

Probabilistic results summary : RESRAD Default

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## Probabilistic Input

Number of Sample Runs: 3000

Number	Name	Distribution	Parameters							
1	DENSCV	TRUNCATED NORMAL	1.51	.159	.001	.999				
2	VCZ	CONTINUOUS LOGARITHMIC4		5.E-8	0	.0007	.22	.005	.95	.2
3	TPCZ	TRUNCATED NORMAL	.43	.06	.001	.999				
4	HCCZ	LOGUNIFORM	786	17000						
5	BCZ	TRUNCATED LOGNORMAL-N	-.0235	.216	.001	.999				
6	EVAPTR	UNIFORM	.5	.75						
7	WIND	BOUNDED LOGNORMAL-N	1.445	.2419	1.4	13				
8	RUNOFF	UNIFORM	.1	.8						
9	DENSAQ	TRUNCATED NORMAL	1.51	.16	.001	.999				
10	TPSZ	TRUNCATED NORMAL	.43	.06	.001	.999				
11	EPSZ	TRUNCATED NORMAL	.383	.061	.001	.999				
12	HCSZ	LOGUNIFORM	786	17000						
13	HGWT	BOUNDED LOGNORMAL-N	-5.11	1.77	.00007	.5				
14	DWIBWT	TRIANGULAR	6	10	30					
15	MLINH	CONTINUOUS LINEAR	8	0	0	.000008	.0151	.000016	.1365	.00003
16	DM	TRIANGULAR	0	.15	.6					
17	DROOT	UNIFORM	.3	4						
18	WLAM	TRIANGULAR	5.1	18	84					
19	YV (1)	TRUNCATED LOGNORMAL-N	.56	.48	.001	.999				
20	RWET (2)	TRIANGULAR	.06	.67	.95					
21	SHF3	UNIFORM	.15	.95						
22	SHF1	BOUNDED LOGNORMAL-N	-1.3	.59	.044	1				
23	VCV	CONTINUOUS LOGARITHMIC4		5.E-8	0	.0007	.22	.005	.95	.2
24	TPUZ (1)	TRUNCATED NORMAL	.43	.06	.001	.999				
25	EPUZ (1)	TRUNCATED NORMAL	.383	.061	.001	.999				
26	HCUZ (1)	LOGUNIFORM	786	17000						
27	BUZ (1)	TRUNCATED LOGNORMAL-N	-.0253	.216	.001	.999				
28	BRTF (27, 1)	LOGNORMAL-N	-2.53	.916291						
29	BRTF (27, 2)	LOGNORMAL-N	-3.51	1.029619						
30	BRTF (27, 3)	LOGNORMAL-N	-6.21	.7						
31	BRTF (55, 1)	LOGNORMAL-N	-3.22	.993252						
32	BRTF (55, 2)	LOGNORMAL-N	-3	.405465						
33	BRTF (55, 3)	LOGNORMAL-N	-4.61	.47						
34	BRTF (28, 1)	LOGNORMAL-N	-3	.916291						
35	BRTF (28, 2)	LOGNORMAL-N	-5.3	.916291						
36	BRTF (28, 3)	LOGNORMAL-N	-3.91	.69315						
37	BRTF (38, 1)	LOGNORMAL-N	-1.2	.993252						
38	BRTF (38, 2)	LOGNORMAL-N	-4.61	.405465						
39	BRTF (38, 3)	LOGNORMAL-N	-6.21	.47						
40	DENSCZ	TRUNCATED NORMAL	1.51	.16	.001	.999				
41	DENSUZ (1)	TRUNCATED NORMAL	1.51	.16	.001	.999				
42	DCACTC (2)	UNIFORM	615	635						
43	DCACTS (2)	UNIFORM	615	635						
44	DCACTC (3)	UNIFORM	615	635						
45	DCACTS (3)	UNIFORM	615	635						
46	DCACTC (4)	UNIFORM	62	331						
47	DCACTS (4)	UNIFORM	62	331						
48	DCACTC (5)	UNIFORM	2.3	3.4						

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## Probabilistic Input (cont.)

Number	Name	Distribution	Parameters	
49	DCACTS (5)	UNIFORM	2.3	3.4
50	DCACTU1 (5)	UNIFORM	2.3	3.4
51	DCACTU1 (4)	UNIFORM	62	331
52	DCACTU1 (3)	UNIFORM	615	635
53	DCACTU1 (2)	UNIFORM	615	635

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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+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03	
Co-60											
Min	0.00E+00	9.16E-07	9.16E-07	8.43E-07	6.91E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.63E+01	4.14E+00	7.29E-01	6.39E-01	4.90E-01	2.27E+00	3.64E-02	1.49E-05	5.66E-17	0.00E+00	0.00E+00
Avg	7.76E-01	4.64E-02	2.41E-02	2.12E-02	1.66E-02	1.91E-02	5.60E-04	1.97E-07	3.18E-18	0.00E+00	0.00E+00
Std	4.54E+00	1.97E-01	3.62E-02	3.18E-02	2.49E-02	1.21E-01	2.74E-03	9.58E-07	7.13E-18	0.00E+00	0.00E+00
Cs-134											
Min	0.00E+00	2.96E-08	2.96E-08	2.24E-08	1.17E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.84E+01	1.09E+00	1.09E+00	7.81E-01	3.98E-01	1.63E-01	5.04E-06	1.08E-14	0.00E+00	0.00E+00	0.00E+00
Avg	1.50E-01	3.82E-02	3.58E-02	2.57E-02	1.33E-02	2.17E-03	1.07E-07	1.94E-16	0.00E+00	0.00E+00	0.00E+00
Std	1.27E+00	6.51E-02	5.94E-02	4.26E-02	2.19E-02	8.99E-03	3.96E-07	7.04E-16	0.00E+00	0.00E+00	0.00E+00
Cs-137											
Min	0.00E+00	9.21E-09	8.52E-09	8.83E-09	8.58E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.18E+02	1.80E+00	8.69E-01	8.48E-01	8.07E-01	1.58E+00	6.86E-01	1.75E-01	1.60E-03	9.30E-11	9.30E-11
Avg	2.60E+01	4.95E-02	2.84E-02	2.79E-02	2.69E-02	3.18E-02	1.95E-02	4.40E-03	9.77E-05	3.89E-12	3.89E-12
Std	7.47E+01	1.29E-01	4.71E-02	4.62E-02	4.45E-02	9.31E-02	5.58E-02	1.20E-02	1.94E-04	9.07E-12	9.07E-12
Ni-63											
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.00E+03	9.90E-03	9.90E-03	9.78E-03	9.54E-03	9.02E-03	7.14E-03	6.12E-03	1.28E-03	2.09E-06	2.09E-06
Avg	4.40E+01	4.55E-04	4.04E-04	4.02E-04	3.95E-04	3.69E-04	2.54E-04	1.29E-04	1.47E-05	7.84E-09	7.84E-09
Std	1.32E+02	6.87E-04	6.28E-04	6.24E-04	6.19E-04	5.94E-04	4.07E-04	2.33E-04	3.76E-05	4.76E-08	4.76E-08
Sr-90											
Min	0.00E+00	1.59E-04	6.79E-13	4.86E-13	2.05E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.30E+02	1.51E+01	1.51E+01	1.21E+01	8.29E+00	1.79E+00	3.38E-01	5.73E-02	6.46E-05	6.51E-13	6.51E-13
Avg	1.02E+01	4.80E-01	4.64E-01	3.19E-01	1.56E-01	1.84E-02	2.36E-02	2.79E-03	8.45E-07	2.17E-16	2.17E-16
Std	2.20E+01	7.53E-01	7.60E-01	5.48E-01	3.06E-01	5.54E-02	4.49E-02	6.82E-03	5.48E-06	1.19E-14	1.19E-14
ΣALL											
Min	0.00E+00	1.41E-06	9.54E-07	8.74E-07	7.11E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.34E+02	1.52E+01	1.52E+01	1.23E+01	8.46E+00	4.02E+00	7.27E-01	1.75E-01	2.12E-03	2.09E-06	2.09E-06
Avg	1.31E+01	5.96E-01	5.53E-01	3.94E-01	2.13E-01	7.18E-02	4.39E-02	7.31E-03	1.13E-04	7.84E-09	7.84E-09
Std	3.93E+01	8.29E-01	7.93E-01	5.76E-01	3.28E-01	2.27E-01	7.31E-02	1.39E-02	2.04E-04	4.76E-08	4.76E-08

ΣALL is total dose summed for all nuclides.

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## Probabilistic Risk Summary

Nuclide (j)	RISK(j, t)								
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03	
Co-60									
Min	2.19E-11	2.01E-11	1.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	1.94E-05	1.70E-05	1.30E-05	5.58E-05	8.93E-07	3.65E-10	1.39E-21	0.00E+00	
Avg	6.39E-07	5.62E-07	4.37E-07	4.66E-07	1.39E-08	4.92E-12	7.82E-23	0.00E+00	
Std	9.62E-07	8.44E-07	6.51E-07	2.91E-06	6.71E-08	2.35E-11	1.75E-22	0.00E+00	
Cs-134									
Min	7.61E-13	5.77E-13	3.10E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	2.71E-05	1.94E-05	9.86E-06	4.34E-06	1.34E-10	2.86E-19	0.00E+00	1.03E-38	
Avg	8.86E-07	6.36E-07	3.27E-07	5.40E-08	2.74E-12	4.99E-21	0.00E+00	4.28E-42	
Std	1.47E-06	1.05E-06	5.40E-07	2.32E-07	1.05E-11	1.86E-20	0.00E+00	0.00E+00	
Cs-137									
Min	1.87E-13	1.94E-13	1.94E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	1.97E-05	1.93E-05	1.83E-05	3.59E-05	1.56E-05	3.95E-06	3.62E-08	2.11E-15	
Avg	6.45E-07	6.32E-07	6.08E-07	7.09E-07	4.42E-07	9.97E-08	2.22E-09	8.81E-17	
Std	1.07E-06	1.05E-06	1.00E-06	2.06E-06	1.27E-06	2.73E-07	4.40E-09	2.05E-16	
Ni-63									
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	4.93E-07	4.87E-07	4.75E-07	4.47E-07	3.54E-07	3.04E-07	6.34E-08	1.04E-10	
Avg	2.01E-08	1.99E-08	1.96E-08	1.83E-08	1.27E-08	6.39E-09	7.31E-10	3.79E-13	
Std	3.12E-08	3.09E-08	3.07E-08	2.95E-08	2.03E-08	1.16E-08	1.87E-09	2.36E-12	
Sr-90									
Min	1.79E-17	1.42E-17	6.21E-18	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	3.27E-04	2.47E-04	1.70E-04	3.73E-05	5.19E-06	8.87E-07	9.76E-10	1.00E-17	
Avg	1.04E-05	7.13E-06	3.45E-06	3.94E-07	3.53E-07	4.29E-08	1.29E-11	3.35E-21	
Std	1.67E-05	1.20E-05	6.56E-06	1.15E-06	6.80E-07	1.04E-07	8.36E-11	1.83E-19	
ΣALL									
Min	2.28E-11	2.09E-11	1.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Max	3.31E-04	2.52E-04	1.75E-04	9.62E-05	1.63E-05	3.96E-06	8.24E-08	1.04E-10	
Avg	1.25E-05	8.98E-06	4.84E-06	1.64E-06	8.21E-07	1.49E-07	2.96E-09	3.80E-13	
Std	1.75E-05	1.27E-05	7.11E-06	5.26E-06	1.48E-06	2.93E-07	5.06E-09	2.36E-12	

ΣALL is total risk summed for all nuclides.

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## 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+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60								
Min	4.20E-07	3.69E-07	2.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.95E-03	6.16E-03	1.42E-01	2.25E+00	3.62E-02	1.49E-05	5.65E-17	0.00E+00
Avg	6.26E-05	6.36E-05	2.88E-04	1.26E-02	4.40E-04	1.49E-07	3.01E-18	0.00E+00
Std	1.10E-04	1.79E-04	4.40E-03	1.21E-01	2.72E-03	9.54E-07	7.10E-18	0.00E+00
Cs-134								
Min	1.21E-08	8.64E-09	4.42E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.28E-04	7.17E-04	2.26E-02	1.62E-01	5.00E-06	1.07E-14	0.00E+00	0.00E+00
Avg	4.98E-06	4.43E-06	3.55E-05	8.86E-04	6.14E-08	1.04E-16	0.00E+00	0.00E+00
Std	1.13E-05	1.89E-05	6.64E-04	8.66E-03	3.82E-07	6.78E-16	0.00E+00	0.00E+00
Cs-137								
Min	3.42E-09	3.35E-09	3.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.80E-05	3.64E-04	2.41E-02	1.55E+00	6.63E-01	1.72E-01	1.57E-03	8.88E-11
Avg	1.62E-06	2.02E-06	3.63E-05	8.51E-03	8.16E-03	1.67E-03	7.52E-05	3.39E-12
Std	3.81E-06	9.40E-06	6.96E-04	8.32E-02	5.08E-02	1.09E-02	1.87E-04	8.57E-12
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90								
Min	1.73E-13	7.10E-14	1.20E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	4.02E-08	1.12E-07	2.85E-05	1.06E-03	2.50E-06	4.00E-11	2.73E-23	0.00E+00
Avg	5.33E-10	5.08E-10	2.53E-08	2.41E-06	2.85E-09	2.38E-14	1.03E-26	0.00E+00
Std	1.72E-09	2.96E-09	6.48E-07	3.61E-05	5.49E-08	8.37E-13	6.83E-25	0.00E+00
ΣALL								
Min	4.35E-07	3.81E-07	2.92E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.25E-03	7.24E-03	1.88E-01	3.97E+00	6.99E-01	1.72E-01	1.57E-03	8.88E-11
Avg	6.92E-05	7.00E-05	3.60E-04	2.19E-02	8.60E-03	1.67E-03	7.52E-05	3.39E-12
Std	1.25E-04	2.07E-04	5.75E-03	2.13E-01	5.35E-02	1.09E-02	1.87E-04	8.57E-12

ΣALL is total pathway dose summed for all nuclides.

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## Probabilistic Dose vs Pathway(i): Inhalation (w/o Radon)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	2.83E-07	8.22E-07	1.42E-08	5.34E-12	1.82E-23	0.00E+00
Avg	0.00E+00	0.00E+00	1.98E-10	2.95E-09	1.18E-10	3.83E-14	9.01E-25	0.00E+00
Std	0.00E+00	0.00E+00	6.03E-09	3.34E-08	8.84E-10	2.90E-13	2.27E-24	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	2.77E-08	2.03E-08	6.75E-13	1.28E-21	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	1.93E-11	7.25E-11	5.60E-15	9.17E-24	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	5.89E-10	8.21E-10	4.19E-14	6.97E-23	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	6.20E-08	3.71E-07	1.71E-07	3.93E-08	3.41E-10	2.65E-17
Avg	0.00E+00	0.00E+00	4.33E-11	1.33E-09	1.42E-09	2.81E-10	1.52E-11	6.68E-19
Std	0.00E+00	0.00E+00	1.32E-09	1.51E-08	1.06E-08	2.13E-09	3.90E-11	1.91E-18
Ni-63								
Min	0.00E+00	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	0.00E+00	1.29E-08	7.94E-08	4.94E-08	2.42E-08	4.65E-09	1.60E-11
Avg	0.00E+00	0.00E+00	8.99E-12	2.93E-10	4.38E-10	1.77E-10	1.33E-10	1.21E-13
Std	0.00E+00	0.00E+00	2.75E-10	3.29E-09	3.20E-09	1.31E-09	4.19E-10	6.39E-13
Sr-90								
Min	0.00E+00	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	0.00E+00	1.20E-06	7.55E-07	1.68E-09	4.75E-14	4.39E-26	0.00E+00
Avg	0.00E+00	0.00E+00	6.76E-10	1.96E-09	2.33E-12	2.37E-17	1.73E-29	0.00E+00
Std	0.00E+00	0.00E+00	2.36E-08	2.85E-08	4.04E-11	9.10E-16	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	0.00E+00
Max	0.00E+00	0.00E+00	1.58E-06	1.99E-06	2.28E-07	5.82E-08	4.91E-09	1.60E-11
Avg	0.00E+00	0.00E+00	9.45E-10	6.61E-09	1.98E-09	4.59E-10	1.48E-10	1.21E-13
Std	0.00E+00	0.00E+00	3.16E-08	7.63E-08	1.47E-08	3.42E-09	4.53E-10	6.39E-13

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Radon (Water Ind.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## 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+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	6.82E-01	5.97E-01	4.58E-01	1.81E-01	3.18E-03	1.20E-06	3.67E-18	0.00E+00
Avg	2.17E-02	1.91E-02	1.47E-02	5.92E-03	1.08E-04	4.35E-08	1.54E-19	0.00E+00
Std	3.26E-02	2.86E-02	2.21E-02	8.82E-03	1.59E-04	6.51E-08	2.41E-19	0.00E+00
Cs-134								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	8.60E-01	6.14E-01	3.13E-01	2.95E-02	1.00E-06	1.91E-15	0.00E+00	0.00E+00
Avg	2.95E-02	2.11E-02	1.09E-02	1.05E-03	3.68E-08	7.35E-17	0.00E+00	0.00E+00
Std	4.85E-02	3.47E-02	1.79E-02	1.78E-03	6.14E-08	1.19E-16	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.83E-01	6.66E-01	6.34E-01	5.33E-01	2.51E-01	5.77E-02	4.13E-04	1.62E-11
Avg	2.34E-02	2.29E-02	2.21E-02	1.90E-02	9.22E-03	2.22E-03	1.77E-05	3.68E-13
Std	3.85E-02	3.77E-02	3.63E-02	3.22E-02	1.54E-02	3.60E-03	2.96E-05	1.02E-12
Ni-63								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.99E-03	7.89E-03	7.70E-03	7.08E-03	4.90E-03	4.91E-03	7.56E-04	1.24E-06
Avg	3.07E-04	3.05E-04	3.00E-04	2.79E-04	1.91E-04	9.64E-05	1.05E-05	4.72E-09
Std	4.62E-04	4.59E-04	4.55E-04	4.30E-04	2.94E-04	1.71E-04	2.53E-05	3.00E-08
Sr-90								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.40E+01	1.17E+01	8.01E+00	1.73E+00	3.22E-03	4.85E-07	8.61E-20	0.00E+00
Avg	4.44E-01	3.05E-01	1.49E-01	1.76E-02	1.69E-05	5.95E-10	7.65E-23	0.00E+00
Std	7.26E-01	5.23E-01	2.93E-01	5.31E-02	1.19E-04	1.11E-08	2.11E-21	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	0.00E+00
Max	1.42E+01	1.18E+01	8.16E+00	1.81E+00	2.51E-01	5.78E-02	7.81E-04	1.24E-06
Avg	5.19E-01	3.68E-01	1.97E-01	4.39E-02	9.54E-03	2.32E-03	2.82E-05	4.72E-09
Std	7.52E-01	5.46E-01	3.10E-01	6.83E-02	1.55E-02	3.63E-03	4.29E-05	3.00E-08

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Meat (Water Ind.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	1.63E-01	1.42E-01	1.09E-01	4.30E-02	7.43E-04	2.70E-07	1.16E-18	0.00E+00
Avg	1.68E-03	1.47E-03	1.14E-03	4.66E-04	8.63E-06	3.43E-09	1.40E-20	0.00E+00
Std	5.18E-03	4.54E-03	3.49E-03	1.40E-03	2.52E-05	9.63E-09	3.90E-20	0.00E+00
Cs-134								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.06E-02	5.04E-02	2.57E-02	2.42E-03	8.23E-08	1.57E-16	0.00E+00	0.00E+00
Avg	2.32E-03	1.67E-03	8.56E-04	8.58E-05	3.12E-09	6.26E-18	0.00E+00	0.00E+00
Std	3.90E-03	2.81E-03	1.45E-03	1.46E-04	5.26E-09	1.06E-17	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.60E-02	5.47E-02	5.20E-02	4.38E-02	2.06E-02	4.74E-03	4.78E-05	1.84E-12
Avg	1.84E-03	1.81E-03	1.74E-03	1.55E-03	7.82E-04	1.90E-04	2.00E-06	5.53E-14
Std	3.10E-03	3.05E-03	2.93E-03	2.64E-03	1.32E-03	3.21E-04	3.15E-06	1.28E-13
Ni-63								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.56E-04	1.53E-04	1.49E-04	1.36E-04	9.03E-05	8.64E-05	5.54E-05	9.10E-08
Avg	3.51E-06	3.50E-06	3.46E-06	3.31E-06	2.36E-06	1.18E-06	1.75E-07	1.07E-10
Std	8.35E-06	8.28E-06	8.21E-06	7.82E-06	5.68E-06	3.20E-06	1.08E-06	1.70E-09
Sr-90								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.34E-01	1.84E-01	1.14E-01	2.34E-02	4.33E-05	6.52E-09	1.13E-21	0.00E+00
Avg	7.32E-03	5.04E-03	2.47E-03	2.90E-04	2.62E-07	8.11E-12	9.88E-25	0.00E+00
Std	1.29E-02	9.32E-03	5.15E-03	9.16E-04	1.70E-06	1.46E-10	2.76E-23	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	0.00E+00
Max	2.40E-01	1.89E-01	1.18E-01	4.64E-02	2.06E-02	4.74E-03	6.03E-05	9.10E-08
Avg	1.32E-02	9.99E-03	6.20E-03	2.40E-03	7.93E-04	1.91E-04	2.17E-06	1.07E-10
Std	1.68E-02	1.29E-02	8.22E-03	3.45E-03	1.32E-03	3.22E-04	3.44E-06	1.70E-09

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Milk (Water Ind.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	3.65E-02	3.20E-02	2.45E-02	9.70E-03	1.71E-04	6.40E-08	1.97E-19	0.00E+00
Avg	6.91E-04	6.08E-04	4.70E-04	1.90E-04	3.47E-06	1.38E-09	5.19E-21	0.00E+00
Std	1.48E-03	1.30E-03	1.00E-03	4.00E-04	7.13E-06	2.84E-09	1.01E-20	0.00E+00
Cs-134								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.64E-01	1.17E-01	5.96E-02	5.62E-03	1.91E-07	3.64E-16	0.00E+00	0.00E+00
Avg	4.05E-03	2.91E-03	1.49E-03	1.47E-04	5.20E-09	1.03E-17	0.00E+00	0.00E+00
Std	8.16E-03	5.85E-03	2.99E-03	2.97E-04	1.03E-08	1.98E-17	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.30E-01	1.27E-01	1.21E-01	1.02E-01	4.79E-02	1.10E-02	7.88E-05	3.87E-12
Avg	3.21E-03	3.15E-03	3.03E-03	2.66E-03	1.30E-03	3.12E-04	2.84E-06	6.90E-14
Std	6.48E-03	6.35E-03	6.07E-03	5.38E-03	2.59E-03	6.00E-04	5.03E-06	1.86E-13
Ni-63								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.52E-03	6.47E-03	6.39E-03	6.08E-03	4.81E-03	2.27E-03	4.64E-04	7.61E-07
Avg	9.40E-05	9.34E-05	9.20E-05	8.72E-05	6.08E-05	3.09E-05	3.97E-06	2.14E-09
Std	2.10E-04	2.08E-04	2.05E-04	2.03E-04	1.43E-04	7.66E-05	1.30E-05	1.67E-08
Sr-90								
Min	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	8.99E-01	6.48E-01	3.34E-01	3.63E-02	1.05E-04	1.40E-08	4.60E-21	0.00E+00
Avg	1.28E-02	8.78E-03	4.28E-03	5.00E-04	5.00E-07	1.96E-11	2.86E-24	0.00E+00
Std	2.67E-02	1.90E-02	1.01E-02	1.56E-03	3.69E-06	3.71E-10	9.31E-23	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	0.00E+00
Max	9.08E-01	6.55E-01	3.39E-01	1.08E-01	4.80E-02	1.10E-02	4.67E-04	7.61E-07
Avg	2.08E-02	1.55E-02	9.36E-03	3.58E-03	1.37E-03	3.43E-04	6.81E-06	2.14E-09
Std	3.20E-02	2.39E-02	1.44E-02	6.12E-03	2.61E-03	6.13E-04	1.46E-05	1.67E-08

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	4.74E-05	9.53E-05	1.70E-06	6.57E-10	2.32E-21	0.00E+00
Avg	0.00E+00	0.00E+00	3.94E-08	7.35E-07	2.69E-08	8.73E-12	2.01E-22	0.00E+00
Std	0.00E+00	0.00E+00	1.13E-06	6.99E-06	1.71E-07	5.79E-11	4.43E-22	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	6.07E-05	3.04E-05	1.06E-09	2.11E-18	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	4.98E-08	2.33E-07	1.65E-11	2.71E-20	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	1.43E-06	2.22E-06	1.05E-10	1.80E-19	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	1.31E-04	5.51E-04	2.66E-04	6.39E-05	5.63E-07	3.40E-14
Avg	0.00E+00	0.00E+00	1.10E-07	4.23E-06	4.14E-06	8.19E-07	4.31E-08	1.91E-15
Std	0.00E+00	0.00E+00	3.14E-06	4.02E-05	2.63E-05	5.46E-06	9.65E-08	4.42E-15
Ni-63								
Min	0.00E+00	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	0.00E+00	1.60E-06	7.33E-06	5.51E-06	2.99E-06	6.37E-07	1.68E-09
Avg	0.00E+00	0.00E+00	1.34E-09	5.46E-08	7.62E-08	3.15E-08	2.24E-08	1.95E-11
Std	0.00E+00	0.00E+00	3.82E-08	5.18E-07	4.87E-07	2.15E-07	6.22E-08	8.61E-11
Sr-90								
Min	0.00E+00	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	0.00E+00	1.60E-04	2.78E-04	7.15E-07	6.28E-12	7.79E-24	0.00E+00
Avg	0.00E+00	0.00E+00	1.27E-07	5.31E-07	6.85E-10	4.68E-15	3.06E-27	0.00E+00
Std	0.00E+00	0.00E+00	3.94E-06	8.13E-06	1.46E-08	1.56E-13	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	0.00E+00
Max	0.00E+00	0.00E+00	4.01E-04	9.61E-04	2.74E-04	6.67E-05	1.20E-06	1.68E-09
Avg	0.00E+00	0.00E+00	3.28E-07	5.79E-06	4.25E-06	8.51E-07	6.55E-08	1.95E-11
Std	0.00E+00	0.00E+00	9.66E-06	5.58E-05	2.70E-05	5.67E-06	1.53E-07	8.61E-11

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Water Ingestion

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.66E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.71E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.77E-09
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	8.19E-02	2.78E-01	4.98E-02	5.84E-05	5.41E-13
Avg	0.00E+00	0.00E+00	0.00E+00	2.73E-05	2.08E-02	2.47E-03	7.41E-07	1.81E-16
Std	0.00E+00	0.00E+00	0.00E+00	1.49E-03	3.95E-02	6.06E-03	4.82E-06	9.88E-15
ΣALL								
Min	0.00E+00	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	0.00E+00	0.00E+00	8.19E-02	2.78E-01	4.98E-02	5.84E-05	6.66E-08
Avg	0.00E+00	0.00E+00	0.00E+00	2.73E-05	2.08E-02	2.47E-03	7.41E-07	6.71E-10
Std	0.00E+00	0.00E+00	0.00E+00	1.49E-03	3.95E-02	6.06E-03	4.82E-06	3.77E-09

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Radon (Water Dep.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Plant (Water Dep.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.87E-09
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-11
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-10
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	1.38E-02	5.30E-02	9.00E-03	8.91E-06	8.32E-14
Avg	0.00E+00	0.00E+00	0.00E+00	4.60E-06	2.19E-03	2.52E-04	8.20E-08	2.78E-17
Std	0.00E+00	0.00E+00	0.00E+00	2.52E-04	4.87E-03	6.90E-04	5.66E-07	1.52E-15
ΣALL								
Min	0.00E+00	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	0.00E+00	0.00E+00	1.38E-02	5.30E-02	9.00E-03	8.91E-06	8.87E-09
Avg	0.00E+00	0.00E+00	0.00E+00	4.60E-06	2.19E-03	2.52E-04	8.20E-08	6.49E-11
Std	0.00E+00	0.00E+00	0.00E+00	2.52E-04	4.87E-03	6.90E-04	5.66E-07	4.13E-10

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Probabilistic Dose vs Pathway(i): Meat (Water Dep.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.53E-10
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.76E-12
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-11
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	8.63E-04	5.50E-03	9.93E-04	1.13E-06	1.72E-14
Avg	0.00E+00	0.00E+00	0.00E+00	2.88E-07	2.64E-04	3.11E-05	1.00E-08	5.72E-18
Std	0.00E+00	0.00E+00	0.00E+00	1.58E-05	5.64E-04	8.13E-05	7.01E-08	3.13E-16
ΣALL								
Min	0.00E+00	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	0.00E+00	0.00E+00	8.63E-04	5.50E-03	9.93E-04	1.13E-06	9.53E-10
Avg	0.00E+00	0.00E+00	0.00E+00	2.88E-07	2.64E-04	3.11E-05	1.00E-08	5.76E-12
Std	0.00E+00	0.00E+00	0.00E+00	1.58E-05	5.64E-04	8.13E-05	7.01E-08	4.14E-11

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## Probabilistic Dose vs Pathway(i): Milk (Water Dep.)

Nuclide (j)	DOSE(i,j,t), mrem/yr							
	t= 0.00E+00	1.00E+00	3.00E+00	1.00E+01	4.05E+01	1.00E+02	3.00E+02	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	0.00E+00
Max	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ni-63								
Min	0.00E+00	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-10
Sr-90								
Min	0.00E+00	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	0.00E+00	0.00E+00	3.17E-03	7.26E-03	1.37E-03	3.50E-06	8.84E-15
Avg	0.00E+00	0.00E+00	0.00E+00	1.06E-06	3.19E-04	3.73E-05	1.20E-08	2.95E-18
Std	0.00E+00	0.00E+00	0.00E+00	5.78E-05	7.11E-04	1.05E-04	9.95E-08	1.61E-16
ΣALL								
Min	0.00E+00	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	0.00E+00	0.00E+00	3.17E-03	7.26E-03	1.37E-03	3.50E-06	1.71E-08
Avg	0.00E+00	0.00E+00	0.00E+00	1.06E-06	3.19E-04	3.73E-05	1.20E-08	1.08E-10
Std	0.00E+00	0.00E+00	0.00E+00	5.78E-05	7.11E-04	1.05E-04	9.95E-08	7.15E-10

ΣALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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## 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+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
0.025	7.39E-06	6.61E-06	5.28E-06	2.38E-06	3.14E-07	5.28E-08	0.00E+00	0.00E+00
0.050	1.27E-05	1.13E-05	9.12E-06	4.12E-06	1.22E-06	2.46E-07	0.00E+00	0.00E+00
0.075	2.06E-05	1.90E-05	1.52E-05	6.81E-06	8.28E-06	1.64E-06	2.82E-11	0.00E+00
0.100	3.26E-05	2.95E-05	2.35E-05	1.10E-05	6.60E-04	2.48E-05	8.99E-10	0.00E+00
0.125	4.97E-05	4.54E-05	3.74E-05	1.82E-05	1.61E-03	2.87E-04	3.10E-08	0.00E+00
0.150	9.04E-05	8.21E-05	6.78E-05	3.73E-05	2.22E-03	4.17E-04	2.61E-06	0.00E+00
0.175	2.47E-04	2.35E-04	2.20E-04	1.34E-04	2.80E-03	5.49E-04	5.44E-06	0.00E+00
0.200	7.08E-02	5.33E-02	2.94E-02	7.76E-03	3.26E-03	6.54E-04	7.22E-06	0.00E+00
0.225	1.06E-01	7.76E-02	4.31E-02	1.05E-02	3.83E-03	7.74E-04	8.53E-06	0.00E+00
0.250	1.34E-01	9.81E-02	5.27E-02	1.29E-02	4.45E-03	8.79E-04	1.03E-05	0.00E+00
0.275	1.56E-01	1.12E-01	6.06E-02	1.47E-02	4.96E-03	1.00E-03	1.20E-05	0.00E+00
0.300	1.73E-01	1.25E-01	6.92E-02	1.63E-02	5.77E-03	1.11E-03	1.36E-05	0.00E+00
0.325	1.94E-01	1.41E-01	7.76E-02	1.83E-02	6.44E-03	1.25E-03	1.53E-05	0.00E+00
0.350	2.15E-01	1.57E-01	8.44E-02	2.00E-02	7.14E-03	1.37E-03	1.72E-05	0.00E+00
0.375	2.35E-01	1.71E-01	9.31E-02	2.17E-02	8.03E-03	1.49E-03	1.88E-05	0.00E+00
0.400	2.55E-01	1.83E-01	1.00E-01	2.36E-02	8.93E-03	1.64E-03	2.06E-05	0.00E+00
0.425	2.74E-01	1.97E-01	1.08E-01	2.53E-02	9.81E-03	1.79E-03	2.29E-05	0.00E+00
0.450	2.96E-01	2.12E-01	1.16E-01	2.72E-02	1.11E-02	1.96E-03	2.59E-05	0.00E+00
0.475	3.19E-01	2.27E-01	1.23E-01	2.91E-02	1.23E-02	2.18E-03	2.83E-05	3.86E-17
0.500	3.38E-01	2.44E-01	1.31E-01	3.10E-02	1.39E-02	2.41E-03	3.13E-05	1.10E-12
0.525	3.63E-01	2.63E-01	1.40E-01	3.29E-02	1.59E-02	2.66E-03	3.42E-05	8.08E-12
0.550	3.91E-01	2.79E-01	1.50E-01	3.53E-02	1.80E-02	2.87E-03	3.74E-05	2.09E-11
0.575	4.20E-01	2.99E-01	1.62E-01	3.76E-02	2.00E-02	3.12E-03	4.16E-05	5.58E-11
0.600	4.50E-01	3.18E-01	1.71E-01	4.08E-02	2.25E-02	3.59E-03	4.56E-05	1.43E-10
0.625	4.75E-01	3.43E-01	1.84E-01	4.38E-02	2.52E-02	4.01E-03	4.97E-05	2.91E-10
0.650	5.15E-01	3.66E-01	1.96E-01	4.69E-02	3.01E-02	4.47E-03	5.72E-05	5.12E-10
0.675	5.47E-01	3.88E-01	2.10E-01	5.06E-02	3.50E-02	4.96E-03	6.46E-05	8.27E-10
0.700	5.91E-01	4.19E-01	2.29E-01	5.46E-02	4.06E-02	5.49E-03	7.22E-05	1.27E-09
0.725	6.36E-01	4.52E-01	2.47E-01	5.80E-02	4.62E-02	6.50E-03	8.14E-05	1.92E-09
0.750	6.88E-01	4.92E-01	2.63E-01	6.27E-02	5.37E-02	7.57E-03	9.70E-05	2.80E-09
0.775	7.47E-01	5.34E-01	2.82E-01	6.87E-02	6.21E-02	8.87E-03	1.16E-04	3.78E-09
0.800	8.07E-01	5.71E-01	3.13E-01	7.50E-02	7.17E-02	1.03E-02	1.40E-04	5.22E-09
0.825	8.87E-01	6.32E-01	3.37E-01	8.36E-02	8.23E-02	1.21E-02	1.76E-04	7.05E-09
0.850	9.94E-01	6.92E-01	3.74E-01	9.25E-02	9.16E-02	1.43E-02	2.38E-04	9.42E-09
0.875	1.10E+00	7.87E-01	4.18E-01	1.05E-01	1.04E-01	1.65E-02	3.19E-04	1.30E-08
0.900	1.28E+00	9.05E-01	4.89E-01	1.24E-01	1.21E-01	1.93E-02	3.77E-04	1.72E-08
0.925	1.52E+00	1.07E+00	5.67E-01	1.46E-01	1.44E-01	2.29E-02	4.67E-04	2.42E-08
0.950	1.82E+00	1.27E+00	6.91E-01	1.82E-01	1.76E-01	2.91E-02	5.71E-04	3.79E-08
0.975	2.61E+00	1.84E+00	9.38E-01	2.81E-01	2.49E-01	4.27E-02	7.38E-04	6.39E-08
1.000	1.52E+01	1.23E+01	8.46E+00	4.02E+00	7.27E-01	1.75E-01	2.12E-03	2.09E-06

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Summary of dose at graphical times, reptition 1

Time Years	Dose statistics at graphical times, mrem/yr							
	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	9.54E-07	5.59E+00	5.58E-01	3.50E-01	1.30E+00	1.86E+00	2.74E+00	3.63E+00
1.00E+00	8.74E-07	3.87E+00	3.97E-01	2.46E-01	9.12E-01	1.33E+00	1.92E+00	2.60E+00
3.00E+00	7.11E-07	2.27E+00	2.13E-01	1.36E-01	4.90E-01	6.89E-01	8.96E-01	1.43E+00
1.00E+01	2.83E-07	2.83E+00	6.94E-02	3.12E-02	1.24E-01	1.73E-01	2.95E-01	1.43E+00
4.00E+01	8.84E-09	7.29E-01	4.20E-02	1.24E-02	1.15E-01	1.66E-01	2.46E-01	3.81E-01
4.05E+01	8.47E-09	7.27E-01	4.19E-02	1.24E-02	1.18E-01	1.68E-01	2.49E-01	3.82E-01
8.00E+01	1.59E-14	2.92E-01	1.46E-02	4.55E-03	4.15E-02	5.49E-02	7.56E-02	1.34E-01
1.00E+02	0.00E+00	1.54E-01	7.49E-03	2.40E-03	1.99E-02	3.00E-02	4.43E-02	7.48E-02
1.20E+02	0.00E+00	6.68E-02	3.81E-03	1.36E-03	9.47E-03	1.35E-02	2.48E-02	4.57E-02
1.60E+02	0.00E+00	2.08E-02	1.25E-03	5.25E-04	2.74E-03	4.22E-03	7.88E-03	1.39E-02
2.00E+02	0.00E+00	1.03E-02	6.30E-04	2.23E-04	1.49E-03	2.91E-03	4.35E-03	6.76E-03
2.40E+02	0.00E+00	6.16E-03	3.73E-04	9.90E-05	1.10E-03	2.15E-03	2.65E-03	3.53E-03
2.80E+02	0.00E+00	2.50E-03	1.72E-04	4.49E-05	5.97E-04	8.85E-04	1.15E-03	1.40E-03
3.00E+02	0.00E+00	1.54E-03	1.14E-04	3.12E-05	3.74E-04	5.56E-04	7.25E-04	9.60E-04
3.20E+02	0.00E+00	9.45E-04	7.37E-05	2.01E-05	2.52E-04	3.51E-04	4.45E-04	5.69E-04
3.60E+02	0.00E+00	5.14E-04	3.04E-05	8.75E-06	9.91E-05	1.37E-04	1.81E-04	2.48E-04
4.00E+02	0.00E+00	3.46E-04	1.35E-05	3.93E-06	4.23E-05	6.04E-05	8.31E-05	1.24E-04
4.40E+02	0.00E+00	2.44E-04	6.38E-06	1.71E-06	1.90E-05	2.82E-05	3.41E-05	5.17E-05
4.80E+02	0.00E+00	1.21E-04	3.10E-06	8.03E-07	9.03E-06	1.30E-05	1.91E-05	2.66E-05
5.20E+02	0.00E+00	5.80E-05	1.64E-06	3.50E-07	4.42E-06	6.75E-06	9.61E-06	1.61E-05
5.60E+02	0.00E+00	2.89E-05	9.22E-07	1.70E-07	2.65E-06	3.77E-06	6.40E-06	9.93E-06
6.00E+02	0.00E+00	1.98E-05	5.35E-07	8.07E-08	1.58E-06	2.36E-06	3.94E-06	6.86E-06
6.40E+02	0.00E+00	1.35E-05	3.21E-07	3.27E-08	9.41E-07	1.55E-06	2.55E-06	4.00E-06
6.80E+02	0.00E+00	9.24E-06	2.02E-07	1.31E-08	5.64E-07	1.01E-06	1.73E-06	2.61E-06
7.20E+02	0.00E+00	6.32E-06	1.27E-07	6.01E-09	3.54E-07	6.71E-07	1.21E-06	1.72E-06
7.60E+02	0.00E+00	4.33E-06	8.17E-08	2.05E-09	2.28E-07	4.32E-07	7.71E-07	1.15E-06
8.00E+02	0.00E+00	2.96E-06	5.26E-08	1.00E-09	1.50E-07	2.77E-07	5.23E-07	6.83E-07
8.40E+02	0.00E+00	2.03E-06	3.37E-08	3.42E-10	9.32E-08	1.77E-07	3.10E-07	4.90E-07
8.80E+02	0.00E+00	1.39E-06	2.20E-08	1.45E-10	6.12E-08	1.20E-07	2.11E-07	3.06E-07
9.20E+02	0.00E+00	9.48E-07	1.46E-08	5.15E-11	3.97E-08	7.98E-08	1.25E-07	2.14E-07
9.60E+02	0.00E+00	6.49E-07	9.77E-09	9.12E-12	2.69E-08	5.54E-08	8.91E-08	1.47E-07
1.00E+03	0.00E+00	4.44E-07	6.56E-09	1.56E-12	1.87E-08	3.57E-08	5.87E-08	9.88E-08

Probabilistic results summary : RESRAD Default

File : C:\USERS\DAVID FAUVER\DOCUMENTS\ZION\RESRAD\TSD\SOIL DCGL\SOIL DCGL\RESRAD INPUT SUBSURFACE\BP INSITU UNSAT SEN.RAD

## Summary of dose at graphical times, reptition 2

Time Years	Dose statistics at graphical times, mrem/yr							
	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	1.31E-06	5.69E+00	5.27E-01	3.27E-01	1.24E+00	1.74E+00	2.44E+00	3.91E+00
1.00E+00	1.16E-06	4.25E+00	3.74E-01	2.39E-01	8.58E-01	1.23E+00	1.78E+00	2.59E+00
3.00E+00	9.06E-07	2.38E+00	2.02E-01	1.28E-01	4.87E-01	6.54E-01	9.37E-01	1.33E+00
1.00E+01	0.00E+00	3.21E+00	6.91E-02	3.08E-02	1.22E-01	1.83E-01	2.61E-01	1.11E+00
4.00E+01	0.00E+00	7.27E-01	4.53E-02	1.50E-02	1.25E-01	1.83E-01	2.59E-01	3.84E-01
4.05E+01	0.00E+00	7.16E-01	4.51E-02	1.53E-02	1.24E-01	1.80E-01	2.51E-01	3.78E-01
8.00E+01	0.00E+00	2.61E-01	1.30E-02	4.47E-03	3.62E-02	4.94E-02	7.40E-02	1.10E-01
1.00E+02	0.00E+00	1.60E-01	6.88E-03	2.35E-03	1.88E-02	2.67E-02	3.97E-02	6.87E-02
1.20E+02	0.00E+00	9.77E-02	3.55E-03	1.29E-03	9.02E-03	1.29E-02	1.96E-02	3.88E-02
1.60E+02	0.00E+00	3.66E-02	1.26E-03	5.40E-04	2.70E-03	4.07E-03	6.18E-03	1.46E-02
2.00E+02	0.00E+00	1.37E-02	6.45E-04	2.39E-04	1.65E-03	2.43E-03	4.50E-03	7.14E-03
2.40E+02	0.00E+00	6.81E-03	3.95E-04	1.06E-04	1.22E-03	2.20E-03	2.79E-03	3.72E-03
2.80E+02	0.00E+00	2.60E-03	1.78E-04	4.63E-05	6.51E-04	9.48E-04	1.17E-03	1.46E-03
3.00E+02	0.00E+00	1.60E-03	1.15E-04	3.16E-05	3.97E-04	5.96E-04	7.58E-04	8.89E-04
3.20E+02	0.00E+00	9.90E-04	7.34E-05	2.01E-05	2.50E-04	3.97E-04	4.72E-04	5.42E-04
3.60E+02	0.00E+00	3.78E-04	3.01E-05	8.86E-06	9.95E-05	1.44E-04	1.78E-04	2.09E-04
4.00E+02	0.00E+00	1.49E-04	1.32E-05	3.77E-06	4.12E-05	6.28E-05	7.84E-05	9.60E-05
4.40E+02	0.00E+00	8.05E-05	6.10E-06	1.78E-06	1.85E-05	2.55E-05	3.48E-05	4.81E-05
4.80E+02	0.00E+00	4.80E-05	2.94E-06	8.60E-07	8.93E-06	1.38E-05	1.73E-05	2.15E-05
5.20E+02	0.00E+00	2.95E-05	1.50E-06	3.17E-07	4.14E-06	7.53E-06	9.20E-06	1.30E-05
5.60E+02	0.00E+00	1.86E-05	8.21E-07	1.56E-07	2.35E-06	4.09E-06	5.77E-06	8.25E-06
6.00E+02	0.00E+00	1.18E-05	4.85E-07	6.56E-08	1.37E-06	2.32E-06	3.88E-06	5.67E-06
6.40E+02	0.00E+00	7.59E-06	2.92E-07	2.98E-08	7.60E-07	1.45E-06	2.54E-06	3.89E-06
6.80E+02	0.00E+00	4.90E-06	1.80E-07	1.34E-08	4.67E-07	9.70E-07	1.63E-06	2.60E-06
7.20E+02	0.00E+00	3.51E-06	1.15E-07	4.71E-09	2.89E-07	6.54E-07	1.10E-06	1.74E-06
7.60E+02	0.00E+00	2.53E-06	7.51E-08	1.66E-09	1.90E-07	4.25E-07	7.42E-07	1.22E-06
8.00E+02	0.00E+00	1.83E-06	5.04E-08	4.65E-10	1.29E-07	2.84E-07	4.85E-07	8.63E-07
8.40E+02	0.00E+00	1.31E-06	3.38E-08	1.48E-10	8.27E-08	1.95E-07	3.26E-07	5.95E-07
8.80E+02	0.00E+00	9.46E-07	2.27E-08	7.11E-11	5.48E-08	1.39E-07	2.12E-07	4.09E-07
9.20E+02	0.00E+00	6.80E-07	1.53E-08	2.17E-11	3.75E-08	9.08E-08	1.43E-07	3.04E-07
9.60E+02	0.00E+00	4.89E-07	1.02E-08	3.24E-12	2.39E-08	6.17E-08	9.37E-08	1.93E-07
1.00E+03	0.00E+00	3.51E-07	6.84E-09	9.21E-13	1.64E-08	3.99E-08	6.07E-08	1.34E-07

Probabilistic results summary : RESRAD Default

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## Summary of dose at graphical times, reptition 3

Time Years	Dose statistics at graphical times, mrem/yr							
	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	1.04E-06	1.52E+01	5.74E-01	3.37E-01	1.35E+00	1.93E+00	2.63E+00	3.74E+00
1.00E+00	9.35E-07	1.23E+01	4.10E-01	2.47E-01	9.57E-01	1.33E+00	1.88E+00	2.65E+00
3.00E+00	7.64E-07	8.46E+00	2.25E-01	1.30E-01	4.89E-01	7.34E-01	1.00E+00	1.34E+00
1.00E+01	3.86E-07	4.02E+00	7.71E-02	3.11E-02	1.24E-01	1.86E-01	3.28E-01	1.44E+00
4.00E+01	2.80E-08	6.16E-01	4.47E-02	1.48E-02	1.21E-01	1.76E-01	2.78E-01	4.32E-01
4.05E+01	2.71E-08	6.06E-01	4.46E-02	1.49E-02	1.20E-01	1.78E-01	2.74E-01	4.24E-01
8.00E+01	0.00E+00	3.06E-01	1.48E-02	4.63E-03	3.88E-02	5.86E-02	8.88E-02	1.43E-01
1.00E+02	0.00E+00	1.75E-01	7.58E-03	2.50E-03	1.91E-02	3.06E-02	4.91E-02	7.44E-02
1.20E+02	0.00E+00	1.08E-01	4.08E-03	1.46E-03	9.78E-03	1.48E-02	2.60E-02	4.47E-02
1.60E+02	0.00E+00	4.13E-02	1.28E-03	5.54E-04	2.97E-03	4.39E-03	7.08E-03	1.37E-02
2.00E+02	0.00E+00	1.58E-02	6.46E-04	2.43E-04	1.35E-03	2.49E-03	4.71E-03	8.82E-03
2.40E+02	0.00E+00	6.06E-03	3.85E-04	1.02E-04	1.27E-03	2.25E-03	3.11E-03	3.46E-03
2.80E+02	0.00E+00	2.88E-03	1.74E-04	4.47E-05	6.08E-04	9.40E-04	1.20E-03	1.55E-03
3.00E+02	0.00E+00	2.12E-03	1.11E-04	3.10E-05	3.69E-04	5.54E-04	7.51E-04	9.34E-04
3.20E+02	0.00E+00	1.59E-03	7.16E-05	1.99E-05	2.33E-04	3.50E-04	4.60E-04	5.49E-04
3.60E+02	0.00E+00	9.40E-04	3.07E-05	8.40E-06	9.51E-05	1.41E-04	1.82E-04	2.25E-04
4.00E+02	0.00E+00	5.90E-04	1.38E-05	3.76E-06	4.16E-05	5.63E-05	7.24E-05	1.02E-04
4.40E+02	0.00E+00	3.85E-04	6.44E-06	1.72E-06	1.76E-05	2.56E-05	3.30E-05	4.52E-05
4.80E+02	0.00E+00	2.57E-04	3.30E-06	8.12E-07	9.38E-06	1.24E-05	1.80E-05	2.38E-05
5.20E+02	0.00E+00	1.75E-04	1.84E-06	3.66E-07	4.61E-06	7.29E-06	1.12E-05	1.69E-05
5.60E+02	0.00E+00	1.20E-04	1.08E-06	1.72E-07	2.51E-06	4.52E-06	6.87E-06	1.11E-05
6.00E+02	0.00E+00	8.24E-05	6.66E-07	7.27E-08	1.42E-06	2.94E-06	4.71E-06	7.25E-06
6.40E+02	0.00E+00	5.69E-05	4.18E-07	3.14E-08	8.06E-07	1.90E-06	2.89E-06	5.33E-06
6.80E+02	0.00E+00	3.94E-05	2.65E-07	1.50E-08	5.21E-07	1.23E-06	1.95E-06	3.31E-06
7.20E+02	0.00E+00	2.73E-05	1.72E-07	6.10E-09	3.19E-07	7.82E-07	1.27E-06	2.22E-06
7.60E+02	0.00E+00	1.89E-05	1.12E-07	1.90E-09	1.90E-07	4.95E-07	8.24E-07	1.48E-06
8.00E+02	0.00E+00	1.31E-05	7.50E-08	7.06E-10	1.21E-07	3.00E-07	5.64E-07	1.00E-06
8.40E+02	0.00E+00	9.07E-06	5.00E-08	2.62E-10	7.85E-08	2.03E-07	3.88E-07	7.13E-07
8.80E+02	0.00E+00	6.29E-06	3.30E-08	6.73E-11	5.22E-08	1.36E-07	2.54E-07	4.44E-07
9.20E+02	0.00E+00	4.36E-06	2.18E-08	2.34E-11	3.47E-08	8.39E-08	1.53E-07	3.10E-07
9.60E+02	0.00E+00	3.02E-06	1.47E-08	4.47E-12	2.31E-08	5.29E-08	1.05E-07	2.17E-07
1.00E+03	0.00E+00	2.09E-06	1.01E-08	1.08E-12	1.57E-08	3.71E-08	7.26E-08	1.50E-07

Probabilistic results summary : RESRAD Default

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Peak of the mean dose (averaged over observations) at graphical times

Repetition	Time of peak mean dose Years	Peak mean dose mrem/yr
1	0.000E+00	5.577E-01
2	0.000E+00	5.270E-01
3	0.000E+00	5.737E-01

Title : RESRAD Default  
 Input File : BP INSITU UNSAT SEN.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
	1		1		1		1	
Repetition =								
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Density of cover material	37	0.01	37	0.01	18	0.03	18	0.03
Contaminated zone erosion rate	38	-0.01	38	-0.01	5	-0.09	5	-0.07
Contaminated zone total porosity	27	0.03	27	0.02	25	0.03	25	0.02
Contaminated zone hydraulic conductivity	14	-0.04	14	-0.03	30	-0.02	30	-0.01
Contaminated zone b parameter	15	-0.04	15	-0.02	43	-0.01	43	0.00
Evapotranspiration coefficient	40	-0.01	40	-0.01	31	-0.02	31	-0.01
Wind Speed	34	-0.02	34	-0.01	24	-0.03	24	-0.02
Runoff coefficient	8	0.06	8	0.04	36	0.01	36	0.01
Density of saturated zone	30	-0.02	30	-0.01	27	-0.02	27	-0.02
Saturated zone total porosity	44	0.01	44	0.01	45	0.01	45	0.00
Saturated zone effective porosity	41	0.01	41	0.01	46	-0.01	46	0.00
Saturated zone hydraulic conductivity	13	0.05	13	0.03	50	0.00	50	0.00
Saturated zone hydraulic gradient	46	0.00	46	0.00	37	-0.01	37	-0.01
Well pump intake depth	51	0.00	51	0.00	34	0.02	34	0.01
Mass loading for inhalation	24	0.03	24	0.02	13	0.05	13	0.04
Depth of soil mixing layer	36	-0.01	36	-0.01	39	-0.01	39	-0.01
Depth of roots	11	0.05	11	0.03	2	0.30	2	0.23
Weathering removal constant of all vegetation	50	0.00	50	0.00	52	0.00	52	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	18	-0.03	18	-0.02	15	-0.04	15	-0.03
Wet foliar interception fraction of leafy vegetables	49	0.00	49	0.00	51	0.00	51	0.00
Indoor dust filtration factor	48	0.00	48	0.00	32	0.02	32	0.01
External gamma shielding factor	47	0.00	47	0.00	48	0.00	48	0.00
Cover erosion rate	2	0.43	2	0.30	16	0.04	16	0.03
Total Porosity of Unsaturated zone 1	16	0.04	16	0.02	26	0.02	26	0.02
Effective Porosity of Unsaturated zone 1	33	0.02	33	0.01	38	0.01	38	0.01
Hydraulic Conductivity of Unsaturated zone 1	45	0.01	45	0.01	42	0.01	42	0.01
b Parameter of Unsaturated zone 1	52	0.00	52	0.00	53	0.00	53	0.00
Plant transfer factor for Co	29	0.02	29	0.01	21	0.03	21	0.02
Meat transfer factor for Co	22	0.03	22	0.02	9	0.05	9	0.04
Milk transfer factor for Co	9	0.06	9	0.03	4	0.09	4	0.07
Plant transfer factor for Cs	3	0.18	3	0.12	3	0.14	3	0.11
Meat transfer factor for Cs	5	-0.07	5	-0.04	14	-0.04	14	-0.03
Milk transfer factor for Cs	6	-0.06	6	-0.04	6	-0.07	6	-0.05
Plant transfer factor for Ni	20	0.03	19	0.02	33	-0.02	33	-0.01
Meat transfer factor for Ni	26	-0.03	26	-0.02	44	-0.01	44	0.00
Milk transfer factor for Ni	43	-0.01	43	-0.01	35	0.02	35	0.01
Plant transfer factor for Sr	1	0.75	1	0.70	1	0.62	1	0.59
Meat transfer factor for Sr	17	0.04	17	0.02	8	0.06	8	0.04
Milk transfer factor for Sr	23	0.03	23	0.02	11	0.05	11	0.04
Density of contaminated zone	31	-0.02	31	-0.01	28	0.02	28	0.02
Density of Unsaturated zone 1	7	-0.06	7	-0.04	12	-0.05	12	-0.04
Kd of Cs-134 in Contaminated Zone	19	-0.03	20	-0.02	20	-0.03	20	-0.02
Kd of Cs-134 in Saturated Zone	32	0.02	32	0.01	19	0.03	19	0.03
Kd of Cs-137 in Contaminated Zone	12	-0.05	12	-0.03	7	-0.07	7	-0.05
Kd of Cs-137 in Saturated Zone	21	0.03	21	0.02	17	0.04	17	0.03
Kd of Ni-63 in Contaminated Zone	42	0.01	42	0.01	41	0.01	41	0.01
Kd of Ni-63 in Saturated Zone	39	0.01	39	0.01	49	0.00	49	0.00
Kd of Sr-90 in Contaminated Zone	28	0.02	28	0.02	29	0.02	29	0.01
Kd of Sr-90 in Saturated Zone	53	0.00	53	0.00	40	-0.01	40	-0.01
Kd of Sr-90 in Unsaturated Zone 1	10	0.05	10	0.03	23	0.03	23	0.02
Kd of Ni-63 in Unsaturated Zone 1	35	0.02	35	0.01	47	0.00	47	0.00
Kd of Cs-137 in Unsaturated Zone 1	25	-0.03	25	-0.02	22	-0.03	22	-0.02





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.

Title : RESRAD Default  
 Input File : BP INSITU UNSAT SEN.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
Repetition =	2		2		2		2	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Density of cover material	52	0.00	52	0.00	15	0.05	15	0.04
Contaminated zone erosion rate	46	-0.01	46	0.00	34	0.02	34	0.02
Contaminated zone total porosity	25	0.03	25	0.02	38	0.01	38	0.01
Contaminated zone hydraulic conductivity	41	0.01	41	0.01	50	0.00	50	0.00
Contaminated zone b parameter	16	0.04	16	0.03	10	0.06	10	0.04
Evapotranspiration coefficient	27	-0.02	27	-0.02	11	-0.05	11	-0.04
Wind Speed	42	0.01	42	0.01	47	0.00	47	0.00
Runoff coefficient	19	0.03	19	0.02	29	0.02	29	0.02
Density of saturated zone	28	-0.02	28	-0.01	23	-0.03	23	-0.02
Saturated zone total porosity	20	0.03	20	0.02	7	0.07	7	0.05
Saturated zone effective porosity	12	-0.04	12	-0.03	16	-0.05	16	-0.04
Saturated zone hydraulic conductivity	29	0.02	30	0.01	44	-0.01	44	-0.01
Saturated zone hydraulic gradient	50	0.00	50	0.00	36	-0.02	36	-0.01
Well pump intake depth	7	-0.06	7	-0.05	17	-0.05	17	-0.04
Mass loading for inhalation	6	-0.07	6	-0.05	21	-0.03	21	-0.03
Depth of soil mixing layer	34	-0.02	34	-0.01	49	0.00	49	0.00
Depth of roots	5	0.07	5	0.05	2	0.31	2	0.25
Weathering removal constant of all vegetation	32	0.02	32	0.01	22	0.03	22	0.02
Wet weight crop yield of fruit, grain and non-leafy vegetables	49	0.00	49	0.00	39	-0.01	39	-0.01
Wet foliar interception fraction of leafy vegetables	21	-0.03	21	-0.02	30	0.02	30	0.02
Indoor dust filtration factor	24	0.03	24	0.02	53	0.00	53	0.00
External gamma shielding factor	31	0.02	31	0.01	5	0.09	5	0.07
Cover erosion rate	2	0.41	2	0.33	4	0.10	4	0.08
Total Porosity of Unsaturated zone 1	43	-0.01	43	-0.01	33	-0.02	33	-0.02
Effective Porosity of Unsaturated zone 1	26	-0.02	26	-0.02	48	0.00	48	0.00
Hydraulic Conductivity of Unsaturated zone 1	22	0.03	22	0.02	37	0.02	37	0.01
b Parameter of Unsaturated zone 1	8	-0.06	8	-0.04	9	-0.06	9	-0.05
Plant transfer factor for Co	4	0.08	4	0.06	6	0.08	6	0.06
Meat transfer factor for Co	38	0.01	38	0.01	25	-0.03	25	-0.02
Milk transfer factor for Co	10	0.05	10	0.03	8	0.06	8	0.05
Plant transfer factor for Cs	3	0.19	3	0.14	3	0.18	3	0.15
Meat transfer factor for Cs	33	-0.02	33	-0.01	35	0.02	35	0.02
Milk transfer factor for Cs	13	-0.04	13	-0.03	18	0.04	18	0.03
Plant transfer factor for Ni	30	-0.02	29	-0.01	28	-0.02	28	-0.02
Meat transfer factor for Ni	11	0.05	11	0.03	19	0.04	19	0.03
Milk transfer factor for Ni	37	-0.01	37	-0.01	20	-0.04	20	-0.03
Plant transfer factor for Sr	1	0.62	1	0.57	1	0.55	1	0.52
Meat transfer factor for Sr	17	0.03	17	0.02	40	0.01	40	0.01
Milk transfer factor for Sr	51	0.00	51	0.00	42	-0.01	42	-0.01
Density of contaminated zone	45	-0.01	45	0.00	52	0.00	52	0.00
Density of Unsaturated zone 1	48	0.01	48	0.00	41	-0.01	41	-0.01
Kd of Cs-134 in Contaminated Zone	36	-0.01	36	-0.01	45	0.01	45	0.01
Kd of Cs-134 in Saturated Zone	9	0.05	9	0.03	43	0.01	43	0.01
Kd of Cs-137 in Contaminated Zone	35	0.02	35	0.01	51	0.00	51	0.00
Kd of Cs-137 in Saturated Zone	15	-0.04	15	-0.03	26	-0.03	26	-0.02
Kd of Ni-63 in Contaminated Zone	18	0.03	18	0.02	14	0.05	14	0.04
Kd of Ni-63 in Saturated Zone	14	-0.04	14	-0.03	46	-0.01	46	-0.01
Kd of Sr-90 in Contaminated Zone	39	0.01	39	0.01	27	0.02	27	0.02
Kd of Sr-90 in Saturated Zone	44	-0.01	44	-0.01	24	-0.03	24	-0.02
Kd of Sr-90 in Unsaturated Zone 1	53	0.00	53	0.00	13	-0.05	13	-0.04
Kd of Ni-63 in Unsaturated Zone 1	40	-0.01	40	-0.01	31	0.02	31	0.02
Kd of Cs-137 in Unsaturated Zone 1	47	-0.01	47	0.00	32	0.02	32	0.02





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.

Title : RESRAD Default  
 Input File : BP INSITU UNSAT SEN.RAD

## Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
	3		3		3		3	
Repetition =								
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Density of cover material	29	-0.02	29	-0.01	11	-0.05	11	-0.04
Contaminated zone erosion rate	45	-0.01	45	0.00	24	-0.03	24	-0.02
Contaminated zone total porosity	24	0.03	24	0.02	27	0.02	27	0.02
Contaminated zone hydraulic conductivity	26	-0.03	26	-0.01	12	-0.05	12	-0.04
Contaminated zone b parameter	42	-0.01	42	0.00	42	-0.01	42	-0.01
Evapotranspiration coefficient	16	0.04	16	0.02	22	0.04	22	0.03
Wind Speed	36	-0.02	36	-0.01	9	-0.06	9	-0.04
Runoff coefficient	38	0.01	38	0.01	17	0.04	17	0.03
Density of saturated zone	22	-0.03	22	-0.02	41	-0.01	41	-0.01
Saturated zone total porosity	44	0.01	44	0.00	36	-0.02	36	-0.01
Saturated zone effective porosity	34	-0.02	34	-0.01	21	-0.04	21	-0.03
Saturated zone hydraulic conductivity	23	-0.03	23	-0.02	30	-0.02	30	-0.02
Saturated zone hydraulic gradient	12	0.05	11	0.03	26	-0.03	26	-0.02
Well pump intake depth	47	0.01	47	0.00	46	0.01	46	0.00
Mass loading for inhalation	7	0.06	7	0.03	35	0.02	35	0.01
Depth of soil mixing layer	8	0.06	8	0.03	34	0.02	34	0.01
Depth of roots	27	0.03	27	0.01	2	0.28	2	0.22
Weathering removal constant of all vegetation	4	0.07	4	0.04	15	0.04	15	0.03
Wet weight crop yield of fruit, grain and non-leafy vegetables	28	-0.02	28	-0.01	14	-0.05	14	-0.03
Wet foliar interception fraction of leafy vegetables	40	-0.01	40	-0.01	38	-0.01	38	-0.01
Indoor dust filtration factor	48	0.00	48	0.00	51	0.00	51	0.00
External gamma shielding factor	5	0.07	5	0.04	52	0.00	52	0.00
Cover erosion rate	2	0.41	2	0.26	13	0.05	13	0.04
Total Porosity of Unsaturated zone 1	10	0.05	12	0.03	20	0.04	20	0.03
Effective Porosity of Unsaturated zone 1	41	-0.01	41	0.00	40	0.01	40	0.01
Hydraulic Conductivity of Unsaturated zone 1	37	-0.01	37	-0.01	48	0.01	48	0.00
b Parameter of Unsaturated zone 1	50	0.00	50	0.00	6	0.06	6	0.05
Plant transfer factor for Co	13	0.05	13	0.03	7	0.06	7	0.05
Meat transfer factor for Co	31	-0.02	31	-0.01	45	0.01	45	0.00
Milk transfer factor for Co	30	-0.02	30	-0.01	44	-0.01	44	-0.01
Plant transfer factor for Cs	3	0.18	3	0.10	3	0.19	3	0.15
Meat transfer factor for Cs	19	-0.03	19	-0.02	10	0.06	10	0.04
Milk transfer factor for Cs	35	-0.02	35	-0.01	18	-0.04	18	-0.03
Plant transfer factor for Ni	51	0.00	51	0.00	16	0.04	16	0.03
Meat transfer factor for Ni	11	-0.05	10	-0.03	43	-0.01	43	-0.01
Milk transfer factor for Ni	18	-0.04	18	-0.02	8	-0.06	8	-0.04
Plant transfer factor for Sr	1	0.80	1	0.75	1	0.60	1	0.57
Meat transfer factor for Sr	20	-0.03	20	-0.02	37	-0.01	37	-0.01
Milk transfer factor for Sr	25	0.03	25	0.02	39	-0.01	39	-0.01
Density of contaminated zone	32	-0.02	32	-0.01	5	-0.07	5	-0.05
Density of Unsaturated zone 1	53	0.00	53	0.00	33	0.02	33	0.02
Kd of Cs-134 in Contaminated Zone	39	0.01	39	0.01	50	0.00	50	0.00
Kd of Cs-134 in Saturated Zone	15	-0.04	15	-0.02	19	-0.04	19	-0.03
Kd of Cs-137 in Contaminated Zone	46	-0.01	46	0.00	49	0.00	49	0.00
Kd of Cs-137 in Saturated Zone	49	0.00	49	0.00	23	0.03	23	0.03
Kd of Ni-63 in Contaminated Zone	17	0.04	17	0.02	31	0.02	31	0.02
Kd of Ni-63 in Saturated Zone	6	0.07	6	0.04	32	0.02	32	0.02
Kd of Sr-90 in Contaminated Zone	21	0.03	21	0.02	28	0.02	28	0.02
Kd of Sr-90 in Saturated Zone	9	-0.06	9	-0.03	4	-0.07	4	-0.06
Kd of Sr-90 in Unsaturated Zone 1	14	0.04	14	0.02	29	0.02	29	0.02
Kd of Ni-63 in Unsaturated Zone 1	33	-0.02	33	-0.01	25	-0.03	25	-0.02
Kd of Cs-137 in Unsaturated Zone 1	43	-0.01	43	0.00	53	0.00	53	0.00





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.