Probabilistic results summary : RESRAD Default
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Part VI: Uncertainty Analysis

RESRAD Uncertainty Analysis Results

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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 LOGARITHMIC	4	5.E-8	0	.0007	.22	.005	.95	.2	1
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 LOGARITHMIC	4	5.E-8	0	.0007	.22	.005	.95	.2	1
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

Probabilistic results summary : RESRAD Default

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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	1.92E+00	1.92E+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	1.01E+01	1.01E+01	8.84E+00	6.79E+00	2.70E+00	4.83E-02	1.88E-05	6.52E-17	0.00E+00
Avg	0.00E+00	4.20E+00	4.20E+00	3.62E+00	2.73E+00	1.03E+00	1.28E-02	2.67E-06	4.71E-18	0.00E+00
Std	0.00E+00	1.46E+00	1.46E+00	1.32E+00	1.05E+00	4.21E-01	8.71E-03	3.36E-06	9.99E-18	0.00E+00
Cs-134										
Min	0.00E+00	1.17E+00	1.17E+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	7.69E+00	7.69E+00	5.44E+00	2.72E+00	2.41E-01	7.28E-06	1.38E-14	0.00E+00	0.00E+00
Avg	0.00E+00	2.57E+00	2.57E+00	1.81E+00	9.04E-01	8.11E-02	1.96E-06	2.06E-15	0.00E+00	0.00E+00
Std	0.00E+00	8.62E-01	8.62E-01	6.38E-01	3.36E-01	3.22E-02	1.31E-06	2.57E-15	0.00E+00	0.00E+00
Cs-137										
Min	0.00E+00	5.16E-01	5.16E-01	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	5.08E+00	5.08E+00	4.91E+00	4.58E+00	3.59E+00	1.20E+00	2.38E-01	1.95E-03	1.18E-10
Avg	0.00E+00	1.19E+00	1.19E+00	1.14E+00	1.07E+00	8.53E-01	2.83E-01	3.59E-02	1.46E-04	4.54E-12
Std	0.00E+00	4.13E-01	4.13E-01	4.17E-01	4.07E-01	3.45E-01	1.91E-01	4.51E-02	3.12E-04	1.21E-11
Ni-63										
Min	0.00E+00	2.12E-04	2.12E-04	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	1.34E-01	1.34E-01	1.28E-01	1.17E-01	8.13E-02	6.01E-02	3.48E-02	5.58E-03	9.16E-06
Avg	0.00E+00	3.72E-03	3.72E-03	3.59E-03	3.38E-03	2.81E-03	1.18E-03	3.11E-04	2.10E-05	1.54E-08
Std	0.00E+00	5.91E-03	5.91E-03	5.75E-03	5.42E-03	4.44E-03	2.24E-03	1.01E-03	1.32E-04	1.87E-07
Sr-90										
Min	0.00E+00	4.48E-02	4.48E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.03E+01	3.86E+01	3.86E+01	3.18E+01	2.15E+01	5.42E+00	5.77E-01	1.29E-01	9.81E-04	8.78E-12
Avg	5.87E-01	1.30E+00	1.30E+00	8.73E-01	4.17E-01	4.68E-02	2.30E-02	1.59E-02	2.94E-05	1.28E-14
Std	5.11E+00	2.33E+00	2.33E+00	1.67E+00	9.36E-01	1.78E-01	5.65E-02	1.92E-02	7.98E-05	2.79E-13
∑ALL										
Min	0.00E+00	3.93E+00	3.93E+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	5.42E+01	5.42E+01	4.48E+01	3.09E+01	9.40E+00	1.35E+00	3.14E-01	6.52E-03	9.16E-06
Avg	0.00E+00	9.27E+00	9.27E+00	7.45E+00	5.12E+00	2.01E+00	3.20E-01	5.21E-02	1.96E-04	1.54E-08
Std	0.00E+00	3.65E+00	3.65E+00	2.97E+00	2.05E+00	8.12E-01	2.08E-01	5.01E-02	3.90E-04	1.87E-07

∑ALL is total dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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Probabilistic Risk Summary

Nuclide	RISK(j,t)							
(j)	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	1.30E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.12E-05	5.36E-05	4.12E-05	1.64E-05	2.93E-07	1.14E-10	3.95E-22	0.00E+00
Avg	2.40E-05	2.09E-05	1.58E-05	5.90E-06	7.20E-08	1.54E-11	2.85E-23	0.00E+00
Std	9.18E-06	8.14E-06	6.32E-06	2.52E-06	5.34E-08	2.02E-11	6.05E-23	0.00E+00
Cs-134								
Min	8.05E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.89E-05	1.34E-05	6.69E-06	5.91E-07	1.87E-11	3.62E-20	0.00E+00	1.03E-38
Avg	6.52E-06	4.61E-06	2.31E-06	2.07E-07	4.95E-12	5.25E-21	0.00E+00	4.28E-42
Std	2.31E-06	1.68E-06	8.76E-07	8.35E-08	3.44E-12	6.67E-21	0.00E+00	0.00E+00
Cs-137								
Min	3.31E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.15E-05	6.90E-05	6.42E-05	4.96E-05	1.85E-05	3.81E-06	3.16E-08	1.91E-15
Avg	1.71E-05	1.65E-05	1.55E-05	1.21E-05	3.92E-06	5.23E-07	2.33E-09	7.29E-17
Std	6.83E-06	6.70E-06	6.42E-06	5.50E-06	3.12E-06	7.12E-07	5.00E-09	1.94E-16
Ni-63								
Min	6.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.78E-06	3.75E-06	3.68E-06	3.45E-06	2.61E-06	1.51E-06	2.42E-07	3.98E-10
Avg	1.26E-07	1.23E-07	1.16E-07	9.53E-08	4.16E-08	1.20E-08	8.85E-10	6.65E-13
Std	1.97E-07	1.91E-07	1.81E-07	1.52E-07	8.85E-08	4.26E-08	5.69E-09	8.10E-12
Sr-90								
Min	3.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.35E-04	1.11E-04	7.47E-05	1.88E-05	5.18E-06	1.45E-06	1.12E-08	9.88E-17
Avg	2.70E-06	1.90E-06	9.93E-07	2.18E-07	4.96E-07	1.72E-07	2.95E-10	1.34E-19
Std	5.77E-06	4.43E-06	2.70E-06	6.45E-07	6.93E-07	2.06E-07	8.32E-10	3.04E-18
∑ALL								
Min	2.92E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.31E-04	1.96E-04	1.43E-04	5.85E-05	2.03E-05	4.36E-06	2.57E-07	3.98E-10
Avg	5.05E-05	4.40E-05	3.46E-05	1.86E-05	4.53E-06	7.07E-07	3.51E-09	6.65E-13
Std	1.92E-05	1.70E-05	1.38E-05	8.03E-06	3.29E-06	7.66E-07	8.83E-09	8.10E-12

∑ALL is total risk summed for all nuclides.

Probabilistic results summary : RESRAD Default

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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+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
Co-60								
Min	1.82E+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+01	8.80E+00	6.76E+00	2.69E+00	4.81E-02	1.87E-05	6.49E-17	0.00E+00
Avg	4.08E+00	3.52E+00	2.65E+00	1.00E+00	1.25E-02	2.60E-06	4.58E-18	0.00E+00
Std	1.45E+00	1.31E+00	1.04E+00	4.16E-01	8.54E-03	3.28E-06	9.74E-18	0.00E+00
Cs-134								
Min	1.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.56E+00	3.98E+00	2.03E+00	1.92E-01	6.74E-06	1.36E-14	0.00E+00	0.00E+00
Avg	2.28E+00	1.60E+00	8.02E-01	7.24E-02	1.77E-06	1.86E-15	0.00E+00	0.00E+00
Std	8.07E-01	5.96E-01	3.12E-01	3.00E-02	1.20E-06	2.33E-15	0.00E+00	0.00E+00
Cs-137								
Min	4.36E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.34E+00	2.28E+00	2.18E+00	1.84E+00	8.95E-01	2.18E-01	1.89E-03	1.14E-10
Avg	9.58E-01	9.22E-01	8.63E-01	6.95E-01	2.36E-01	2.99E-02	1.19E-04	3.73E-12
Std	3.39E-01	3.43E-01	3.36E-01	2.88E-01	1.59E-01	3.74E-02	2.56E-04	1.01E-11
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	2.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.64E-02	1.39E-02	9.85E-03	2.98E-03	2.23E-05	1.69E-09	2.83E-23	0.00E+00
Avg	6.11E-03	4.11E-03	1.97E-03	2.21E-04	1.98E-07	3.71E-12	1.68E-26	0.00E+00
Std	2.20E-03	1.75E-03	1.19E-03	2.92E-04	1.13E-06	4.93E-11	6.83E-25	0.00E+00
∑ALL								
Min	3.31E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.80E+01	1.51E+01	1.10E+01	4.73E+00	9.43E-01	2.18E-01	1.89E-03	1.14E-10
Avg	7.33E+00	6.05E+00	4.32E+00	1.77E+00	2.48E-01	2.99E-02	1.19E-04	3.73E-12
Std	2.60E+00	2.25E+00	1.69E+00	7.35E-01	1.68E-01	3.74E-02	2.56E-04	1.01E-11

∑ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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	4.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.51E-05	1.05E-05	7.69E-06	2.59E-06	4.03E-08	1.48E-11	4.79E-23	0.00E+00
Avg	1.53E-06	1.31E-06	9.76E-07	3.59E-07	4.15E-09	8.72E-13	1.69E-24	0.00E+00
Std	1.19E-06	1.02E-06	7.79E-07	2.99E-07	4.77E-09	1.57E-12	4.43E-24	0.00E+00
Cs-134								
Min	9.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.90E-06	1.63E-06	7.95E-07	6.38E-08	1.91E-12	3.53E-21	0.00E+00	0.00E+00
Avg	2.92E-07	2.03E-07	1.01E-07	8.84E-09	1.97E-13	2.09E-22	0.00E+00	0.00E+00
Std	2.28E-07	1.58E-07	8.05E-08	7.35E-09	2.27E-13	3.76E-22	0.00E+00	0.00E+00
Cs-137								
Min	7.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.31E-06	1.79E-06	1.63E-06	1.17E-06	4.84E-07	1.08E-07	8.53E-10	3.77E-17
Avg	2.34E-07	2.23E-07	2.07E-07	1.62E-07	5.00E-08	6.39E-09	2.85E-11	8.82E-19
Std	1.83E-07	1.74E-07	1.65E-07	1.35E-07	5.74E-08	1.15E-08	7.52E-11	2.85E-18
Ni-63								
Min	1.44E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	4.57E-07	3.59E-07	3.34E-07	2.67E-07	1.59E-07	7.41E-08	1.00E-08	2.28E-11
Avg	4.64E-08	4.48E-08	4.24E-08	3.59E-08	1.57E-08	4.11E-09	2.54E-10	1.71E-13
Std	3.63E-08	3.49E-08	3.39E-08	2.99E-08	1.84E-08	7.87E-09	8.23E-10	9.97E-13
Sr-90								
Min	2.35E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	7.88E-05	4.03E-05	2.06E-05	3.97E-06	2.04E-08	1.73E-12	6.07E-26	0.00E+00
Avg	8.04E-06	5.34E-06	2.52E-06	2.67E-07	1.78E-10	2.80E-15	2.59E-29	0.00E+00
Std	6.31E-06	4.34E-06	2.40E-06	4.29E-07	1.00E-09	4.37E-14	0.00E+00	0.00E+00
∑ALL								
Min	3.00E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	9.95E-05	5.46E-05	2.93E-05	6.74E-06	6.83E-07	1.82E-07	1.07E-08	2.28E-11
Avg	1.01E-05	7.12E-06	3.85E-06	8.33E-07	7.00E-08	1.05E-08	2.83E-10	1.71E-13
Std	7.94E-06	5.68E-06	3.33E-06	7.81E-07	8.06E-08	1.92E-08	8.88E-10	9.97E-13

∑ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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
∑ALL								
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

∑ALL is total pathway dose summed for all nuclides.

Probabilistic results summary : RESRAD Default

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j)	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	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.09E+00	9.52E-01	7.20E-01	2.71E-01	3.70E-03	1.19E-06	3.57E-18	0.00E+00
Avg	4.19E-02	3.58E-02	2.66E-02	9.57E-03	1.07E-04	2.23E-08	4.56E-20	0.00E+00
Std	6.81E-02	5.89E-02	4.42E-02	1.61E-02	2.19E-04	6.43E-08	1.78E-19	0.00E+00
Cs-134								
Min	3.88E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.13E+00	1.50E+00	7.47E-01	6.47E-02	1.36E-06	1.44E-15	0.00E+00	0.00E+00
Avg	5.48E-02	3.81E-02	1.87E-02	1.60E-03	3.40E-08	3.55E-17	0.00E+00	0.00E+00
Std	9.08E-02	6.37E-02	3.16E-02	2.74E-03	6.86E-08	9.57E-17	0.00E+00	0.00E+00
Cs-137								
Min	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.69E+00	1.63E+00	1.52E+00	1.17E+00	3.40E-01	4.36E-02	2.75E-04	1.07E-11
Avg	4.35E-02	4.14E-02	3.80E-02	2.90E-02	8.53E-03	1.07E-03	4.97E-06	1.45E-13
Std	7.20E-02	6.91E-02	6.40E-02	4.96E-02	1.72E-02	2.90E-03	1.82E-05	6.21E-13
Ni-63								
Min	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.44E-02	1.38E-02	1.27E-02	1.08E-02	8.16E-03	4.73E-03	7.57E-04	1.24E-06
Avg	5.99E-04	5.78E-04	5.44E-04	4.50E-04	1.91E-04	5.08E-05	3.41E-06	2.26E-09
Std	9.66E-04	9.41E-04	8.96E-04	7.57E-04	4.13E-04	1.79E-04	2.11E-05	2.73E-08
Sr-90								
Min	4.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.01E+01	2.47E+01	1.67E+01	4.22E+00	1.01E-02	1.79E-07	2.73E-21	0.00E+00
Avg	8.77E-01	5.88E-01	2.82E-01	3.19E-02	2.83E-05	2.88E-10	1.41E-24	0.00E+00
Std	1.65E+00	1.19E+00	6.77E-01	1.33E-01	3.11E-04	5.11E-09	5.21E-23	0.00E+00
∑ALL								
Min	2.96E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.04E+01	2.50E+01	1.69E+01	4.30E+00	3.42E-01	4.38E-02	7.82E-04	1.24E-06
Avg	1.02E+00	7.04E-01	3.66E-01	7.25E-02	8.85E-03	1.13E-03	8.38E-06	2.26E-09
Std	1.71E+00	1.24E+00	7.11E-01	1.52E-01	1.74E-02	2.97E-03	3.20E-05	2.73E-08

∑ALL 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 EXCAVATION SEN.RAD

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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	5.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.40E+00	2.04E+00	1.46E+00	4.80E-01	8.47E-03	3.21E-06	1.02E-17	0.00E+00
Avg	5.69E-02	4.88E-02	3.64E-02	1.33E-02	1.54E-04	3.31E-08	6.74E-20	0.00E+00
Std	1.06E-01	9.19E-02	6.90E-02	2.53E-02	3.53E-04	1.09E-07	3.13E-19	0.00E+00
Cs-134								
Min	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.43E+00	1.01E+00	5.03E-01	4.62E-02	1.53E-06	2.78E-15	0.00E+00	0.00E+00
Avg	1.14E-01	7.96E-02	3.94E-02	3.42E-03	7.50E-08	7.97E-17	0.00E+00	0.00E+00
Std	9.24E-02	6.55E-02	3.28E-02	2.94E-03	8.81E-08	1.46E-16	0.00E+00	0.00E+00
Cs-137								
Min	9.13E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.14E+00	1.10E+00	1.02E+00	8.37E-01	3.85E-01	8.44E-02	5.16E-04	1.26E-11
Avg	9.05E-02	8.64E-02	7.98E-02	6.18E-02	1.88E-02	2.41E-03	1.10E-05	3.28E-13
Std	7.34E-02	7.11E-02	6.66E-02	5.33E-02	2.21E-02	4.41E-03	2.85E-05	9.75E-13
Ni-63								
Min	1.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	8.04E-03	7.97E-03	7.82E-03	7.33E-03	5.55E-03	3.22E-03	5.15E-04	8.45E-07
Avg	1.59E-04	1.53E-04	1.45E-04	1.21E-04	5.30E-05	1.41E-05	9.23E-07	7.26E-10
Std	2.63E-04	2.58E-04	2.48E-04	2.18E-04	1.36E-04	6.72E-05	9.80E-06	1.57E-08
Sr-90								
Min	7.66E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	4.97E+00	3.60E+00	1.88E+00	4.21E-01	1.21E-03	3.71E-08	4.11E-22	0.00E+00
Avg	1.63E-01	1.09E-01	5.19E-02	5.72E-03	4.70E-06	5.80E-11	2.69E-25	0.00E+00
Std	2.64E-01	1.86E-01	1.00E-01	1.78E-02	4.19E-05	9.97E-10	8.56E-24	0.00E+00
∑ALL								
Min	5.00E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	5.28E+00	3.87E+00	2.08E+00	8.88E-01	3.85E-01	8.46E-02	5.60E-04	8.45E-07
Avg	4.25E-01	3.24E-01	2.08E-01	8.44E-02	1.90E-02	2.43E-03	1.19E-05	7.27E-10
Std	3.59E-01	2.73E-01	1.73E-01	6.85E-02	2.22E-02	4.42E-03	3.16E-05	1.57E-08

∑ALL 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 EXCAVATION SEN.RAD

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j)	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	5.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.52E-01	3.08E-01	2.36E-01	9.34E-02	1.64E-03	6.11E-07	2.05E-18	0.00E+00
Avg	1.73E-02	1.48E-02	1.10E-02	4.00E-03	4.53E-05	9.50E-09	1.95E-20	0.00E+00
Std	2.77E-02	2.40E-02	1.81E-02	6.69E-03	9.41E-05	2.91E-08	8.69E-20	0.00E+00
Cs-134								
Min	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.73E+00	1.22E+00	6.02E-01	5.25E-02	1.65E-06	3.13E-15	0.00E+00	0.00E+00
Avg	1.24E-01	8.67E-02	4.28E-02	3.69E-03	7.95E-08	8.27E-17	0.00E+00	0.00E+00
Std	1.40E-01	9.88E-02	4.91E-02	4.28E-03	1.13E-07	1.74E-16	0.00E+00	0.00E+00
Cs-137								
Min	8.14E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.37E+00	1.32E+00	1.22E+00	9.51E-01	4.13E-01	9.51E-02	6.85E-04	2.17E-11
Avg	9.86E-02	9.41E-02	8.68E-02	6.69E-02	1.99E-02	2.50E-03	1.13E-05	3.39E-13
Std	1.11E-01	1.07E-01	9.97E-02	7.75E-02	2.83E-02	5.28E-03	3.45E-05	1.19E-12
Ni-63								
Min	9.86E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.28E-01	1.23E-01	1.12E-01	7.78E-02	4.64E-02	2.69E-02	4.31E-03	7.07E-06
Avg	2.96E-03	2.86E-03	2.69E-03	2.23E-03	9.37E-04	2.46E-04	1.66E-05	1.20E-08
Std	5.14E-03	4.99E-03	4.69E-03	3.79E-03	1.83E-03	8.02E-04	1.04E-04	1.46E-07
Sr-90								
Min	6.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.05E+01	6.83E+00	3.38E+00	7.80E-01	2.33E-03	3.92E-08	1.18E-21	0.00E+00
Avg	2.55E-01	1.71E-01	8.10E-02	8.84E-03	6.87E-06	7.29E-11	5.41E-25	0.00E+00
Std	5.01E-01	3.50E-01	1.84E-01	3.02E-02	6.48E-05	1.14E-09	2.20E-23	0.00E+00
∑ALL								
Min	4.61E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	1.14E+01	7.58E+00	3.70E+00	1.03E+00	4.15E-01	9.61E-02	4.33E-03	7.07E-06
Avg	4.98E-01	3.69E-01	2.24E-01	8.56E-02	2.09E-02	2.75E-03	2.79E-05	1.20E-08
Std	6.04E-01	4.42E-01	2.60E-01	9.29E-02	2.89E-02	5.60E-03	1.19E-04	1.46E-07

∑ALL 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 EXCAVATION SEN.RAD

Probabilistic Dose vs Pathway(i): Soil Ingestion

Nuclide	DOSE(i,j,t), mrem/yr							
(j)	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	4.14E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.57E-04	3.12E-04	2.40E-04	9.54E-05	1.72E-06	6.74E-10	2.32E-21	0.00E+00
Avg	2.38E-04	2.04E-04	1.53E-04	5.62E-05	6.48E-07	1.35E-10	2.61E-22	0.00E+00
Std	9.10E-05	8.26E-05	6.56E-05	2.70E-05	5.36E-07	1.94E-10	5.66E-22	0.00E+00
Cs-134								
Min	1.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	8.81E-04	6.29E-04	3.21E-04	3.05E-05	1.08E-09	2.20E-18	0.00E+00	0.00E+00
Avg	5.88E-04	4.11E-04	2.04E-04	1.79E-05	3.98E-10	4.18E-19	0.00E+00	0.00E+00
Std	2.25E-04	1.66E-04	8.75E-05	8.57E-06	3.29E-10	5.99E-19	0.00E+00	0.00E+00
Cs-137								
Min	7.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	6.99E-04	6.83E-04	6.51E-04	5.53E-04	2.70E-04	6.66E-05	5.64E-07	3.42E-14
Avg	4.66E-04	4.46E-04	4.13E-04	3.23E-04	9.95E-05	1.26E-05	5.60E-08	1.72E-15
Std	1.79E-04	1.80E-04	1.78E-04	1.55E-04	8.24E-05	1.81E-05	1.23E-07	4.65E-15
Ni-63								
Min	9.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	8.13E-06	8.06E-06	7.92E-06	7.47E-06	5.76E-06	3.48E-06	6.43E-07	1.97E-09
Avg	5.41E-06	5.23E-06	4.96E-06	4.19E-06	1.83E-06	4.76E-07	2.90E-08	1.92E-11
Std	2.07E-06	2.12E-06	2.13E-06	2.02E-06	1.55E-06	7.33E-07	8.00E-08	9.97E-11
Sr-90								
Min	2.30E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	2.01E-03	1.73E-03	1.29E-03	4.53E-04	3.10E-06	2.17E-10	7.59E-24	0.00E+00
Avg	1.19E-03	7.95E-04	3.76E-04	4.00E-05	2.84E-08	4.67E-13	3.60E-27	0.00E+00
Std	4.63E-04	3.59E-04	2.34E-04	5.31E-05	1.61E-07	6.41E-12	0.00E+00	0.00E+00
∑ALL								
Min	4.58E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Max	3.95E-03	3.36E-03	2.51E-03	1.13E-03	2.79E-04	6.97E-05	1.20E-06	1.97E-09
Avg	2.49E-03	1.86E-03	1.15E-03	4.41E-04	1.02E-04	1.31E-05	8.50E-08	1.92E-11
Std	9.55E-04	7.70E-04	5.22E-04	2.18E-04	8.45E-05	1.88E-05	1.95E-07	9.97E-11

∑ALL 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 EXCAVATION SEN.RAD

Probabilistic Dose vs Pathway(i): Water Ingestion

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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	2.38E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-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	0.00E+00	4.07E-01	8.85E-02	6.85E-04	6.52E-12
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-02	1.16E-02	2.15E-05	8.84E-15
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-02	1.39E-02	5.84E-05	1.93E-13
∑ALL								
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	4.07E-01	8.85E-02	6.85E-04	2.38E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E-02	1.16E-02	2.15E-05	1.34E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-02	1.39E-02	5.84E-05	1.25E-09

∑ALL 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 EXCAVATION SEN.RAD

Probabilistic Dose vs Pathway(i): Fish Ingestion

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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
∑ALL								
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

∑ALL 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 EXCAVATION SEN.RAD

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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
∑ALL								
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

∑ALL 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 EXCAVATION SEN.RAD

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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	4.52E-09
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-11
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.55E-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	0.00E+00	6.28E-02	1.63E-02	7.63E-05	7.97E-13
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03	1.26E-03	2.25E-06	1.18E-15
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-03	1.87E-03	6.70E-06	2.59E-14
∑ALL								
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	6.28E-02	1.63E-02	7.63E-05	4.52E-09
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-03	1.26E-03	2.25E-06	1.40E-11
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.06E-03	1.87E-03	6.70E-06	1.55E-10

∑ALL 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 EXCAVATION SEN.RAD

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

Nuclide	DOSE(i,j,t), mrem/yr							
(j) 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	5.81E-09
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-11
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-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	0.00E+00	5.62E-02	2.05E-02	6.79E-05	9.43E-13
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-03	1.38E-03	2.55E-06	1.50E-15
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-03	1.91E-03	7.38E-06	3.32E-14
∑ALL								
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	5.62E-02	2.05E-02	6.79E-05	5.81E-09
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-03	1.38E-03	2.55E-06	1.04E-11
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.21E-03	1.91E-03	7.38E-06	1.41E-10

∑ALL 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	DOSE(i,j,t), mrem/yr							
(j) 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	8.54E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.24E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-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	0.00E+00	9.59E-02	2.46E-02	1.66E-04	1.30E-12
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	1.66E-03	3.06E-06	1.32E-15
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-03	2.49E-03	9.88E-06	3.16E-14
∑ALL								
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	9.59E-02	2.46E-02	1.66E-04	8.54E-08
Avg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	1.66E-03	3.06E-06	2.24E-10
Std	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.90E-03	2.49E-03	9.88E-06	2.67E-09

∑ALL 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 EXCAVATION SEN.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+01	4.05E+01	1.00E+02	3.00E+02	1.00E+03
0.025	4.96E+00	3.77E+00	2.33E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.050	5.30E+00	4.23E+00	2.87E+00	1.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.075	5.57E+00	4.48E+00	3.06E+00	1.19E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.100	5.83E+00	4.67E+00	3.22E+00	1.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.125	6.03E+00	4.88E+00	3.36E+00	1.32E+00	2.46E-04	5.31E-12	0.00E+00	0.00E+00
0.150	6.20E+00	5.02E+00	3.47E+00	1.37E+00	4.83E-02	5.02E-09	0.00E+00	0.00E+00
0.175	6.36E+00	5.15E+00	3.57E+00	1.41E+00	8.65E-02	7.15E-07	0.00E+00	0.00E+00
0.200	6.52E+00	5.27E+00	3.66E+00	1.46E+00	1.25E-01	3.47E-05	0.00E+00	0.00E+00
0.225	6.69E+00	5.42E+00	3.75E+00	1.50E+00	1.53E-01	7.87E-04	0.00E+00	0.00E+00
0.250	6.82E+00	5.56E+00	3.86E+00	1.53E+00	1.78E-01	4.84E-03	0.00E+00	0.00E+00
0.275	6.98E+00	5.67E+00	3.94E+00	1.58E+00	2.00E-01	1.13E-02	0.00E+00	0.00E+00
0.300	7.12E+00	5.80E+00	4.03E+00	1.61E+00	2.19E-01	1.47E-02	0.00E+00	0.00E+00
0.325	7.26E+00	5.92E+00	4.11E+00	1.64E+00	2.35E-01	1.79E-02	0.00E+00	0.00E+00
0.350	7.42E+00	6.02E+00	4.19E+00	1.68E+00	2.53E-01	2.07E-02	0.00E+00	0.00E+00
0.375	7.58E+00	6.15E+00	4.27E+00	1.71E+00	2.67E-01	2.37E-02	0.00E+00	0.00E+00
0.400	7.73E+00	6.28E+00	4.36E+00	1.75E+00	2.83E-01	2.64E-02	0.00E+00	0.00E+00
0.425	7.89E+00	6.40E+00	4.45E+00	1.78E+00	2.96E-01	2.93E-02	0.00E+00	0.00E+00
0.450	8.06E+00	6.54E+00	4.55E+00	1.81E+00	3.07E-01	3.19E-02	0.00E+00	0.00E+00
0.475	8.23E+00	6.71E+00	4.65E+00	1.86E+00	3.17E-01	3.54E-02	0.00E+00	0.00E+00
0.500	8.42E+00	6.85E+00	4.74E+00	1.91E+00	3.29E-01	3.96E-02	0.00E+00	0.00E+00
0.525	8.63E+00	7.01E+00	4.86E+00	1.95E+00	3.37E-01	4.38E-02	0.00E+00	0.00E+00
0.550	8.79E+00	7.15E+00	4.98E+00	1.98E+00	3.47E-01	4.79E-02	0.00E+00	0.00E+00
0.575	8.98E+00	7.31E+00	5.08E+00	2.03E+00	3.59E-01	5.23E-02	0.00E+00	0.00E+00
0.600	9.23E+00	7.47E+00	5.19E+00	2.08E+00	3.70E-01	5.67E-02	2.17E-21	0.00E+00
0.625	9.45E+00	7.67E+00	5.32E+00	2.12E+00	3.82E-01	6.10E-02	4.44E-15	0.00E+00
0.650	9.71E+00	7.83E+00	5.46E+00	2.17E+00	3.92E-01	6.56E-02	1.34E-09	0.00E+00
0.675	9.92E+00	8.08E+00	5.62E+00	2.23E+00	4.02E-01	7.08E-02	5.05E-05	0.00E+00
0.700	1.02E+01	8.29E+00	5.77E+00	2.29E+00	4.17E-01	7.54E-02	1.28E-04	0.00E+00
0.725	1.05E+01	8.52E+00	5.89E+00	2.35E+00	4.31E-01	7.90E-02	1.68E-04	0.00E+00
0.750	1.08E+01	8.77E+00	6.07E+00	2.42E+00	4.43E-01	8.48E-02	2.11E-04	0.00E+00
0.775	1.12E+01	9.04E+00	6.26E+00	2.50E+00	4.59E-01	8.95E-02	2.78E-04	0.00E+00
0.800	1.15E+01	9.40E+00	6.52E+00	2.57E+00	4.78E-01	9.56E-02	3.85E-04	7.80E-12
0.825	1.20E+01	9.71E+00	6.75E+00	2.67E+00	4.98E-01	1.01E-01	4.87E-04	8.47E-11
0.850	1.24E+01	1.01E+01	7.01E+00	2.78E+00	5.20E-01	1.06E-01	5.85E-04	1.32E-09
0.875	1.30E+01	1.06E+01	7.34E+00	2.90E+00	5.47E-01	1.14E-01	6.72E-04	3.97E-09
0.900	1.38E+01	1.11E+01	7.66E+00	3.05E+00	5.78E-01	1.23E-01	7.60E-04	8.76E-09
0.925	1.46E+01	1.18E+01	8.12E+00	3.22E+00	6.22E-01	1.35E-01	8.59E-04	1.95E-08
0.950	1.58E+01	1.27E+01	8.82E+00	3.47E+00	6.67E-01	1.48E-01	9.90E-04	4.88E-08
0.975	1.77E+01	1.44E+01	9.83E+00	3.87E+00	7.49E-01	1.70E-01	1.22E-03	1.24E-07
1.000	5.42E+01	4.48E+01	3.09E+01	9.40E+00	1.35E+00	3.14E-01	6.52E-03	9.16E-06

Probabilistic results summary : RESRAD Default

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

Summary of dose at graphical times, reptition 1

Dose statistics at graphical times, mrem/yr

Time Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	3.93E+00	4.27E+01	9.22E+00	8.44E+00	1.35E+01	1.55E+01	1.76E+01	2.19E+01
1.00E+00	0.00E+00	3.32E+01	7.42E+00	6.89E+00	1.10E+01	1.27E+01	1.43E+01	1.68E+01
1.30E+00	0.00E+00	3.08E+01	6.98E+00	6.46E+00	1.04E+01	1.20E+01	1.36E+01	1.58E+01
1.70E+00	0.00E+00	2.79E+01	6.46E+00	5.98E+00	9.66E+00	1.11E+01	1.26E+01	1.42E+01
2.22E+00	0.00E+00	2.45E+01	5.87E+00	5.43E+00	8.79E+00	1.02E+01	1.14E+01	1.28E+01
2.89E+00	0.00E+00	2.08E+01	5.20E+00	4.82E+00	7.83E+00	9.15E+00	1.00E+01	1.13E+01
3.00E+00	0.00E+00	2.03E+01	5.11E+00	4.73E+00	7.67E+00	9.00E+00	9.83E+00	1.11E+01
3.78E+00	0.00E+00	1.68E+01	4.50E+00	4.18E+00	6.77E+00	7.94E+00	8.62E+00	9.83E+00
4.92E+00	0.00E+00	1.28E+01	3.77E+00	3.51E+00	5.68E+00	6.69E+00	7.23E+00	8.15E+00
6.42E+00	0.00E+00	9.20E+00	3.06E+00	2.85E+00	4.60E+00	5.44E+00	5.87E+00	6.51E+00
8.38E+00	0.00E+00	6.50E+00	2.41E+00	2.26E+00	3.62E+00	4.30E+00	4.64E+00	5.15E+00
1.00E+01	0.00E+00	5.45E+00	2.01E+00	1.90E+00	3.04E+00	3.55E+00	3.90E+00	4.30E+00
1.09E+01	0.00E+00	5.02E+00	1.83E+00	1.74E+00	2.77E+00	3.23E+00	3.55E+00	3.92E+00
1.43E+01	0.00E+00	3.88E+00	1.35E+00	1.28E+00	2.04E+00	2.39E+00	2.63E+00	2.91E+00
1.86E+01	0.00E+00	2.95E+00	9.68E-01	9.21E-01	1.49E+00	1.73E+00	1.91E+00	2.16E+00
2.42E+01	0.00E+00	2.23E+00	6.76E-01	6.53E-01	1.06E+00	1.23E+00	1.34E+00	1.60E+00
3.16E+01	0.00E+00	1.67E+00	4.60E-01	4.59E-01	7.73E-01	8.85E-01	9.78E-01	1.18E+00
4.05E+01	0.00E+00	1.25E+00	3.21E-01	3.29E-01	5.77E-01	6.71E-01	7.71E-01	8.97E-01
4.12E+01	0.00E+00	1.22E+00	3.13E-01	3.22E-01	5.71E-01	6.58E-01	7.51E-01	8.77E-01
5.38E+01	0.00E+00	8.48E-01	2.08E-01	2.12E-01	4.11E-01	4.82E-01	5.36E-01	6.35E-01
7.02E+01	0.00E+00	5.56E-01	1.28E-01	1.23E-01	2.69E-01	3.17E-01	3.69E-01	4.16E-01
9.15E+01	0.00E+00	3.29E-01	6.78E-02	5.47E-02	1.52E-01	1.82E-01	2.16E-01	2.51E-01
1.00E+02	0.00E+00	2.67E-01	5.21E-02	3.81E-02	1.23E-01	1.48E-01	1.75E-01	2.00E-01
1.19E+02	0.00E+00	1.67E-01	2.86E-02	1.95E-02	7.37E-02	8.76E-02	1.06E-01	1.25E-01
1.56E+02	0.00E+00	6.86E-02	9.51E-03	5.22E-03	2.79E-02	3.54E-02	4.18E-02	5.07E-02
2.03E+02	0.00E+00	2.17E-02	2.43E-03	1.87E-08	8.34E-03	1.10E-02	1.30E-02	1.58E-02
2.65E+02	0.00E+00	4.68E-03	4.70E-04	0.00E+00	1.79E-03	2.31E-03	2.85E-03	3.74E-03
3.00E+02	0.00E+00	2.44E-03	1.94E-04	0.00E+00	7.72E-04	9.92E-04	1.22E-03	1.63E-03
3.46E+02	0.00E+00	1.16E-03	6.45E-05	0.00E+00	2.61E-04	3.44E-04	4.38E-04	5.83E-04
4.51E+02	0.00E+00	2.54E-04	6.97E-06	0.00E+00	2.77E-05	4.23E-05	5.94E-05	9.14E-05
5.88E+02	0.00E+00	4.65E-05	8.63E-07	0.00E+00	2.20E-06	5.54E-06	8.41E-06	1.59E-05
7.67E+02	0.00E+00	6.32E-06	1.13E-07	0.00E+00	1.57E-07	6.93E-07	1.25E-06	2.58E-06
1.00E+03	0.00E+00	7.19E-07	1.05E-08	0.00E+00	1.13E-08	5.22E-08	1.24E-07	2.73E-07

Probabilistic results summary : RESRAD Default

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

Summary of dose at graphical times, reptition 2

Dose statistics at graphical times, mrem/yr

Time Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	4.04E+00	5.42E+01	9.32E+00	8.40E+00	1.39E+01	1.59E+01	1.76E+01	2.23E+01
1.00E+00	0.00E+00	4.48E+01	7.48E+00	6.83E+00	1.12E+01	1.27E+01	1.45E+01	1.65E+01
1.30E+00	0.00E+00	4.23E+01	7.03E+00	6.48E+00	1.05E+01	1.19E+01	1.36E+01	1.53E+01
1.70E+00	0.00E+00	3.93E+01	6.50E+00	6.01E+00	9.65E+00	1.11E+01	1.26E+01	1.41E+01
2.22E+00	0.00E+00	3.57E+01	5.89E+00	5.46E+00	8.77E+00	1.01E+01	1.14E+01	1.27E+01
2.89E+00	0.00E+00	3.15E+01	5.22E+00	4.86E+00	7.77E+00	9.00E+00	1.01E+01	1.13E+01
3.00E+00	0.00E+00	3.09E+01	5.13E+00	4.75E+00	7.64E+00	8.84E+00	9.96E+00	1.11E+01
3.78E+00	0.00E+00	2.69E+01	4.51E+00	4.18E+00	6.78E+00	7.71E+00	8.86E+00	9.75E+00
4.92E+00	0.00E+00	2.19E+01	3.77E+00	3.54E+00	5.65E+00	6.51E+00	7.31E+00	8.00E+00
6.42E+00	0.00E+00	1.69E+01	3.06E+00	2.87E+00	4.62E+00	5.29E+00	5.88E+00	6.62E+00
8.38E+00	0.00E+00	1.22E+01	2.41E+00	2.27E+00	3.65E+00	4.18E+00	4.57E+00	5.25E+00
1.00E+01	0.00E+00	9.40E+00	2.01E+00	1.91E+00	3.05E+00	3.53E+00	3.84E+00	4.44E+00
1.09E+01	0.00E+00	8.15E+00	1.83E+00	1.74E+00	2.79E+00	3.22E+00	3.49E+00	4.06E+00
1.43E+01	0.00E+00	5.04E+00	1.35E+00	1.28E+00	2.07E+00	2.37E+00	2.58E+00	3.03E+00
1.86E+01	0.00E+00	3.05E+00	9.66E-01	9.13E-01	1.48E+00	1.72E+00	1.91E+00	2.21E+00
2.42E+01	0.00E+00	2.32E+00	6.75E-01	6.44E-01	1.07E+00	1.24E+00	1.40E+00	1.62E+00
3.16E+01	0.00E+00	1.70E+00	4.59E-01	4.51E-01	7.80E-01	9.03E-01	1.02E+00	1.18E+00
4.05E+01	0.00E+00	1.22E+00	3.20E-01	3.30E-01	5.81E-01	6.73E-01	7.50E-01	8.77E-01
4.12E+01	0.00E+00	1.18E+00	3.12E-01	3.22E-01	5.74E-01	6.62E-01	7.50E-01	8.75E-01
5.38E+01	0.00E+00	8.06E-01	2.12E-01	2.16E-01	4.11E-01	4.82E-01	5.61E-01	6.22E-01
7.02E+01	0.00E+00	5.33E-01	1.30E-01	1.23E-01	2.75E-01	3.17E-01	3.63E-01	4.15E-01
9.15E+01	0.00E+00	3.13E-01	6.80E-02	5.72E-02	1.51E-01	1.81E-01	2.09E-01	2.46E-01
1.00E+02	0.00E+00	2.35E-01	5.21E-02	4.08E-02	1.22E-01	1.46E-01	1.72E-01	2.03E-01
1.19E+02	0.00E+00	1.46E-01	2.84E-02	2.00E-02	7.05E-02	8.78E-02	1.08E-01	1.25E-01
1.56E+02	0.00E+00	7.19E-02	9.19E-03	4.56E-03	2.64E-02	3.43E-02	4.44E-02	5.10E-02
2.03E+02	0.00E+00	2.39E-02	2.33E-03	1.69E-10	8.02E-03	1.04E-02	1.38E-02	1.59E-02
2.65E+02	0.00E+00	5.57E-03	4.63E-04	0.00E+00	1.73E-03	2.24E-03	2.78E-03	3.57E-03
3.00E+02	0.00E+00	2.45E-03	1.91E-04	0.00E+00	7.46E-04	9.74E-04	1.25E-03	1.57E-03
3.46E+02	0.00E+00	8.52E-04	6.36E-05	0.00E+00	2.56E-04	3.50E-04	4.39E-04	5.93E-04
4.51E+02	0.00E+00	1.92E-04	6.82E-06	0.00E+00	2.43E-05	3.90E-05	5.37E-05	9.09E-05
5.88E+02	0.00E+00	4.45E-05	8.26E-07	0.00E+00	1.69E-06	4.83E-06	7.99E-06	1.80E-05
7.67E+02	0.00E+00	7.93E-06	1.12E-07	0.00E+00	1.18E-07	5.55E-07	1.26E-06	3.18E-06
1.00E+03	0.00E+00	8.62E-07	1.09E-08	0.00E+00	7.89E-09	4.33E-08	1.21E-07	3.25E-07

Probabilistic results summary : RESRAD Default

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Summary of dose at graphical times, reptition 3

Dose statistics at graphical times, mrem/yr

Time Years	Minimum	Maximum	Mean	Median	90%	95%	97.5%	99%
0.00E+00	4.02E+00	3.75E+01	9.27E+00	8.43E+00	1.39E+01	1.59E+01	1.82E+01	2.13E+01
1.00E+00	0.00E+00	2.83E+01	7.46E+00	6.84E+00	1.12E+01	1.27E+01	1.46E+01	1.67E+01
1.30E+00	0.00E+00	2.66E+01	7.01E+00	6.45E+00	1.05E+01	1.19E+01	1.36E+01	1.56E+01
1.70E+00	0.00E+00	2.46E+01	6.48E+00	5.99E+00	9.77E+00	1.09E+01	1.25E+01	1.44E+01
2.22E+00	0.00E+00	2.22E+01	5.88E+00	5.44E+00	8.86E+00	9.84E+00	1.11E+01	1.30E+01
2.89E+00	0.00E+00	1.95E+01	5.22E+00	4.84E+00	7.83E+00	8.70E+00	9.89E+00	1.17E+01
3.00E+00	0.00E+00	1.91E+01	5.12E+00	4.75E+00	7.68E+00	8.54E+00	9.73E+00	1.15E+01
3.78E+00	0.00E+00	1.65E+01	4.50E+00	4.19E+00	6.71E+00	7.54E+00	8.59E+00	9.80E+00
4.92E+00	0.00E+00	1.34E+01	3.77E+00	3.52E+00	5.63E+00	6.34E+00	7.26E+00	8.26E+00
6.42E+00	0.00E+00	1.03E+01	3.06E+00	2.88E+00	4.62E+00	5.15E+00	5.90E+00	6.57E+00
8.38E+00	0.00E+00	7.50E+00	2.40E+00	2.27E+00	3.67E+00	4.05E+00	4.59E+00	5.23E+00
1.00E+01	0.00E+00	5.88E+00	2.01E+00	1.91E+00	3.05E+00	3.37E+00	3.85E+00	4.40E+00
1.09E+01	0.00E+00	5.16E+00	1.83E+00	1.75E+00	2.79E+00	3.06E+00	3.52E+00	3.94E+00
1.43E+01	0.00E+00	3.57E+00	1.35E+00	1.28E+00	2.07E+00	2.25E+00	2.61E+00	2.97E+00
1.86E+01	0.00E+00	2.66E+00	9.62E-01	9.22E-01	1.49E+00	1.64E+00	1.86E+00	2.16E+00
2.42E+01	0.00E+00	1.96E+00	6.71E-01	6.43E-01	1.06E+00	1.19E+00	1.33E+00	1.56E+00
3.16E+01	0.00E+00	1.45E+00	4.56E-01	4.47E-01	7.62E-01	8.67E-01	9.75E-01	1.14E+00
4.05E+01	0.00E+00	1.35E+00	3.19E-01	3.26E-01	5.76E-01	6.47E-01	7.30E-01	8.50E-01
4.12E+01	0.00E+00	1.34E+00	3.10E-01	3.18E-01	5.63E-01	6.36E-01	7.17E-01	8.35E-01
5.38E+01	0.00E+00	9.84E-01	2.09E-01	2.11E-01	4.19E-01	4.58E-01	5.05E-01	5.81E-01
7.02E+01	0.00E+00	6.54E-01	1.29E-01	1.21E-01	2.74E-01	3.04E-01	3.35E-01	3.98E-01
9.15E+01	0.00E+00	3.87E-01	6.80E-02	5.50E-02	1.57E-01	1.83E-01	2.03E-01	2.33E-01
1.00E+02	0.00E+00	3.14E-01	5.22E-02	3.94E-02	1.24E-01	1.49E-01	1.65E-01	1.88E-01
1.19E+02	0.00E+00	1.55E-01	2.92E-02	1.98E-02	7.35E-02	8.98E-02	1.03E-01	1.18E-01
1.56E+02	0.00E+00	6.57E-02	9.53E-03	4.94E-03	2.79E-02	3.56E-02	4.23E-02	4.92E-02
2.03E+02	0.00E+00	2.28E-02	2.47E-03	1.12E-07	8.30E-03	1.08E-02	1.34E-02	1.61E-02
2.65E+02	0.00E+00	9.85E-03	4.93E-04	0.00E+00	1.81E-03	2.36E-03	2.92E-03	4.05E-03
3.00E+02	0.00E+00	6.52E-03	2.04E-04	0.00E+00	7.61E-04	1.03E-03	1.24E-03	1.76E-03
3.46E+02	0.00E+00	4.00E-03	7.01E-05	0.00E+00	2.64E-04	3.65E-04	4.58E-04	6.31E-04
4.51E+02	0.00E+00	1.43E-03	9.28E-06	0.00E+00	2.46E-05	4.47E-05	6.37E-05	1.07E-04
5.88E+02	0.00E+00	4.01E-04	1.51E-06	0.00E+00	1.77E-06	4.97E-06	1.12E-05	2.22E-05
7.67E+02	0.00E+00	7.76E-05	2.38E-07	0.00E+00	1.32E-07	6.12E-07	1.76E-06	3.75E-06
1.00E+03	0.00E+00	9.16E-06	2.49E-08	0.00E+00	8.71E-09	4.45E-08	1.78E-07	3.83E-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	Peak mean dose
	Years	mrem/yr
1	0.000E+00	9.225E+00
2	0.000E+00	9.315E+00
3	0.000E+00	9.271E+00

Title : RESRAD Default
Input File : BP EXCAVATION SEN.RAD

Coefficients for peak All Pathways Dose

Coefficient =	PCC		SRC		PRCC		SRRC	
Repetition =	1		1		1		1	
Description of Probabilistic Variable	Sig	Coeff	Sig	Coeff	Sig	Coeff	Sig	Coeff
Density of cover material	43	-0.01	43	0.00	44	-0.01	44	0.00
Contaminated zone erosion rate	5	-0.21	5	-0.10	6	-0.12	6	-0.04
Contaminated zone total porosity	35	0.01	35	0.01	43	0.01	43	0.00
Contaminated zone hydraulic conductivity	13	0.06	13	0.03	31	0.02	31	0.01
Contaminated zone b parameter	40	0.01	40	0.00	46	0.01	46	0.00
Evapotranspiration coefficient	7	0.12	7	0.05	9	0.09	9	0.03
Wind Speed	28	-0.02	28	-0.01	8	0.09	8	0.03
Runoff coefficient	20	0.03	20	0.01	25	0.03	25	0.01
Density of saturated zone	23	-0.03	23	-0.01	38	-0.02	38	-0.01
Saturated zone total porosity	16	-0.04	16	-0.02	12	-0.07	12	-0.02
Saturated zone effective porosity	30	0.02	30	0.01	15	0.06	15	0.02
Saturated zone hydraulic conductivity	31	-0.02	31	-0.01	22	0.04	22	0.01
Saturated zone hydraulic gradient	38	0.01	38	0.01	11	-0.07	11	-0.02
Well pump intake depth	39	-0.01	39	-0.01	24	-0.03	24	-0.01
Mass loading for inhalation	27	-0.02	27	-0.01	48	-0.01	48	0.00
Depth of soil mixing layer	12	-0.06	12	-0.03	14	-0.06	14	-0.02
Depth of roots	3	-0.56	3	-0.30	3	-0.59	3	-0.26
Weathering removal constant of all vegetation	34	-0.01	34	-0.01	26	-0.03	26	-0.01
Wet weight crop yield of fruit, grain and non-leafy vegetables	14	0.06	14	0.03	42	0.01	42	0.00
Wet foliar interception fraction of leafy vegetables	51	0.00	51	0.00	45	0.01	45	0.00
Indoor dust filtration factor	25	0.02	25	0.01	35	0.02	35	0.01
External gamma shielding factor	1	0.85	1	0.72	1	0.92	1	0.83
Cover erosion rate	47	0.00	47	0.00	51	0.00	51	0.00
Total Porosity of Unsaturated zone 1	17	-0.04	17	-0.02	49	0.00	49	0.00
Effective Porosity of Unsaturated zone 1	53	0.00	53	0.00	20	0.05	20	0.02
Hydraulic Conductivity of Unsaturated zone 1	36	0.01	36	0.01	41	0.01	41	0.00
b Parameter of Unsaturated zone 1	33	0.01	33	0.01	32	0.02	32	0.01
Plant transfer factor for Co	9	0.08	9	0.04	10	0.08	10	0.03
Meat transfer factor for Co	21	0.03	21	0.01	30	0.03	30	0.01
Milk transfer factor for Co	49	0.00	49	0.00	17	-0.06	17	-0.02
Plant transfer factor for Cs	6	0.20	6	0.09	4	0.24	4	0.09
Meat transfer factor for Cs	10	0.07	10	0.03	19	0.05	19	0.02
Milk transfer factor for Cs	8	0.10	8	0.05	7	0.11	7	0.04
Plant transfer factor for Ni	52	0.00	52	0.00	47	-0.01	47	0.00
Meat transfer factor for Ni	48	0.00	48	0.00	52	0.00	52	0.00
Milk transfer factor for Ni	46	0.00	46	0.00	53	0.00	53	0.00
Plant transfer factor for Sr	2	0.68	2	0.42	2	0.63	2	0.28
Meat transfer factor for Sr	50	0.00	50	0.00	21	0.04	21	0.01
Milk transfer factor for Sr	41	0.01	41	0.00	28	0.03	28	0.01
Density of contaminated zone	4	0.22	4	0.10	5	0.23	5	0.08
Density of Unsaturated zone 1	24	0.03	24	0.01	13	-0.06	13	-0.02
Kd of Cs-134 in Contaminated Zone	29	0.02	29	0.01	34	-0.02	34	-0.01
Kd of Cs-134 in Saturated Zone	45	-0.01	45	0.00	37	-0.02	37	-0.01
Kd of Cs-137 in Contaminated Zone	26	0.02	26	0.01	36	0.02	36	0.01
Kd of Cs-137 in Saturated Zone	11	-0.07	11	-0.03	50	0.00	50	0.00
Kd of Ni-63 in Contaminated Zone	32	0.01	32	0.01	33	0.02	33	0.01
Kd of Ni-63 in Saturated Zone	15	-0.04	15	-0.02	16	-0.06	16	-0.02
Kd of Sr-90 in Contaminated Zone	37	0.01	37	0.01	23	0.03	23	0.01
Kd of Sr-90 in Saturated Zone	19	-0.03	19	-0.02	29	0.03	29	0.01
Kd of Sr-90 in Unsaturated Zone 1	44	0.01	44	0.00	27	-0.03	27	-0.01
Kd of Ni-63 in Unsaturated Zone 1	42	0.01	42	0.00	39	-0.02	39	-0.01
Kd of Cs-137 in Unsaturated Zone 1	22	0.03	22	0.01	18	0.05	18	0.02

Kd of Cs-134 in Unsaturated Zone 1	18	0.03	18	0.02	40	0.01	40	0.01

R-SQUARE	0.80	0.80	0.88	0.88

-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 EXCAVATION 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	41	-0.01	41	0.00	29	-0.02	29	-0.01
Contaminated zone erosion rate	4	-0.20	4	-0.08	7	-0.13	7	-0.05
Contaminated zone total porosity	25	-0.03	25	-0.01	39	-0.02	39	-0.01
Contaminated zone hydraulic conductivity	21	-0.04	21	-0.02	24	-0.03	24	-0.01
Contaminated zone b parameter	36	-0.02	36	-0.01	14	-0.05	14	-0.02
Evapotranspiration coefficient	9	0.08	9	0.03	9	0.09	9	0.04
Wind Speed	12	0.07	12	0.03	33	-0.02	33	-0.01
Runoff coefficient	20	0.04	20	0.02	43	0.01	43	0.01
Density of saturated zone	34	0.02	34	0.01	15	0.05	15	0.02
Saturated zone total porosity	26	-0.03	26	-0.01	16	-0.05	16	-0.02
Saturated zone effective porosity	24	0.03	24	0.01	40	0.02	40	0.01
Saturated zone hydraulic conductivity	15	-0.05	15	-0.02	41	-0.02	41	-0.01
Saturated zone hydraulic gradient	43	-0.01	43	0.00	17	-0.04	17	-0.02
Well pump intake depth	53	0.00	53	0.00	44	-0.01	44	-0.01
Mass loading for inhalation	39	0.01	39	0.00	27	-0.03	27	-0.01
Depth of soil mixing layer	46	-0.01	46	0.00	8	-0.10	8	-0.04
Depth of roots	3	-0.59	3	-0.30	3	-0.63	3	-0.31
Weathering removal constant of all vegetation	19	-0.04	19	-0.02	13	-0.05	13	-0.02
Wet weight crop yield of fruit, grain and non-leafy vegetables	50	0.00	50	0.00	45	-0.01	45	0.00
Wet foliar interception fraction of leafy vegetables	40	-0.01	40	0.00	23	-0.04	23	-0.01
Indoor dust filtration factor	11	-0.07	11	-0.03	35	0.02	35	0.01
External gamma shielding factor	1	0.86	1	0.68	1	0.90	1	0.80
Cover erosion rate	37	-0.02	37	-0.01	34	-0.02	34	-0.01
Total Porosity of Unsaturated zone 1	27	0.03	27	0.01	48	-0.01	48	0.00
Effective Porosity of Unsaturated zone 1	23	0.04	23	0.02	25	0.03	25	0.01
Hydraulic Conductivity of Unsaturated zone 1	49	0.00	49	0.00	49	-0.01	49	0.00
b Parameter of Unsaturated zone 1	38	0.02	38	0.01	50	0.01	50	0.00
Plant transfer factor for Co	35	-0.02	35	-0.01	18	0.04	18	0.02
Meat transfer factor for Co	17	0.04	16	0.02	12	0.06	12	0.02
Milk transfer factor for Co	22	-0.04	22	-0.02	31	0.02	31	0.01
Plant transfer factor for Cs	5	0.18	5	0.08	4	0.26	4	0.10
Meat transfer factor for Cs	10	0.07	10	0.03	42	-0.01	42	-0.01
Milk transfer factor for Cs	7	0.14	7	0.06	6	0.14	6	0.06
Plant transfer factor for Ni	28	-0.02	28	-0.01	21	0.04	21	0.02
Meat transfer factor for Ni	42	0.01	42	0.00	22	0.04	22	0.01
Milk transfer factor for Ni	45	0.01	44	0.00	26	0.03	26	0.01
Plant transfer factor for Sr	2	0.74	2	0.46	2	0.63	2	0.31
Meat transfer factor for Sr	14	0.05	14	0.02	19	0.04	19	0.02
Milk transfer factor for Sr	8	0.11	8	0.05	10	0.08	10	0.03
Density of contaminated zone	6	0.16	6	0.06	5	0.22	5	0.09
Density of Unsaturated zone 1	13	-0.06	13	-0.02	46	0.01	46	0.00
Kd of Cs-134 in Contaminated Zone	32	0.02	32	0.01	20	-0.04	20	-0.02
Kd of Cs-134 in Saturated Zone	44	-0.01	45	0.00	38	0.02	38	0.01
Kd of Cs-137 in Contaminated Zone	52	0.00	52	0.00	52	0.01	52	0.00
Kd of Cs-137 in Saturated Zone	51	0.00	51	0.00	11	0.08	11	0.03
Kd of Ni-63 in Contaminated Zone	29	-0.02	29	-0.01	53	0.00	53	0.00
Kd of Ni-63 in Saturated Zone	30	0.02	30	0.01	28	-0.03	28	-0.01
Kd of Sr-90 in Contaminated Zone	33	0.02	33	0.01	30	-0.02	30	-0.01
Kd of Sr-90 in Saturated Zone	47	-0.01	47	0.00	32	0.02	32	0.01
Kd of Sr-90 in Unsaturated Zone 1	18	0.04	18	0.02	37	-0.02	37	-0.01
Kd of Ni-63 in Unsaturated Zone 1	16	-0.05	17	-0.02	36	-0.02	36	-0.01
Kd of Cs-137 in Unsaturated Zone 1	31	-0.02	31	-0.01	47	-0.01	47	0.00

Kd of Cs-134 in Unsaturated Zone 1	48	-0.01	48	0.00	51	0.01	51	0.00

R-SQUARE	0.83	0.83	0.85	0.85

-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 EXCAVATION SEN.RAD

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
Density of cover material	27	0.03	27	0.01	39	0.02	39	0.01
Contaminated zone erosion rate	6	-0.19	6	-0.07	19	-0.05	19	-0.02
Contaminated zone total porosity	40	-0.01	40	0.00	24	-0.04	24	-0.01
Contaminated zone hydraulic conductivity	46	0.00	46	0.00	21	0.04	21	0.02
Contaminated zone b parameter	10	0.07	10	0.03	31	0.03	31	0.01
Evapotranspiration coefficient	34	0.02	34	0.01	22	0.04	22	0.01
Wind Speed	29	0.03	29	0.01	18	0.05	18	0.02
Runoff coefficient	13	0.06	13	0.02	10	0.08	10	0.03
Density of saturated zone	50	0.00	50	0.00	50	0.01	50	0.00
Saturated zone total porosity	32	0.02	32	0.01	37	-0.02	37	-0.01
Saturated zone effective porosity	52	0.00	52	0.00	43	-0.02	43	-0.01
Saturated zone hydraulic conductivity	49	0.00	49	0.00	38	0.02	38	0.01
Saturated zone hydraulic gradient	51	0.00	51	0.00	41	0.02	41	0.01
Well pump intake depth	42	-0.01	42	0.00	44	0.02	44	0.01
Mass loading for inhalation	43	0.01	43	0.00	35	0.03	35	0.01
Depth of soil mixing layer	9	-0.11	9	-0.04	5	-0.18	5	-0.07
Depth of roots	3	-0.62	3	-0.29	3	-0.63	3	-0.29
Weathering removal constant for all vegetation	23	-0.04	23	-0.02	51	0.01	51	0.00
Wet weight crop yield of fruit, grain and non-leafy vegetables	45	0.01	45	0.00	45	0.01	45	0.00
Wet foliar interception fraction of leafy vegetables	41	0.01	41	0.00	46	-0.01	46	0.00
Indoor dust filtration factor	35	0.02	35	0.01	14	0.06	14	0.02
External gamma shielding factor	1	0.89	1	0.72	1	0.92	1	0.82
Cover erosion rate	38	-0.01	38	-0.01	42	-0.02	42	-0.01
Total Porosity of Unsaturated zone 1	25	-0.04	25	-0.01	17	-0.05	17	-0.02
Effective Porosity of Unsaturated zone 1	28	-0.03	28	-0.01	30	-0.03	30	-0.01
Hydraulic Conductivity of Unsaturated zone 1	39	0.01	39	0.00	49	0.01	49	0.00
b Parameter of Unsaturated zone 1	16	-0.06	16	-0.02	47	-0.01	47	0.00
Plant transfer factor for Co	12	0.07	12	0.02	34	0.03	34	0.01
Meat transfer factor for Co	20	0.04	20	0.02	8	0.11	8	0.04
Milk transfer factor for Co	19	0.05	19	0.02	52	0.00	52	0.00
Plant transfer factor for Cs	5	0.22	5	0.08	6	0.16	6	0.06
Meat transfer factor for Cs	21	0.04	21	0.02	16	0.05	16	0.02
Milk transfer factor for Cs	7	0.11	7	0.04	9	0.10	9	0.04
Plant transfer factor for Ni	33	0.02	33	0.01	27	0.04	27	0.01
Meat transfer factor for Ni	30	0.03	30	0.01	29	0.03	29	0.01
Milk transfer factor for Ni	15	0.06	15	0.02	20	0.05	20	0.02
Plant transfer factor for Sr	2	0.78	2	0.46	2	0.63	2	0.29
Meat transfer factor for Sr	11	0.07	11	0.03	15	0.05	15	0.02
Milk transfer factor for Sr	8	0.11	8	0.04	7	0.12	7	0.04
Density of contaminated zone	4	0.25	4	0.09	4	0.22	4	0.08
Density of Unsaturated zone 1	24	-0.04	24	-0.01	40	-0.02	40	-0.01
Kd of Cs-134 in Contaminated Zone	44	-0.01	44	0.00	23	-0.04	23	-0.01
Kd of Cs-134 in Saturated Zone	47	0.00	47	0.00	33	0.03	33	0.01
Kd of Cs-137 in Contaminated Zone	18	-0.05	18	-0.02	32	-0.03	32	-0.01
Kd of Cs-137 in Saturated Zone	14	-0.06	14	-0.02	53	0.00	53	0.00
Kd of Ni-63 in Contaminated Zone	53	0.00	53	0.00	11	0.07	11	0.03
Kd of Ni-63 in Saturated Zone	26	-0.04	26	-0.01	26	-0.04	26	-0.01
Kd of Sr-90 in Contaminated Zone	22	0.04	22	0.02	28	0.03	28	0.01
Kd of Sr-90 in Saturated Zone	17	0.05	17	0.02	13	0.07	13	0.02
Kd of Sr-90 in Unsaturated Zone 1	48	0.00	48	0.00	12	0.07	12	0.02
Kd of Ni-63 in Unsaturated Zone 1	37	-0.01	37	-0.01	36	-0.02	36	-0.01
Kd of Cs-137 in Unsaturated Zone 1	31	-0.03	31	-0.01	48	-0.01	48	0.00

Kd of Cs-134 in Unsaturated Zone 1	36	-0.02	36	-0.01	25	-0.04	25	-0.01

R-SQUARE	0.87	0.87	0.87	0.87

-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.