-02	2.76E-02	2.11E-02	0.00E+00
0.975	3.59E-02	3.14E-02	2.40E-02	0.00E+00
1.000	4.42E-02	3.86E-02	2.94E-02	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in E

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300904.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig Coeff		Sig Coeff		Sig Coeff		Sig Coeff	
Area of contaminated zone	3	0.69	3	0.33	3	0.58	3	0.24
Thickness of contaminated zone	2	0.78	2	0.42	2	0.81	2	0.47
Density of contaminated zone	4	0.29	4	0.10	4	0.29	4	0.10
Indoor time fraction	1	0.91	1	0.76	1	0.92	1	0.79
R-SQUARE	0.88		0.88		0.89		0.89	

-Rank is set to zero if the dose is zero or the correlation matrix is singular.
 -R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300905.RAD

Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See ETRG 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)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	1.520E-01	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.548E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300905.RAD

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	1	---	---	KYMAX

Summary of Pathway Selections

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

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	3.14 square meters	Co-60	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.15 meters		

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+03
TDOSE(t):	4.757E-03	4.202E-03	3.269E-03	0.000E+00
M(t):	1.903E-04	1.681E-04	1.308E-04	0.000E+00

Maximum TDOSE(t): 4.757E-03 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300905.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	4.757E-03	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	4.757E-03	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.757E-03	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.757E-03	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		
5	COVER0	NORMAL	.152	.076		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.46E-02	2.46E-02	2.16E-02	1.67E-02	0.00E+00
Avg	0.00E+00	5.45E-03	5.45E-03	4.80E-03	3.72E-03	0.00E+00
Std	0.00E+00	5.28E-03	5.28E-03	4.64E-03	3.59E-03	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.46E-02	2.46E-02	2.16E-02	1.67E-02	0.00E+00
Avg	0.00E+00	5.45E-03	5.45E-03	4.80E-03	3.72E-03	0.00E+00
Std	0.00E+00	5.28E-03	5.28E-03	4.64E-03	3.59E-03	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.46E-02	2.16E-02	1.67E-02	0.00E+00
Avg	5.45E-03	4.80E-03	3.72E-03	0.00E+00
Std	5.28E-03	4.64E-03	3.59E-03	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.46E-02	2.16E-02	1.67E-02	0.00E+00
Avg	5.45E-03	4.80E-03	3.72E-03	0.00E+00
Std	5.28E-03	4.64E-03	3.59E-03	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	4.21E-04	3.71E-04	2.89E-04	0.00E+00
0.100	6.49E-04	5.56E-04	4.05E-04	0.00E+00
0.125	8.06E-04	7.10E-04	5.53E-04	0.00E+00
0.150	9.53E-04	8.42E-04	6.56E-04	0.00E+00
0.175	1.09E-03	9.58E-04	7.36E-04	0.00E+00
0.200	1.25E-03	1.10E-03	8.50E-04	0.00E+00
0.225	1.42E-03	1.26E-03	9.80E-04	0.00E+00
0.250	1.56E-03	1.38E-03	1.07E-03	0.00E+00
0.275	1.70E-03	1.50E-03	1.16E-03	0.00E+00
0.300	1.84E-03	1.62E-03	1.27E-03	0.00E+00
0.325	2.16E-03	1.89E-03	1.46E-03	0.00E+00
0.350	2.37E-03	2.09E-03	1.62E-03	0.00E+00
0.375	2.47E-03	2.18E-03	1.70E-03	0.00E+00
0.400	2.60E-03	2.29E-03	1.78E-03	0.00E+00
0.425	2.89E-03	2.55E-03	1.98E-03	0.00E+00
0.450	3.15E-03	2.77E-03	2.15E-03	0.00E+00
0.475	3.44E-03	3.02E-03	2.34E-03	0.00E+00
0.500	3.68E-03	3.25E-03	2.52E-03	0.00E+00
0.525	3.99E-03	3.52E-03	2.74E-03	0.00E+00
0.550	4.27E-03	3.74E-03	2.91E-03	0.00E+00
0.575	4.50E-03	3.95E-03	3.07E-03	0.00E+00
0.600	4.84E-03	4.26E-03	3.31E-03	0.00E+00
0.625	5.14E-03	4.54E-03	3.48E-03	0.00E+00
0.650	5.86E-03	5.16E-03	4.00E-03	0.00E+00
0.675	6.30E-03	5.56E-03	4.34E-03	0.00E+00
0.700	6.66E-03	5.86E-03	4.58E-03	0.00E+00
0.725	7.12E-03	6.27E-03	4.89E-03	0.00E+00
0.750	7.66E-03	6.75E-03	5.23E-03	0.00E+00
0.775	8.15E-03	7.18E-03	5.53E-03	0.00E+00
0.800	9.11E-03	8.01E-03	6.19E-03	0.00E+00
0.825	1.05E-02	9.15E-03	6.99E-03	0.00E+00
0.850	1.11E-02	9.75E-03	7.56E-03	0.00E+00
0.875	1.14E-02	1.00E-02	7.78E-03	0.00E+00
0.900	1.25E-02	1.11E-02	8.56E-03	0.00E+00
0.925	1.46E-02	1.29E-02	1.00E-02	0.00E+00
0.950	1.75E-02	1.54E-02	1.20E-02	0.00E+00
0.975	1.98E-02	1.73E-02	1.33E-02	0.00E+00
1.000	2.46E-02	2.16E-02	1.67E-02	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in E

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300905.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	4	0.36	4	0.20	4	0.36	4	0.17
Thickness of contaminated zone	3	0.49	3	0.29	3	0.59	3	0.33
Density of contaminated zone	5	0.10	5	0.05	5	0.17	5	0.08
Indoor time fraction	2	0.67	2	0.47	2	0.77	2	0.54
Cover depth	1	-0.77	1	-0.63	1	-0.81	1	-0.62
R-SQUARE		0.73		0.73		0.80		0.80

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

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Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

#For DCF1(xxx) only, factors are for infinite depth & area. See ETRG 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)	3.140E+00	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.520E-01	2.000E+00	---	THICKO
R011	Length parallel to aquifer flow (m)	not used	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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(1)
R013	Cover depth (m)	3.050E-01	0.000E+00	---	COVERO
R013	Density of cover material (g/cm**3)	1.500E+00	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	not used	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	not used	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	not used	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	not used	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	not used	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	not used	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	not used	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	not used	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	not used	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	not used	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	not used	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.548E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	8.400E-03	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	0.000E+00	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)	not used	1.600E+02	---	DIET (1)
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET (2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET (3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET (4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET (5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET (6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV (1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV (2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV (3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE (1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE (2)
R19B	Growing Season for Fodder (years)	not used	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	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300906.RAD

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	1	---	---	KYMAX

Summary of Pathway Selections

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300906.RAD

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
------------------------------	--	------------------------------------	--

Area:	3.14 square meters	Co-60	1.000E+00
Thickness:	0.15 meters		
Cover Depth:	0.31 meters		

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+03
TDOSE(t):	8.943E-04	7.899E-04	6.163E-04	0.000E+00
M(t):	3.577E-05	3.160E-05	2.465E-05	0.000E+00

Maximum TDOSE(t): 8.943E-04 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300906.RAD

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	8.943E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	8.943E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.943E-04	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.943E-04	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	1.57	3.14	6.28	
2	THICK0	NORMAL	.152	.076		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FIND	NORMAL	.0084	.0042		
5	COVER0	NORMAL	.305	.152		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	t=	DOSE(j,t), mrem/yr			
				0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.36E-02	2.36E-02	2.08E-02	1.60E-02	0.00E+00	0.00E+00
Avg	0.00E+00	2.21E-03	2.21E-03	1.94E-03	1.50E-03	0.00E+00	0.00E+00
Std	0.00E+00	3.86E-03	3.86E-03	3.38E-03	2.60E-03	0.00E+00	0.00E+00
ΣALL							
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.36E-02	2.36E-02	2.08E-02	1.60E-02	0.00E+00	0.00E+00
Avg	0.00E+00	2.21E-03	2.21E-03	1.94E-03	1.50E-03	0.00E+00	0.00E+00
Std	0.00E+00	3.86E-03	3.86E-03	3.38E-03	2.60E-03	0.00E+00	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.36E-02	2.08E-02	1.60E-02	0.00E+00
Avg	2.21E-03	1.94E-03	1.50E-03	0.00E+00
Std	3.86E-03	3.38E-03	2.60E-03	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.36E-02	2.08E-02	1.60E-02	0.00E+00
Avg	2.21E-03	1.94E-03	1.50E-03	0.00E+00
Std	3.86E-03	3.38E-03	2.60E-03	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : Alternate Brookside Resident Dose Assessment un-
 it Co-60 DoseFile: C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300906.RAD

Cumulative Probability Summary for: Total Dose Over Pathways

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	1.46E-05	1.29E-05	1.01E-05	0.00E+00
0.100	4.05E-05	3.58E-05	2.80E-05	0.00E+00
0.125	5.25E-05	4.64E-05	3.63E-05	0.00E+00
0.150	7.37E-05	6.51E-05	5.06E-05	0.00E+00
0.175	8.29E-05	7.32E-05	5.72E-05	0.00E+00
0.200	9.89E-05	8.74E-05	6.82E-05	0.00E+00
0.225	1.27E-04	1.11E-04	8.62E-05	0.00E+00
0.250	1.75E-04	1.54E-04	1.21E-04	0.00E+00
0.275	2.11E-04	1.87E-04	1.36E-04	0.00E+00
0.300	2.40E-04	2.10E-04	1.64E-04	0.00E+00
0.325	2.78E-04	2.45E-04	1.87E-04	0.00E+00
0.350	3.19E-04	2.82E-04	2.21E-04	0.00E+00
0.375	3.69E-04	3.25E-04	2.51E-04	0.00E+00
0.400	3.87E-04	3.40E-04	2.65E-04	0.00E+00
0.425	4.48E-04	3.96E-04	3.05E-04	0.00E+00
0.450	5.13E-04	4.52E-04	3.51E-04	0.00E+00
0.475	5.83E-04	5.15E-04	3.94E-04	0.00E+00
0.500	6.35E-04	5.61E-04	4.39E-04	0.00E+00
0.525	7.40E-04	6.54E-04	5.10E-04	0.00E+00
0.550	7.93E-04	7.00E-04	5.46E-04	0.00E+00
0.575	9.02E-04	7.98E-04	6.24E-04	0.00E+00
0.600	1.07E-03	9.51E-04	7.39E-04	0.00E+00
0.625	1.18E-03	1.04E-03	8.14E-04	0.00E+00
0.650	1.39E-03	1.23E-03	9.59E-04	0.00E+00
0.675	1.54E-03	1.36E-03	1.06E-03	0.00E+00
0.700	1.87E-03	1.65E-03	1.29E-03	0.00E+00
0.725	2.02E-03	1.79E-03	1.40E-03	0.00E+00
0.750	2.29E-03	2.02E-03	1.57E-03	0.00E+00
0.775	2.61E-03	2.31E-03	1.79E-03	0.00E+00
0.800	2.91E-03	2.56E-03	2.00E-03	0.00E+00
0.825	3.61E-03	3.19E-03	2.50E-03	0.00E+00
0.850	4.45E-03	3.93E-03	3.08E-03	0.00E+00
0.875	5.18E-03	4.58E-03	3.57E-03	0.00E+00
0.900	6.60E-03	5.84E-03	4.57E-03	0.00E+00
0.925	7.74E-03	6.84E-03	5.33E-03	0.00E+00
0.950	1.05E-02	9.22E-03	7.18E-03	0.00E+00
0.975	1.69E-02	1.48E-02	1.12E-02	0.00E+00
1.000	2.36E-02	2.08E-02	1.60E-02	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - 6 in E

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300906.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig Coeff		Sig Coeff		Sig Coeff		Sig Coeff	
Area of contaminated zone	4	0.22	4	0.16	4	0.20	4	0.11
Thickness of contaminated zone	3	0.23	3	0.17	3	0.36	3	0.21
Density of contaminated zone	5	0.02	5	0.01	5	0.08	5	0.04
Indoor time fraction	2	0.28	2	0.21	2	0.55	2	0.36
Cover depth	1	-0.65	1	-0.62	1	-0.80	1	-0.73
R-SQUARE	0.48		0.48		0.70		0.70	

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300907.RAD

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Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

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Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCF1(1)
A-1	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCF1(2)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(1,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(1,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(1,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)

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

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

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)	1.860E+02	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.930E+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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+00	0.000E+00	---	S1(1)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(1)
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.810E+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)	1.522E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.500E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	5.000E-03	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	8.000E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	1.180E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

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Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	3.000E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.522E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.500E-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	7.120E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	4.600E+03	4.600E+03	---	DCNUC(1,1)
R016	Saturated zone (cm**3/g)	4.600E+03	4.600E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.121E-04	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	0.000E+00	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.400E-02	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)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	5.000E-01	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	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	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	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)	not used	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)	not used	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	not used	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	not used	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	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

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Site-Specific Parameter Summary (continued)

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

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

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Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	186.00 square meters	Cs-137	1.000E+00
Thickness:	0.23 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	8.217E-02	8.005E-02	7.597E-02	0.000E+00
M(t):	3.287E-03	3.202E-03	3.039E-03	0.000E+00

Maximum TDOSE(t): 8.217E-02 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Gard

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Cs-137	3.850E-02	0.4685	4.139E-08	0.0000	0.000E+00	0.0000	4.367E-02	0.5315	0.000E+00	0.0000	0.000E+00	0.0000	2.355E-06	0.0000
Total	3.850E-02	0.4685	4.139E-08	0.0000	0.000E+00	0.0000	4.367E-02	0.5315	0.000E+00	0.0000	0.000E+00	0.0000	2.355E-06	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
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	8.217E-02	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.217E-02	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	93	186	372	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FOTD	NORMAL	.014	.076		
5	FPLANT	NORMAL	.5	.25		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.39E-01	6.39E-01	6.24E-01	5.95E-01	0.00E+00
Avg	0.00E+00	1.38E-01	1.38E-01	1.35E-01	1.28E-01	0.00E+00
Std	0.00E+00	1.36E-01	1.36E-01	1.33E-01	1.26E-01	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	6.39E-01	6.39E-01	6.24E-01	5.95E-01	0.00E+00
Avg	0.00E+00	1.38E-01	1.38E-01	1.35E-01	1.28E-01	0.00E+00
Std	0.00E+00	1.36E-01	1.36E-01	1.33E-01	1.26E-01	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.66E-01	5.53E-01	5.27E-01	0.00E+00
Avg	9.41E-02	9.18E-02	8.73E-02	0.00E+00
Std	1.29E-01	1.25E-01	1.20E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.66E-01	5.53E-01	5.27E-01	0.00E+00
Avg	9.41E-02	9.18E-02	8.73E-02	0.00E+00
Std	1.29E-01	1.25E-01	1.20E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Cs-137				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.60E-01	1.56E-01	1.48E-01	0.00E+00
Avg	4.41E-02	4.29E-02	4.05E-02	0.00E+00
Std	3.24E-02	3.16E-02	3.01E-02	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.60E-01	1.56E-01	1.48E-01	0.00E+00
Avg	4.41E-02	4.29E-02	4.05E-02	0.00E+00
Std	3.24E-02	3.16E-02	3.01E-02	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	2.80E-03	2.16E-03	1.96E-03	0.00E+00
0.075	6.01E-03	5.55E-03	5.17E-03	0.00E+00
0.100	1.30E-02	1.25E-02	1.17E-02	0.00E+00
0.125	1.92E-02	1.86E-02	1.66E-02	0.00E+00
0.150	2.35E-02	2.29E-02	2.08E-02	0.00E+00
0.175	2.69E-02	2.59E-02	2.41E-02	0.00E+00
0.200	3.02E-02	2.93E-02	2.76E-02	0.00E+00
0.225	3.33E-02	3.24E-02	3.07E-02	0.00E+00
0.250	3.73E-02	3.57E-02	3.38E-02	0.00E+00
0.275	4.04E-02	3.92E-02	3.68E-02	0.00E+00
0.300	4.40E-02	4.26E-02	4.00E-02	0.00E+00
0.325	4.80E-02	4.67E-02	4.41E-02	0.00E+00
0.350	5.20E-02	5.06E-02	4.80E-02	0.00E+00
0.375	5.75E-02	5.60E-02	5.31E-02	0.00E+00
0.400	6.56E-02	6.39E-02	6.06E-02	0.00E+00
0.425	7.16E-02	6.97E-02	6.62E-02	0.00E+00
0.450	7.65E-02	7.46E-02	7.09E-02	0.00E+00
0.475	8.28E-02	8.05E-02	7.61E-02	0.00E+00
0.500	9.00E-02	8.76E-02	8.24E-02	0.00E+00
0.525	9.27E-02	9.03E-02	8.55E-02	0.00E+00
0.550	9.69E-02	9.47E-02	9.03E-02	0.00E+00
0.575	1.10E-01	1.08E-01	9.87E-02	0.00E+00
0.600	1.20E-01	1.17E-01	1.09E-01	0.00E+00
0.625	1.31E-01	1.28E-01	1.21E-01	0.00E+00
0.650	1.45E-01	1.41E-01	1.35E-01	0.00E+00
0.675	1.57E-01	1.54E-01	1.46E-01	0.00E+00
0.700	1.75E-01	1.71E-01	1.62E-01	0.00E+00
0.725	2.00E-01	1.95E-01	1.86E-01	0.00E+00
0.750	2.12E-01	2.07E-01	1.97E-01	0.00E+00
0.775	2.21E-01	2.15E-01	2.04E-01	0.00E+00
0.800	2.42E-01	2.36E-01	2.25E-01	0.00E+00
0.825	2.70E-01	2.63E-01	2.49E-01	0.00E+00
0.850	2.80E-01	2.73E-01	2.60E-01	0.00E+00
0.875	3.08E-01	3.00E-01	2.84E-01	0.00E+00
0.900	3.53E-01	3.45E-01	3.25E-01	0.00E+00
0.925	3.66E-01	3.57E-01	3.40E-01	0.00E+00
0.950	4.22E-01	4.12E-01	3.92E-01	0.00E+00
0.975	4.88E-01	4.76E-01	4.54E-01	0.00E+00
1.000	6.39E-01	6.24E-01	5.95E-01	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Cs-137 Dose Assessment - Garde

Input File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300907.RAD

Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Area of contaminated zone	5	0.00	5	0.00	5	-0.03	5	-0.02
Thickness of contaminated zone	2	0.52	2	0.31	2	0.62	2	0.39
Density of contaminated zone	4	-0.03	4	-0.02	4	0.08	4	0.04
Outdoor time fraction	1	0.84	1	0.79	1	0.84	1	0.75
Plant food	3	0.26	3	0.14	3	0.41	3	0.22
R-SQUARE		0.74		0.74		0.77		0.77

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garde

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300908.RAD

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Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garde

File : C:\RESRAD_FAMILY\RESRAD\USERFILES\PBRF_OFF-SITE\06300908.RAD

Dose Conversion Factor (and Related) Parameter Summary

Dose Library: FGR 11

Menu	Parameter	Current Value#	Base Case*	Parameter Name
A-1	DCF's for external ground radiation, (mrem/yr)/(pCi/g)			
A-1	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCF1(1)
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Co-60	2.190E-04	2.190E-04	DCF2(1)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Co-60	2.690E-05	2.690E-05	DCF3(1)
D-34	Food transfer factors:			
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(1,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(1,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(1,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(1,2)

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

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

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)	1.860E+02	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	2.290E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.930E+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+03	1.000E+01	---	T(4)
R011	Times for calculations (yr)	not used	3.000E+01	---	T(5)
R011	Times for calculations (yr)	not used	1.000E+02	---	T(6)
R011	Times for calculations (yr)	not used	3.000E+02	---	T(7)
R011	Times for calculations (yr)	not used	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+00	0.000E+00	---	SI(1)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	WI(1)
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)	1.522E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.500E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.120E+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)	8.600E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	1.040E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	3.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.810E+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)	1.522E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.500E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.700E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	5.000E-03	2.000E-02	---	HGWT
R014	Saturated zone b parameter	not used	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	8.000E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	1.180E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Unsat. zone 1, thickness (m)	3.000E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.522E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.500E-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	7.120E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	2.700E+02	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	1.000E+03	1.000E+03	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.355E-03	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
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	1.000E+00	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	0.000E+00	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	1.400E-02	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)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.830E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	5.000E-01	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	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	not used	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	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)	not used	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)	not used	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	not used	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	not used	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	not used	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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garde

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Site-Specific Parameter Summary (continued)

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

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garde

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Contaminated Zone Dimensions

Initial Soil Concentrations, pCi/g

Area:	186.00 square meters	Co-60	1.000E+00
Thickness:	0.23 meters		
Cover Depth:	0.00 meters		

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+03
TDOSE(t):	2.126E-01	1.857E-01	1.417E-01	0.000E+00
M(t):	8.505E-03	7.428E-03	5.666E-03	0.000E+00

Maximum TDOSE(t): 2.126E-01 mrem/yr at t = 0.000E+00 years

Summary : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garde

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Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio- Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Co-60	1.681E-01	0.7907	2.691E-07	0.0000	0.000E+00	0.0000	4.450E-02	0.2093	0.000E+00	0.0000	0.000E+00	0.0000	1.200E-06	0.0000
Total	1.681E-01	0.7907	2.691E-07	0.0000	0.000E+00	0.0000	4.450E-02	0.2093	0.000E+00	0.0000	0.000E+00	0.0000	1.200E-06	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years

Water Dependent Pathways

Radio- 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.
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.126E-01	1.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.126E-01	1.0000

*Sum of all water independent and dependent pathways.

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Probabilistic Input

Number of Sample Runs: 300

Number	Name	Distribution	Parameters			
1	AREA	TRIANGULAR	93	186	372	
2	THICK0	NORMAL	.229	.114		
3	DENSCZ	TRUNCATED NORMAL	1.55	.23	.001	.999
4	FOTD	NORMAL	.014	.076		
5	FPLANT	NORMAL	.5	.25		

Probabilistic Total Dose Summary

Nuclide (j)	Peak Time	Peak Dose	DOSE(j,t), mrem/yr			
			t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.58E+00	2.58E+00	2.26E+00	1.73E+00	0.00E+00
Avg	0.00E+00	4.55E-01	4.55E-01	3.97E-01	3.02E-01	0.00E+00
Std	0.00E+00	5.68E-01	5.68E-01	4.96E-01	3.79E-01	0.00E+00
ΣALL						
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	0.00E+00	2.58E+00	2.58E+00	2.26E+00	1.73E+00	0.00E+00
Avg	0.00E+00	4.55E-01	4.55E-01	3.97E-01	3.02E-01	0.00E+00
Std	0.00E+00	5.68E-01	5.68E-01	4.96E-01	3.79E-01	0.00E+00

ΣALL is total dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Ground External

Nuclide	DOSE(i,j,t), mrem/yr			
	(j) t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.49E+00	2.18E+00	1.67E+00	0.00E+00
Avg	4.10E-01	3.58E-01	2.73E-01	0.00E+00
Std	5.63E-01	4.92E-01	3.76E-01	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.49E+00	2.18E+00	1.67E+00	0.00E+00
Avg	4.10E-01	3.58E-01	2.73E-01	0.00E+00
Std	5.63E-01	4.92E-01	3.76E-01	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic Dose vs Pathway(i): Plant (Water Ind.)

Nuclide (j)	DOSE(i,j,t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
Co-60				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.63E-01	1.42E-01	1.09E-01	0.00E+00
Avg	4.49E-02	3.91E-02	2.97E-02	0.00E+00
Std	3.31E-02	2.89E-02	2.21E-02	0.00E+00
ΣALL				
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.63E-01	1.42E-01	1.09E-01	0.00E+00
Avg	4.49E-02	3.91E-02	2.97E-02	0.00E+00
Std	3.31E-02	2.89E-02	2.21E-02	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Cumulative Probability	Dose(t), mrem/yr			
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+03
0.025	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	2.84E-03	2.39E-03	1.39E-03	0.00E+00
0.075	6.11E-03	5.04E-03	3.78E-03	0.00E+00
0.100	1.32E-02	1.14E-02	8.47E-03	0.00E+00
0.125	1.96E-02	1.69E-02	1.26E-02	0.00E+00
0.150	2.40E-02	2.09E-02	1.59E-02	0.00E+00
0.175	2.83E-02	2.46E-02	1.86E-02	0.00E+00
0.200	3.35E-02	2.93E-02	2.23E-02	0.00E+00
0.225	3.98E-02	3.46E-02	2.63E-02	0.00E+00
0.250	4.33E-02	3.76E-02	2.83E-02	0.00E+00
0.275	4.80E-02	4.18E-02	3.18E-02	0.00E+00
0.300	5.22E-02	4.54E-02	3.42E-02	0.00E+00
0.325	5.92E-02	5.15E-02	3.89E-02	0.00E+00
0.350	6.70E-02	5.85E-02	4.44E-02	0.00E+00
0.375	7.43E-02	6.48E-02	4.90E-02	0.00E+00
0.400	8.30E-02	7.22E-02	5.41E-02	0.00E+00
0.425	9.25E-02	7.72E-02	5.87E-02	0.00E+00
0.450	1.03E-01	8.86E-02	6.73E-02	0.00E+00
0.475	1.20E-01	1.05E-01	7.69E-02	0.00E+00
0.500	1.34E-01	1.17E-01	8.96E-02	0.00E+00
0.525	1.67E-01	1.46E-01	1.12E-01	0.00E+00
0.550	2.47E-01	2.14E-01	1.63E-01	0.00E+00
0.575	3.02E-01	2.64E-01	2.02E-01	0.00E+00
0.600	3.45E-01	3.01E-01	2.30E-01	0.00E+00
0.625	4.09E-01	3.54E-01	2.67E-01	0.00E+00
0.650	4.72E-01	4.12E-01	3.08E-01	0.00E+00
0.675	5.65E-01	4.93E-01	3.75E-01	0.00E+00
0.700	6.20E-01	5.42E-01	4.16E-01	0.00E+00
0.725	6.66E-01	5.82E-01	4.45E-01	0.00E+00
0.750	7.66E-01	6.69E-01	5.11E-01	0.00E+00
0.775	8.03E-01	7.03E-01	5.39E-01	0.00E+00
0.800	8.67E-01	7.58E-01	5.80E-01	0.00E+00
0.825	9.86E-01	8.63E-01	6.62E-01	0.00E+00
0.850	1.06E+00	9.23E-01	6.98E-01	0.00E+00
0.875	1.22E+00	1.07E+00	8.15E-01	0.00E+00
0.900	1.29E+00	1.13E+00	8.64E-01	0.00E+00
0.925	1.39E+00	1.22E+00	9.36E-01	0.00E+00
0.950	1.61E+00	1.41E+00	1.08E+00	0.00E+00
0.975	2.00E+00	1.75E+00	1.34E+00	0.00E+00
1.000	2.58E+00	2.26E+00	1.73E+00	0.00E+00

Title : Alternate Brookside Resident Dose Assessment unit Co-60 Dose Assessment - Garden

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Coefficients for peak of mean dose time Dose

Coefficient =	PCC	SRC	PRCC	SRRC
Repetition =	1	1	1	1

Description of Probabilistic Variable	Sig Coeff	Sig Coeff	Sig Coeff	Sig Coeff
Area of contaminated zone	5 0.01	5 0.01	5 -0.02	5 -0.01
Thickness of contaminated zone	2 0.36	2 0.21	2 0.55	2 0.31
Density of contaminated zone	4 -0.02	4 -0.01	4 0.07	4 0.03
Outdoor time fraction	1 0.84	1 0.82	1 0.87	1 0.82
Plant food	3 0.03	3 0.01	3 0.21	3 0.10
R-SQUARE	0.72	0.72	0.78	0.78

-Rank is set to zero if the dose is zero or the correlation matrix is singular.

-R-SQUARE varies between 0 and 1 and is called the coefficient of determination; it provides a measure of the variation in the dependent variable (Dose) explained by regression on the independent variables.