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

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	5.960E-01	0.8026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	1.171E-02	0.0158	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	1.348E-01	0.1816	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	7.425E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

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

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.960E-01	0.8026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.171E-02	0.0158
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.348E-01	0.1816
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.425E-01	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	5.631E-01	0.8026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	1.107E-02	0.0158	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	1.274E-01	0.1816	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	7.016E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.631E-01	0.8026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.107E-02	0.0158
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.274E-01	0.1816
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.016E-01	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	5.028E-01	0.8026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	9.888E-03	0.0158	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	1.137E-01	0.1816	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	6.264E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.028E-01	0.8026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.888E-03	0.0158
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.137E-01	0.1816
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.264E-01	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	3.381E-01	0.8026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	6.666E-03	0.0158	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	7.648E-02	0.1815	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	4.213E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.381E-01	0.8026
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.666E-03	0.0158
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.648E-02	0.1815
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.213E-01	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	1.089E-01	0.8027	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	2.166E-03	0.0160	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	2.460E-02	0.1813	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	1.357E-01	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.089E-01	0.8027
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.166E-03	0.0160
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.460E-02	0.1813
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.357E-01	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	2.218E-03	0.8184	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	4.117E-05	0.0152	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	4.512E-04	0.1664	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	2.711E-03	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.218E-03	0.8184
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.117E-05	0.0152
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.512E-04	0.1664
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.711E-03	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	2.030E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	4.886E-10	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	7.433E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	2.030E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.030E-04	1.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.886E-10	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.433E-09	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.030E-04	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	1.803E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	5.687E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	2.284E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	1.803E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.803E-04	1.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.687E-15	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.284E-09	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.803E-04	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 9.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	1.366E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	7.234E-25	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	1.730E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	1.366E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 9.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.366E-04	1.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.234E-25	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.730E-09	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.366E-04	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	1.259E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-235	0.000E+00	0.0000	2.392E-27	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
U-238	0.000E+00	0.0000	1.595E-09	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Total	0.000E+00	0.0000	1.259E-04	1.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.259E-04	1.0000
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.392E-27	0.0000
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.595E-09	0.0000
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.259E-04	1.0000

*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Branch Fraction	t=	DSR(j,t) (mrem/yr)/(pCi/g) 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00		1.047E-01	9.897E-02	8.836E-02	5.941E-02	1.911E-02	3.503E-04	3.771E-09	4.017E-14	4.373E-24	1.396E-26
U-234	Th-230	1.000E+00		0.000E+00	2.264E-06	6.423E-06	1.777E-05	3.353E-05	3.956E-05	3.564E-05	3.167E-05	2.399E-05	2.212E-05
U-234	Ra-226	1.000E+00		0.000E+00	1.288E-11	1.087E-10	9.676E-10	4.817E-09	1.052E-08	9.955E-09	8.847E-09	6.700E-09	6.177E-09
U-234	Pb-210	1.000E+00		0.000E+00	2.127E-13	5.312E-12	1.502E-10	1.939E-09	8.202E-09	8.356E-09	7.426E-09	5.624E-09	5.185E-09
U-234	Po-210	1.000E+00		0.000E+00	4.608E-14	2.070E-12	7.846E-11	1.111E-09	4.834E-09	4.935E-09	4.386E-09	3.322E-09	3.063E-09
U-234	∑DSR(j)			1.047E-01	9.897E-02	8.836E-02	5.942E-02	1.914E-02	3.899E-04	3.567E-05	3.169E-05	2.400E-05	2.213E-05
U-235	U-235	1.000E+00		9.760E-02	9.222E-02	8.233E-02	5.536E-02	1.781E-02	3.265E-04	3.517E-09	3.749E-14	4.085E-24	1.305E-26
U-235	Pa-231	1.000E+00		0.000E+00	2.031E-05	5.438E-05	1.219E-04	1.176E-04	7.182E-06	2.316E-10	4.105E-15	8.019E-25	2.842E-27
U-235	Ac-227	1.000E+00		0.000E+00	1.633E-06	1.218E-05	7.161E-05	1.220E-04	9.433E-06	3.232E-10	5.798E-15	1.141E-24	4.049E-27
U-235	∑DSR(j)			9.760E-02	9.224E-02	8.240E-02	5.555E-02	1.805E-02	3.431E-04	4.071E-09	4.739E-14	6.028E-24	1.994E-26
U-238	U-238	1.000E+00		9.364E-02	8.847E-02	7.899E-02	5.311E-02	1.708E-02	3.132E-04	3.374E-09	3.596E-14	3.919E-24	1.252E-26
U-238	U-234	1.000E+00		0.000E+00	2.806E-07	7.515E-07	1.684E-06	1.625E-06	9.932E-08	3.208E-12	5.698E-17	1.117E-26	3.963E-29
U-238	Th-230	1.000E+00		0.000E+00	3.179E-12	2.654E-11	2.282E-10	1.040E-09	1.941E-09	1.784E-09	1.585E-09	1.200E-09	1.107E-09
U-238	Ra-226	1.000E+00		0.000E+00	1.210E-17	3.025E-16	8.594E-15	1.123E-13	4.860E-13	4.981E-13	4.427E-13	3.353E-13	3.091E-13
U-238	Pb-210	1.000E+00		0.000E+00	1.503E-19	1.117E-17	1.027E-15	3.664E-14	3.562E-13	4.181E-13	3.716E-13	2.814E-13	2.595E-13
U-238	Po-210	1.000E+00		0.000E+00	2.760E-20	3.924E-18	5.147E-16	2.070E-14	2.095E-13	2.469E-13	2.195E-13	1.662E-13	1.533E-13
U-238	∑DSR(j)			9.364E-02	8.847E-02	7.899E-02	5.311E-02	1.708E-02	3.133E-04	5.162E-09	1.586E-09	1.201E-09	1.107E-09

Branch Fraction is the cumulative factor for the j'th principal radionuclide daughter: CUMBRF(j) = BRF(1)*BRF(2)* ... BRF(j).
The DSR includes contributions from associated (half-life ≤ 30 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 30 mrem/yr

Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	2.864E+02	3.031E+02	3.395E+02	5.049E+02	1.567E+03	7.695E+04	8.410E+05	9.465E+05	1.250E+06	1.356E+06
U-235	3.074E+02	3.252E+02	3.641E+02	5.401E+02	1.662E+03	8.743E+04	*2.160E+06	*2.160E+06	*2.160E+06	*2.160E+06
U-238	3.204E+02	3.391E+02	3.798E+02	5.649E+02	1.756E+03	9.574E+04	*3.360E+05	*3.360E+05	*3.360E+05	*3.360E+05

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 0.000E+00 years

Nuclide (i)	Initial pCi/g	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
U-234	5.690E+00	0.000E+00	1.047E-01	2.864E+02	1.047E-01	2.864E+02
U-235	1.200E-01	0.000E+00	9.760E-02	3.074E+02	9.760E-02	3.074E+02
U-238	1.440E+00	0.000E+00	9.364E-02	3.204E+02	9.364E-02	3.204E+02

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

Nuclide (j)	Parent (i)	BRF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00	5.960E-01	5.631E-01	5.027E-01	3.380E-01	1.087E-01	1.993E-03	2.146E-08	2.286E-13	2.488E-23	7.944E-26
U-234	U-238	1.000E+00	0.000E+00	4.040E-07	1.082E-06	2.425E-06	2.340E-06	1.430E-07	4.620E-12	8.206E-17	1.609E-26	5.707E-29
U-234	∑DOSE(j):		5.960E-01	5.631E-01	5.027E-01	3.380E-01	1.087E-01	1.993E-03	2.146E-08	2.287E-13	2.490E-23	7.949E-26
Th-230	U-234	1.000E+00	0.000E+00	1.288E-05	3.655E-05	1.011E-04	1.908E-04	2.251E-04	2.028E-04	1.802E-04	1.365E-04	1.258E-04
Th-230	U-238	1.000E+00	0.000E+00	4.577E-12	3.822E-11	3.286E-10	1.498E-09	2.794E-09	2.568E-09	2.282E-09	1.728E-09	1.594E-09
Th-230	∑DOSE(j):		0.000E+00	1.288E-05	3.655E-05	1.011E-04	1.908E-04	2.251E-04	2.028E-04	1.802E-04	1.365E-04	1.258E-04
Ra-226	U-234	1.000E+00	0.000E+00	7.329E-11	6.184E-10	5.506E-09	2.741E-08	5.986E-08	5.665E-08	5.034E-08	3.812E-08	3.515E-08
Ra-226	U-238	1.000E+00	0.000E+00	1.742E-17	4.356E-16	1.237E-14	1.616E-13	6.998E-13	7.173E-13	6.375E-13	4.828E-13	4.451E-13
Ra-226	∑DOSE(j):		0.000E+00	7.329E-11	6.184E-10	5.506E-09	2.741E-08	5.986E-08	5.665E-08	5.034E-08	3.812E-08	3.515E-08
Pb-210	U-234	1.000E+00	0.000E+00	1.210E-12	3.022E-11	8.546E-10	1.103E-08	4.667E-08	4.755E-08	4.225E-08	3.200E-08	2.950E-08
Pb-210	U-238	1.000E+00	0.000E+00	2.164E-19	1.609E-17	1.478E-15	5.276E-14	5.129E-13	6.020E-13	5.351E-13	4.052E-13	3.736E-13
Pb-210	∑DOSE(j):		0.000E+00	1.210E-12	3.022E-11	8.546E-10	1.103E-08	4.667E-08	4.755E-08	4.225E-08	3.200E-08	2.950E-08
Po-210	U-234	1.000E+00	0.000E+00	2.622E-13	1.178E-11	4.464E-10	6.319E-09	2.751E-08	2.808E-08	2.496E-08	1.890E-08	1.743E-08
Po-210	U-238	1.000E+00	0.000E+00	3.974E-20	5.651E-18	7.412E-16	2.981E-14	3.017E-13	3.556E-13	3.160E-13	2.393E-13	2.207E-13
Po-210	∑DOSE(j):		0.000E+00	2.622E-13	1.178E-11	4.464E-10	6.319E-09	2.751E-08	2.808E-08	2.496E-08	1.890E-08	1.743E-08
U-235	U-235	1.000E+00	1.171E-02	1.107E-02	9.880E-03	6.643E-03	2.137E-03	3.918E-05	4.220E-10	4.498E-15	4.902E-25	1.566E-27
Pa-231	U-235	1.000E+00	0.000E+00	2.437E-06	6.526E-06	1.462E-05	1.411E-05	8.618E-07	2.779E-11	4.926E-16	9.623E-26	3.411E-28
Ac-227	U-235	1.000E+00	0.000E+00	1.960E-07	1.461E-06	8.594E-06	1.464E-05	1.132E-06	3.879E-11	6.957E-16	1.370E-25	4.859E-28
U-238	U-238	1.000E+00	1.348E-01	1.274E-01	1.137E-01	7.647E-02	2.460E-02	4.511E-04	4.858E-09	5.179E-14	5.644E-24	1.802E-26

BRF(i) is the branch fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	BRF(i)	S(j,t), pCi/g t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00	5.690E+00	5.376E+00	4.800E+00	3.227E+00	1.038E+00	1.959E-02	2.322E-07	2.753E-12	3.869E-22	1.332E-24
U-234	U-238	1.000E+00	0.000E+00	3.857E-06	1.033E-05	2.315E-05	2.234E-05	1.406E-06	5.001E-11	9.883E-16	2.501E-25	9.571E-28
U-234	∑S(j):		5.690E+00	5.376E+00	4.800E+00	3.227E+00	1.038E+00	1.959E-02	2.323E-07	2.754E-12	3.871E-22	1.333E-24
Th-230	U-234	1.000E+00	0.000E+00	4.979E-05	1.413E-04	3.908E-04	7.376E-04	8.958E-04	8.889E-04	8.789E-04	8.593E-04	8.545E-04
Th-230	U-238	1.000E+00	0.000E+00	1.769E-11	1.477E-10	1.270E-09	5.791E-09	1.112E-08	1.126E-08	1.113E-08	1.088E-08	1.082E-08
Th-230	∑S(j):		0.000E+00	4.979E-05	1.413E-04	3.908E-04	7.376E-04	8.959E-04	8.889E-04	8.789E-04	8.593E-04	8.545E-04
Ra-226	U-234	1.000E+00	0.000E+00	1.074E-08	9.061E-08	8.068E-07	4.016E-06	9.031E-06	9.411E-06	9.306E-06	9.098E-06	9.047E-06
Ra-226	U-238	1.000E+00	0.000E+00	2.553E-15	6.384E-14	1.813E-12	2.369E-11	1.056E-10	1.192E-10	1.178E-10	1.152E-10	1.146E-10
Ra-226	∑S(j):		0.000E+00	1.074E-08	9.061E-08	8.068E-07	4.016E-06	9.031E-06	9.411E-06	9.306E-06	9.098E-06	9.047E-06
Pb-210	U-234	1.000E+00	0.000E+00	1.105E-10	2.760E-09	7.804E-08	1.008E-06	4.388E-06	4.923E-06	4.868E-06	4.759E-06	4.732E-06
Pb-210	U-238	1.000E+00	0.000E+00	1.976E-17	1.469E-15	1.350E-13	4.818E-12	4.822E-11	6.233E-11	6.164E-11	6.027E-11	5.993E-11
Pb-210	∑S(j):		0.000E+00	1.105E-10	2.760E-09	7.804E-08	1.008E-06	4.388E-06	4.923E-06	4.868E-06	4.759E-06	4.732E-06
Po-210	U-234	1.000E+00	0.000E+00	3.515E-11	1.579E-09	5.985E-08	8.472E-07	3.796E-06	4.268E-06	4.221E-06	4.127E-06	4.103E-06
Po-210	U-238	1.000E+00	0.000E+00	5.328E-18	7.576E-16	9.936E-14	3.997E-12	4.164E-11	5.405E-11	5.345E-11	5.226E-11	5.197E-11
Po-210	∑S(j):		0.000E+00	3.515E-11	1.579E-09	5.985E-08	8.472E-07	3.796E-06	4.269E-06	4.221E-06	4.127E-06	4.104E-06
U-235	U-235	1.000E+00	1.200E-01	1.134E-01	1.012E-01	6.806E-02	2.189E-02	4.133E-04	4.902E-09	5.814E-14	8.180E-24	2.817E-26
Pa-231	U-235	1.000E+00	0.000E+00	2.399E-06	6.425E-06	1.440E-05	1.389E-05	8.735E-07	3.102E-11	6.119E-16	1.543E-25	5.898E-28
Ac-227	U-235	1.000E+00	0.000E+00	3.675E-08	2.740E-07	1.612E-06	2.746E-06	2.185E-07	8.247E-12	1.646E-16	4.183E-26	1.601E-28
U-238	U-238	1.000E+00	1.440E+00	1.361E+00	1.215E+00	8.167E-01	2.627E-01	4.959E-03	5.882E-08	6.977E-13	9.816E-23	3.381E-25

BRF(i) is the branch fraction of the parent nuclide.

SUB AREA "H" CONCRETE

RESRAD, Version 5.70

All Pathways

Table of Contents

Part I: Mixture Sums and Single Radionuclide Guidelines

Dose Conversion Factor (and Related) Parameter Summary
File: DOSFAC30.BIN

Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.720E+00	6.720E+00	DCF2(1)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(2)
B-1	Pb-210+D	1.380E-02	1.380E-02	DCF2(3)
B-1	Po-210	9.400E-03	9.400E-03	DCF2(4)
B-1	Ra-226+D	8.600E-03	8.600E-03	DCF2(5)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(6)
B-1	U-234	1.320E-01	1.320E-01	DCF2(7)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(8)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(9)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.480E-02	DCF3(1)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(2)
D-1	Pb-210+D	5.370E-03	5.370E-03	DCF3(3)
D-1	Po-210	1.900E-03	1.900E-03	DCF3(4)
D-1	Ra-226+D	1.330E-03	1.330E-03	DCF3(5)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(6)
D-1	U-234	2.830E-04	2.830E-04	DCF3(7)
D-1	U-235+D	2.670E-04	2.670E-04	DCF3(8)
D-1	U-238+D	2.690E-04	2.690E-04	DCF3(9)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(2,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(2,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(2,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(3,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(3,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(3,3)
D-34				
D-34	Po-210 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(4,1)
D-34	Po-210 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(4,2)
D-34	Po-210 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.400E-04	3.400E-04	RTF(4,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(5,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(5,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(5,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(6,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(6,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(6,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(7,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(7,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(7,3)
D-34				

Dose Conversion Factor (and Related) Parameter Summary (continued)
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Menu	Parameter	Current Value	Default	Parameter Name
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(8,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(8,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(8,3)
D-34				
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(9,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(9,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(9,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(2,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(2,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(3,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(3,2)
D-5				
D-5	Po-210 , fish	1.000E+02	1.000E+02	BIOFAC(4,1)
D-5	Po-210 , crustacea and mollusks	2.000E+04	2.000E+04	BIOFAC(4,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(5,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(5,2)
D-5				
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(6,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(6,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(7,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(7,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(8,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(8,2)
D-5				
D-5	U-238+D , fish	1.000E+01	1.000E+01	BIOFAC(9,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(9,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.110E+02	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.524E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.000E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	3.000E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	2.000E+01	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	5.000E+02	1.000E+03	---	T(8)
R011	Times for calculations (yr)	9.000E+02	0.000E+00	---	T(9)
R011	Times for calculations (yr)	1.000E+03	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): U-234	2.400E-01	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): U-235	5.100E-03	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): U-238	6.000E-02	0.000E+00	---	S1(9)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(9)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.800E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	6.700E-05	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	3.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone effective porosity	2.000E-01	2.000E-01	---	EPCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Humidity in air (g/cm**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	5.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	1.000E+00	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	7.600E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.630E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.000E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	2.000E-01	2.000E-01	---	EPSZ
R014	Saturated zone hydraulic conductivity (m/yr)	1.000E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	1.000E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.500E+02	2.500E+02	---	UW

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015	Number of unsaturated zone strata	1	1	---	NS
R015	Unsat. zone 1, thickness (m)	4.000E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.630E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	3.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	1.000E+01	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(7,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.671E-02	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.671E-02	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for U-238				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(9,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.671E-02	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.412E-01	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for daughter Pa-231				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	5.671E-02	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(3,1)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.839E-02	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for daughter Po-210				
R016	Contaminated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	1.000E+01	1.000E+01	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.805E-01	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for daughter Ra-226				
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.054E-02	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for daughter Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.739E-05	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R017	Inhalation rate (m**3/yr)	1.051E+04	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	2.000E-04	2.000E-04	---	MLINH
R017	Dilution length for airborne dust, inhalation (m)	3.000E+00	3.000E+00	---	LM
R017	Exposure duration	5.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	5.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	3.300E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.100E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	1 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.660E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.100E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	1.000E+02	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	5.400E+00	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	9.000E-01	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.825E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	7.300E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	5.000E-01	5.000E-01	---	FR9
R018	Contamination fraction of plant food	-1	-1	0.555E-01	FPLANT
R018	Contamination fraction of meat	-1	-1	0.555E-02	FMEAT
R018	Contamination fraction of milk	-1	-1	0.555E-02	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	5.500E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	1.000E+00	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average annual wind speed (m/sec)	not used	2.000E+00	---	WIND
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)

Summary of Pathway Selections

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

Contaminated Zone Dimensions

Area:	111.00 square meters
Thickness:	0.15 meters
Cover Depth:	0.00 meters

Initial Soil Concentrations, pCi/g

U-234	2.400E-01
U-235	5.100E-03
U-238	6.000E-02

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 30 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years):	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
TDOSE(t):	3.546E-02	3.351E-02	2.991E-02	2.012E-02	6.477E-03	1.297E-04	8.073E-03	9.131E-03	9.567E-03	1.332E-03
M(t):	1.182E-03	1.117E-03	9.971E-04	6.705E-04	2.159E-04	4.325E-06	2.691E-04	3.044E-04	3.189E-04	4.440E-05

Maximum TDOSE(t): 3.546E-02 mrem/yr at t = 0.000E+00 years

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

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	3.210E-05	0.0009	2.514E-02	0.7089	0.000E+00	0.0000	2.860E-04	0.0081	4.282E-06	0.0001	1.186E-05	0.0003	1.046E-04	0.0029
U-235	1.231E-03	0.0347	4.978E-04	0.0140	0.000E+00	0.0000	5.733E-06	0.0002	8.585E-08	0.0000	2.378E-07	0.0000	2.096E-06	0.0001
U-238	2.432E-03	0.0686	5.618E-03	0.1584	0.000E+00	0.0000	6.795E-05	0.0019	1.018E-06	0.0000	2.819E-06	0.0001	2.485E-05	0.0007
Total	3.695E-03	0.1042	3.125E-02	0.8814	0.000E+00	0.0000	3.596E-04	0.0101	5.385E-06	0.0002	1.492E-05	0.0004	1.315E-04	0.0037

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

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.558E-02	0.7213
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.737E-03	0.0490
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.147E-03	0.2297
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.546E-02	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	3.033E-05	0.0009	2.375E-02	0.7089	0.000E+00	0.0000	2.701E-04	0.0081	4.046E-06	0.0001	1.121E-05	0.0003	9.880E-05	0.0029
U-235	1.163E-03	0.0347	4.704E-04	0.0140	0.000E+00	0.0000	5.433E-06	0.0002	8.229E-08	0.0000	2.247E-07	0.0000	1.983E-06	0.0001
U-238	2.298E-03	0.0686	5.308E-03	0.1584	0.000E+00	0.0000	6.418E-05	0.0019	9.614E-07	0.0000	2.664E-06	0.0001	2.348E-05	0.0007
Total	3.491E-03	0.1042	2.953E-02	0.8814	0.000E+00	0.0000	3.397E-04	0.0101	5.089E-06	0.0002	1.410E-05	0.0004	1.243E-04	0.0037

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.417E-02	0.7213
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.642E-03	0.0490
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.697E-03	0.2297
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.351E-02	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	2.709E-05	0.0009	2.121E-02	0.7089	0.000E+00	0.0000	2.409E-04	0.0081	3.612E-06	0.0001	1.001E-05	0.0003	8.821E-05	0.0029
U-235	1.039E-03	0.0347	4.202E-04	0.0140	0.000E+00	0.0000	4.879E-06	0.0002	7.554E-08	0.0000	2.006E-07	0.0000	1.773E-06	0.0001
U-238	2.051E-03	0.0686	4.739E-03	0.1584	0.000E+00	0.0000	5.725E-05	0.0019	8.583E-07	0.0000	2.378E-06	0.0001	2.096E-05	0.0007
Total	3.117E-03	0.1042	2.637E-02	0.8814	0.000E+00	0.0000	3.030E-04	0.0101	4.546E-06	0.0002	1.258E-05	0.0004	1.109E-04	0.0037

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.158E-02	0.7213
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.466E-03	0.0490
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.872E-03	0.2297
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.991E-02	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	1.832E-05	0.0009	1.426E-02	0.7090	0.000E+00	0.0000	1.615E-04	0.0080	2.428E-06	0.0001	6.727E-06	0.0003	5.932E-05	0.0029
U-235	6.982E-04	0.0347	2.833E-04	0.0141	0.000E+00	0.0000	3.350E-06	0.0002	5.569E-08	0.0000	1.349E-07	0.0000	1.201E-06	0.0001
U-238	1.378E-03	0.0685	3.186E-03	0.1584	0.000E+00	0.0000	3.837E-05	0.0019	5.770E-07	0.0000	1.599E-06	0.0001	1.409E-05	0.0007
Total	2.095E-03	0.1041	1.773E-02	0.8815	0.000E+00	0.0000	2.032E-04	0.0101	3.061E-06	0.0002	8.460E-06	0.0004	7.461E-05	0.0037

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.451E-02	0.7213
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.862E-04	0.0490
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.619E-03	0.2296
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.012E-02	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	6.404E-06	0.0010	4.594E-03	0.7092	0.000E+00	0.0000	5.153E-05	0.0080	7.810E-07	0.0001	2.163E-06	0.0003	1.910E-05	0.0029
U-235	2.245E-04	0.0347	9.204E-05	0.0142	0.000E+00	0.0000	1.143E-06	0.0002	2.241E-08	0.0000	4.339E-08	0.0000	3.948E-07	0.0001
U-238	4.426E-04	0.0683	1.025E-03	0.1583	0.000E+00	0.0000	1.224E-05	0.0019	1.855E-07	0.0000	5.141E-07	0.0001	4.534E-06	0.0007
Total	6.735E-04	0.1040	5.711E-03	0.8817	0.000E+00	0.0000	6.491E-05	0.0100	9.890E-07	0.0002	2.720E-06	0.0004	2.403E-05	0.0037

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.674E-03	0.7216
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.181E-04	0.0491
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.485E-03	0.2293
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.477E-03	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	1.318E-06	0.0102	9.357E-05	0.7212	0.000E+00	0.0000	1.024E-06	0.0079	1.526E-08	0.0001	4.004E-08	0.0003	3.834E-07	0.0030
U-235	4.214E-06	0.0325	1.750E-06	0.0135	0.000E+00	0.0000	2.572E-08	0.0002	6.993E-10	0.0000	7.965E-10	0.0000	7.807E-09	0.0001
U-238	8.263E-06	0.0637	1.880E-05	0.1449	0.000E+00	0.0000	2.239E-07	0.0017	3.402E-09	0.0000	9.427E-09	0.0001	8.315E-08	0.0006
Total	1.379E-05	0.1063	1.141E-04	0.8796	0.000E+00	0.0000	1.274E-06	0.0098	1.936E-08	0.0001	5.026E-08	0.0004	4.743E-07	0.0037

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.635E-05	0.7426
U-235	8.132E-09	0.0001	6.827E-12	0.0000	0.000E+00	0.0000	1.795E-10	0.0000	1.179E-13	0.0000	6.770E-14	0.0000	6.007E-06	0.0463
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.738E-05	0.2111
Total	8.132E-09	0.0001	6.827E-12	0.0000	0.000E+00	0.0000	1.795E-10	0.0000	1.179E-13	0.0000	6.770E-14	0.0000	1.297E-04	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	1.203E-06	0.0001	8.561E-06	0.0011	0.000E+00	0.0000	7.793E-08	0.0000	8.966E-10	0.0000	3.766E-10	0.0000	3.060E-08	0.0000
U-235	4.901E-11	0.0000	2.076E-11	0.0000	0.000E+00	0.0000	4.247E-13	0.0000	1.636E-14	0.0000	8.610E-15	0.0000	1.016E-13	0.0000
U-238	1.096E-10	0.0000	3.097E-10	0.0000	0.000E+00	0.0000	3.401E-12	0.0000	4.802E-14	0.0000	1.063E-13	0.0000	1.279E-12	0.0000
Total	1.203E-06	0.0001	8.561E-06	0.0011	0.000E+00	0.0000	7.794E-08	0.0000	8.966E-10	0.0000	3.767E-10	0.0000	3.060E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	6.154E-03	0.7623	5.871E-07	0.0001	0.000E+00	0.0000	1.344E-04	0.0166	5.210E-07	0.0001	1.513E-06	0.0002	6.301E-03	0.7805
U-235	2.687E-04	0.0333	1.099E-07	0.0000	0.000E+00	0.0000	5.866E-06	0.0007	5.219E-08	0.0000	3.135E-08	0.0000	2.747E-04	0.0340
U-238	1.465E-03	0.1814	1.355E-07	0.0000	0.000E+00	0.0000	3.198E-05	0.0040	1.237E-07	0.0000	3.602E-07	0.0000	1.497E-03	0.1855
Total	7.888E-03	0.9770	8.324E-07	0.0001	0.000E+00	0.0000	1.722E-04	0.0213	6.969E-07	0.0001	1.905E-06	0.0002	8.073E-03	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	1.130E-06	0.0001	7.607E-06	0.0008	0.000E+00	0.0000	6.919E-08	0.0000	7.953E-10	0.0000	3.342E-10	0.0000	2.719E-08	0.0000
U-235	5.674E-16	0.0000	2.417E-16	0.0000	0.000E+00	0.0000	6.096E-18	0.0000	2.682E-19	0.0000	9.212E-20	0.0000	1.268E-18	0.0000
U-238	1.414E-11	0.0000	9.516E-11	0.0000	0.000E+00	0.0000	8.856E-13	0.0000	1.018E-14	0.0000	4.211E-15	0.0000	3.401E-13	0.0000
Total	1.130E-06	0.0001	7.607E-06	0.0008	0.000E+00	0.0000	6.919E-08	0.0000	7.953E-10	0.0000	3.342E-10	0.0000	2.719E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 5.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	6.904E-03	0.7561	1.539E-06	0.0002	0.000E+00	0.0000	1.507E-04	0.0165	6.352E-07	0.0001	1.690E-06	0.0002	7.067E-03	0.7740
U-235	3.920E-04	0.0429	1.846E-07	0.0000	0.000E+00	0.0000	8.558E-06	0.0009	8.669E-08	0.0000	3.542E-08	0.0000	4.009E-04	0.0439
U-238	1.626E-03	0.1781	1.507E-07	0.0000	0.000E+00	0.0000	3.551E-05	0.0039	1.374E-07	0.0000	4.000E-07	0.0000	1.663E-03	0.1821
Total	8.922E-03	0.9772	1.874E-06	0.0002	0.000E+00	0.0000	1.947E-04	0.0213	8.593E-07	0.0001	2.125E-06	0.0002	9.131E-03	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 9.000E+02 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	9.681E-07	0.0001	5.761E-06	0.0006	0.000E+00	0.0000	5.241E-08	0.0000	6.025E-10	0.0000	2.531E-10	0.0000	2.059E-08	0.0000
U-235	7.444E-26	0.0000	3.074E-26	0.0000	0.000E+00	0.0000	1.004E-27	0.0000	4.954E-29	0.0000	1.011E-29	0.0000	1.783E-28	0.0000
U-238	1.211E-11	0.0000	7.206E-11	0.0000	0.000E+00	0.0000	6.720E-13	0.0000	7.822E-15	0.0000	3.206E-15	0.0000	2.576E-13	0.0000
Total	9.681E-07	0.0001	5.761E-06	0.0006	0.000E+00	0.0000	5.241E-08	0.0000	6.025E-10	0.0000	2.531E-10	0.0000	2.059E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 9.000E+02 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	7.194E-03	0.7519	4.813E-06	0.0005	0.000E+00	0.0000	1.568E-04	0.0164	8.471E-07	0.0001	1.731E-06	0.0002	7.365E-03	0.7698
U-235	5.234E-04	0.0547	2.626E-07	0.0000	0.000E+00	0.0000	1.143E-05	0.0012	1.438E-07	0.0000	3.626E-08	0.0000	5.353E-04	0.0560
U-238	1.631E-03	0.1704	1.522E-07	0.0000	0.000E+00	0.0000	3.560E-05	0.0037	1.378E-07	0.0000	4.010E-07	0.0000	1.667E-03	0.1742
Total	9.348E-03	0.9771	5.228E-06	0.0005	0.000E+00	0.0000	2.038E-04	0.0213	1.129E-06	0.0001	2.169E-06	0.0002	9.567E-03	1.0000

*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	9.231E-07	0.0007	5.312E-06	0.0040	0.000E+00	0.0000	4.826E-08	0.0000	5.548E-10	0.0000	2.333E-10	0.0000	1.898E-08	0.0000
U-235	2.502E-28	0.0000	1.017E-28	0.0000	0.000E+00	0.0000	3.477E-30	0.0000	1.741E-31	0.0000	3.177E-32	0.0000	6.014E-31	0.0000
U-238	1.155E-11	0.0000	6.645E-11	0.0000	0.000E+00	0.0000	6.052E-13	0.0000	6.970E-15	0.0000	2.922E-15	0.0000	2.375E-13	0.0000
Total	9.232E-07	0.0007	5.312E-06	0.0040	0.000E+00	0.0000	4.826E-08	0.0000	5.548E-10	0.0000	2.333E-10	0.0000	1.898E-08	0.0000

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
U-234	1.104E-03	0.8290	5.312E-06	0.0040	0.000E+00	0.0000	2.378E-05	0.0178	3.939E-07	0.0003	2.241E-07	0.0002	1.140E-03	0.8560
U-235	3.400E-05	0.0255	1.115E-08	0.0000	0.000E+00	0.0000	7.427E-07	0.0006	1.476E-08	0.0000	3.280E-09	0.0000	3.477E-05	0.0261
U-238	1.536E-04	0.1153	1.584E-08	0.0000	0.000E+00	0.0000	3.353E-06	0.0025	1.307E-08	0.0000	3.775E-08	0.0000	1.570E-04	0.1179
Total	1.292E-03	0.9698	5.339E-06	0.0040	0.000E+00	0.0000	2.787E-05	0.0209	4.217E-07	0.0003	2.652E-07	0.0002	1.332E-03	1.0000

*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

Parent (i)	Product (j)	Branch Fraction	t=	DSR(j,t) (mrem/yr)/(pCi/g) 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00		1.066E-01	1.007E-01	8.990E-02	6.044E-02	1.944E-02	3.564E-04	2.621E-02	2.907E-02	2.907E-02	2.734E-03
U-234	Th-230	1.000E+00		0.000E+00	2.284E-06	6.478E-06	1.792E-05	3.382E-05	3.990E-05	3.596E-05	3.205E-05	2.447E-05	2.262E-05
U-234	Ra-226	1.000E+00		0.000E+00	6.191E-09	5.222E-08	4.646E-07	2.307E-06	5.116E-06	5.603E-06	3.043E-05	1.234E-04	1.530E-04
U-234	Pb-210	1.000E+00		0.000E+00	2.949E-12	6.084E-11	1.590E-09	1.994E-08	8.361E-08	1.493E-06	7.069E-05	3.290E-04	4.111E-04
U-234	Po-210	1.000E+00		0.000E+00	1.430E-13	5.329E-12	1.893E-10	2.629E-09	1.138E-08	4.961E-06	2.473E-04	1.139E-03	1.430E-03
U-234	∑DSR(j)			1.066E-01	1.007E-01	8.990E-02	6.046E-02	1.947E-02	4.015E-04	2.625E-02	2.945E-02	3.069E-02	4.751E-03
U-235	U-235	1.000E+00		3.406E-01	3.219E-01	2.873E-01	1.931E-01	6.210E-02	1.157E-03	2.475E-02	2.746E-02	2.750E-02	2.587E-03
U-235	Pa-231	1.000E+00		0.000E+00	2.562E-05	6.855E-05	1.535E-04	1.479E-04	9.038E-06	6.636E-03	1.194E-02	2.107E-02	2.194E-03
U-235	Ac-227	1.000E+00		0.000E+00	1.857E-06	1.382E-05	8.120E-05	1.383E-04	1.234E-05	2.249E-02	3.920E-02	5.640E-02	2.037E-03
U-235	∑DSR(j)			3.406E-01	3.219E-01	2.874E-01	1.934E-01	6.238E-02	1.178E-03	5.387E-02	7.860E-02	1.050E-01	6.817E-03
U-238	U-238	1.000E+00		1.358E-01	1.283E-01	1.145E-01	7.699E-02	2.475E-02	4.563E-04	2.493E-02	2.767E-02	2.770E-02	2.606E-03
U-238	U-234	1.000E+00		0.000E+00	2.856E-07	7.647E-07	1.714E-06	1.653E-06	1.010E-07	2.378E-05	4.288E-05	7.592E-05	7.913E-06
U-238	Th-230	1.000E+00		0.000E+00	3.208E-12	2.677E-11	2.301E-10	1.049E-09	1.957E-09	1.809E-09	1.709E-09	1.673E-09	1.660E-09
U-238	Ra-226	1.000E+00		0.000E+00	5.815E-15	1.454E-13	4.126E-12	5.377E-11	2.363E-10	3.038E-09	3.719E-08	1.595E-07	1.895E-07
U-238	Pb-210	1.000E+00		0.000E+00	1.540E-18	1.322E-16	1.099E-14	3.779E-13	3.632E-12	7.505E-09	9.965E-08	4.296E-07	5.106E-07
U-238	Po-210	1.000E+00		0.000E+00	5.751E-20	8.091E-18	1.251E-15	4.911E-14	4.933E-13	3.060E-08	3.534E-07	1.512E-06	1.797E-06
U-238	∑DSR(j)			1.358E-01	1.283E-01	1.145E-01	7.699E-02	2.475E-02	4.564E-04	2.496E-02	2.771E-02	2.778E-02	2.617E-03

Branch Fraction is the cumulative factor for the j'th principal radionuclide daughter: CUMBRF(j) = BRF(1)*BRF(2)* ... BRF(j).
The DSR includes contributions from associated (half-life ≤ 30 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 30 mrem/yr

Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	2.815E+02	2.979E+02	3.337E+02	4.962E+02	1.540E+03	7.473E+04	1.143E+03	1.019E+03	9.776E+02	6.315E+03
U-235	8.807E+01	9.320E+01	1.044E+02	1.551E+02	4.809E+02	2.547E+04	5.569E+02	3.817E+02	2.858E+02	4.401E+03
U-238	2.210E+02	2.339E+02	2.620E+02	3.897E+02	1.212E+03	6.573E+04	1.202E+03	1.083E+03	1.080E+03	1.147E+04

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 0.000E+00 years

Nuclide (i)	Initial pCi/g	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
U-234	2.400E-01	0.000E+00	1.066E-01	2.815E+02	1.066E-01	2.815E+02
U-235	5.100E-03	0.000E+00	3.406E-01	8.807E+01	3.406E-01	8.807E+01
U-238	6.000E-02	0.000E+00	1.358E-01	2.210E+02	1.358E-01	2.210E+02

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

Nuclide (j)	Parent (i)	BRF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00	2.558E-02	2.417E-02	2.158E-02	1.451E-02	4.665E-03	8.553E-05	6.290E-03	6.976E-03	6.977E-03	6.562E-04
U-234	U-238	1.000E+00	0.000E+00	1.714E-08	4.588E-08	1.028E-07	9.920E-08	6.063E-09	1.427E-06	2.573E-06	4.555E-06	4.748E-07
U-234	∑DOSE(j):		2.558E-02	2.417E-02	2.158E-02	1.451E-02	4.665E-03	8.553E-05	6.291E-03	6.978E-03	6.982E-03	6.566E-04
Th-230	U-234	1.000E+00	0.000E+00	5.481E-07	1.555E-06	4.300E-06	8.116E-06	9.575E-06	8.631E-06	7.691E-06	5.874E-06	5.429E-06
Th-230	U-238	1.000E+00	0.000E+00	1.925E-13	1.606E-12	1.381E-11	6.294E-11	1.174E-10	1.085E-10	1.026E-10	1.004E-10	9.959E-11
Th-230	∑DOSE(j):		0.000E+00	5.481E-07	1.555E-06	4.300E-06	8.116E-06	9.575E-06	8.631E-06	7.691E-06	5.874E-06	5.429E-06
Ra-226	U-234	1.000E+00	0.000E+00	1.486E-09	1.253E-08	1.115E-07	5.538E-07	1.228E-06	1.345E-06	7.303E-06	2.962E-05	3.671E-05
Ra-226	U-238	1.000E+00	0.000E+00	3.489E-16	8.722E-15	2.476E-13	3.226E-12	1.418E-11	1.823E-10	2.231E-09	9.569E-09	1.137E-08
Ra-226	∑DOSE(j):		0.000E+00	1.486E-09	1.253E-08	1.115E-07	5.538E-07	1.228E-06	1.345E-06	7.306E-06	2.963E-05	3.672E-05
Pb-210	U-234	1.000E+00	0.000E+00	7.078E-13	1.460E-11	3.817E-10	4.784E-09	2.007E-08	3.584E-07	1.697E-05	7.896E-05	9.866E-05
Pb-210	U-238	1.000E+00	0.000E+00	9.240E-20	7.930E-18	6.593E-16	2.267E-14	2.179E-13	4.503E-10	5.979E-09	2.578E-08	3.064E-08
Pb-210	∑DOSE(j):		0.000E+00	7.078E-13	1.460E-11	3.817E-10	4.784E-09	2.007E-08	3.589E-07	1.697E-05	7.899E-05	9.869E-05
Po-210	U-234	1.000E+00	0.000E+00	3.433E-14	1.279E-12	4.543E-11	6.309E-10	2.731E-09	1.191E-06	5.935E-05	2.733E-04	3.433E-04
Po-210	U-238	1.000E+00	0.000E+00	3.450E-21	4.855E-19	7.508E-17	2.947E-15	2.960E-14	1.836E-09	2.120E-08	9.072E-08	1.078E-07
Po-210	∑DOSE(j):		0.000E+00	3.433E-14	1.279E-12	4.543E-11	6.309E-10	2.731E-09	1.192E-06	5.937E-05	2.734E-04	3.434E-04
U-235	U-235	1.000E+00	1.737E-03	1.641E-03	1.465E-03	9.851E-04	3.167E-04	5.898E-06	1.262E-04	1.401E-04	1.402E-04	1.319E-05
Pa-231	U-235	1.000E+00	0.000E+00	1.307E-07	3.496E-07	7.829E-07	7.543E-07	4.609E-08	3.384E-05	6.090E-05	1.074E-04	1.119E-05
Ac-227	U-235	1.000E+00	0.000E+00	9.468E-09	7.047E-08	4.141E-07	7.053E-07	6.295E-08	1.147E-04	1.999E-04	2.876E-04	1.039E-05
U-238	U-238	1.000E+00	8.147E-03	7.697E-03	6.871E-03	4.619E-03	1.485E-03	2.738E-05	1.496E-03	1.660E-03	1.662E-03	1.564E-04

BRF(i) is the branch fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	BRF(i)	S(j,t), pCi/g t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	5.000E+02	9.000E+02	1.000E+03
U-234	U-234	1.000E+00	2.400E-01	2.268E-01	2.025E-01	1.361E-01	4.378E-02	8.263E-04	9.796E-09	1.161E-13	1.632E-23	5.619E-26
U-234	U-238	1.000E+00	0.000E+00	1.607E-07	4.305E-07	9.647E-07	9.309E-07	5.857E-08	2.084E-12	4.118E-17	1.042E-26	3.988E-29
U-234	∑S(j):		2.400E-01	2.268E-01	2.025E-01	1.361E-01	4.378E-02	8.264E-04	9.798E-09	1.162E-13	1.633E-23	5.623E-26
Th-230	U-234	1.000E+00	0.000E+00	2.100E-06	5.959E-06	1.648E-05	3.111E-05	3.779E-05	3.749E-05	3.707E-05	3.624E-05	3.604E-05
Th-230	U-238	1.000E+00	0.000E+00	7.372E-13	6.156E-12	5.293E-11	2.413E-10	4.634E-10	4.690E-10	4.638E-10	4.534E-10	4.509E-10
Th-230	∑S(j):		0.000E+00	2.100E-06	5.959E-06	1.648E-05	3.111E-05	3.779E-05	3.749E-05	3.707E-05	3.625E-05	3.604E-05
Ra-226	U-234	1.000E+00	0.000E+00	4.530E-10	3.822E-09	3.403E-08	1.694E-07	3.809E-07	3.970E-07	3.925E-07	3.838E-07	3.816E-07
Ra-226	U-238	1.000E+00	0.000E+00	1.064E-16	2.660E-15	7.556E-14	9.869E-13	4.399E-12	4.966E-12	4.910E-12	4.801E-12	4.774E-12
Ra-226	∑S(j):		0.000E+00	4.530E-10	3.822E-09	3.403E-08	1.694E-07	3.809E-07	3.970E-07	3.925E-07	3.838E-07	3.816E-07
Pb-210	U-234	1.000E+00	0.000E+00	4.662E-12	1.164E-10	3.292E-09	4.250E-08	1.851E-07	2.076E-07	2.053E-07	2.007E-07	1.996E-07
Pb-210	U-238	1.000E+00	0.000E+00	8.234E-19	6.123E-17	5.624E-15	2.007E-13	2.009E-12	2.597E-12	2.568E-12	2.511E-12	2.497E-12
Pb-210	∑S(j):		0.000E+00	4.662E-12	1.164E-10	3.292E-09	4.250E-08	1.851E-07	2.076E-07	2.053E-07	2.007E-07	1.996E-07
Po-210	U-234	1.000E+00	0.000E+00	1.483E-12	6.660E-11	2.525E-09	3.573E-08	1.601E-07	1.800E-07	1.780E-07	1.741E-07	1.731E-07
Po-210	U-238	1.000E+00	0.000E+00	2.220E-19	3.157E-17	4.140E-15	1.665E-13	1.735E-12	2.252E-12	2.227E-12	2.177E-12	2.165E-12
Po-210	∑S(j):		0.000E+00	1.483E-12	6.660E-11	2.525E-09	3.573E-08	1.601E-07	1.800E-07	1.780E-07	1.741E-07	1.731E-07
U-235	U-235	1.000E+00	5.100E-03	4.819E-03	4.302E-03	2.893E-03	9.304E-04	1.756E-05	2.083E-10	2.471E-15	3.477E-25	1.197E-27
Pa-231	U-235	1.000E+00	0.000E+00	1.020E-07	2.731E-07	6.119E-07	5.904E-07	3.712E-08	1.318E-12	2.600E-17	6.558E-27	2.507E-29
Ac-227	U-235	1.000E+00	0.000E+00	1.562E-09	1.165E-08	6.849E-08	1.167E-07	9.288E-09	3.505E-13	6.995E-18	1.778E-27	6.802E-30
U-238	U-238	1.000E+00	6.000E-02	5.669E-02	5.061E-02	3.403E-02	1.095E-02	2.066E-04	2.451E-09	2.907E-14	4.090E-24	1.409E-26

BRF(i) is the branch fraction of the parent nuclide.

370 380 390 400 410

440 430 420 410 400 390 380

SUB–AREA H

970 970 975 975 980 980 985 985

BURIAL AREA #4
HOLDING POND

SUB–AREA N

HC–9
HC–8
HC–7
HC–6
HC–5
AM–018
HC–4
HC–3
HC–2
HC–1

26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

SUB–AREA N

LEGEND

- HC – SOIL/SEDIMENT SAMPLE
- AM – TLD (THERMOLUMINESCENT DOSIMETER)

5 0 5
SCALE IN METERS

REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	Drawing Issued.	JE	WR	JL	10/12/98

CIMARRON CORPORATION

CIMARRON FACILITY
PHASE II – SUB–AREA H
CONCRETE RIPRAP AREA

DRWN. BY	DATE	CHKD. BY	DATE	SCALE:
JE	10/12/98	WR	10/12/98	AS SHOWN

JOB NO.	DRAWING NO.	REV.
	98POAHCONC–0	0

...\CIMARRON\SUBAREAH\CONCRETE\98CONC

CIMARRON CORPORATION
CIMARRON FACILITY
PHASE III, SUB-AREA "H"
RIVER DEPTH SAMPLES

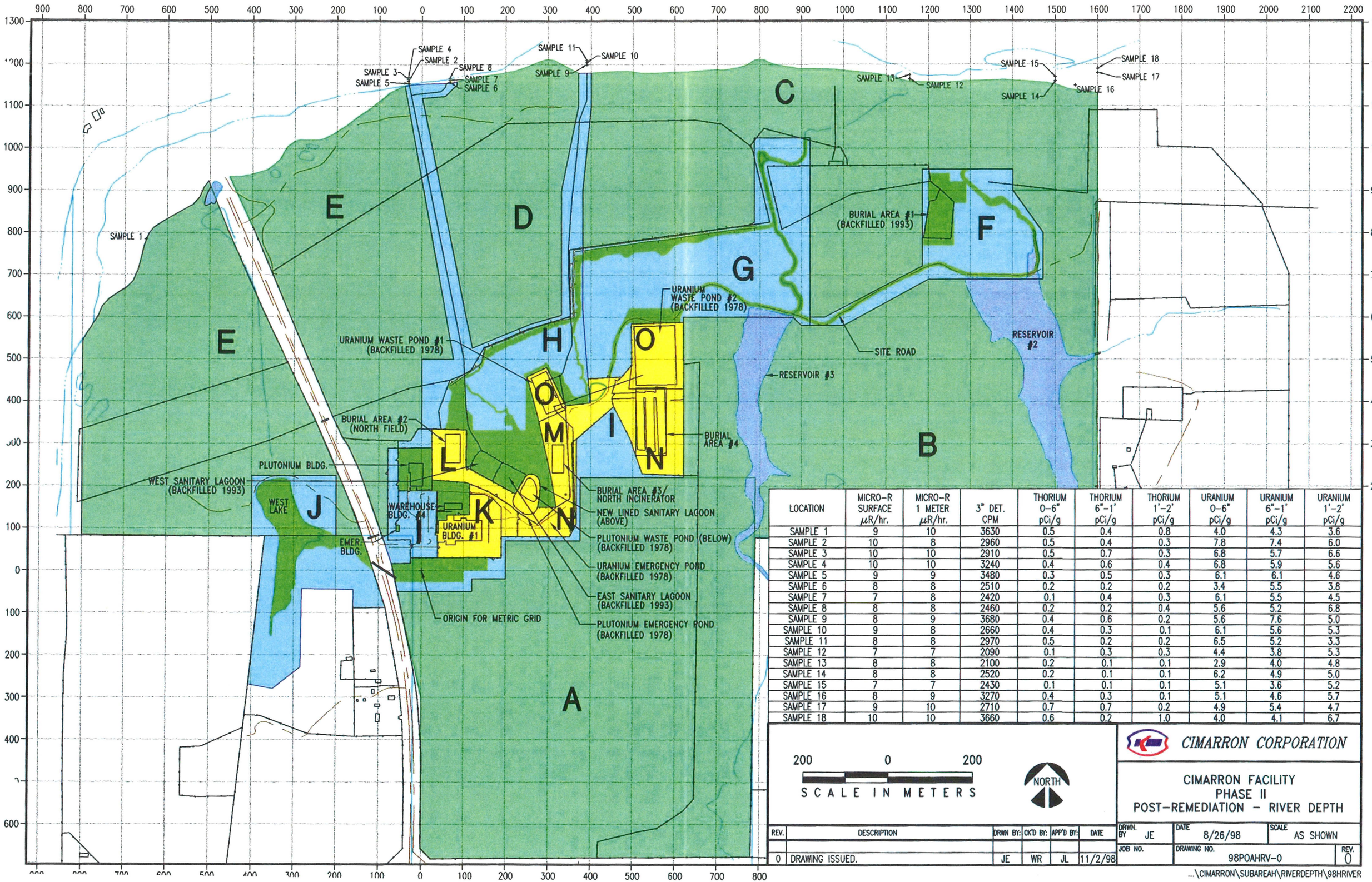
DATE: 07/15/9

LN #	GRID NUMBER	3" DETECT C.P.M.	MICRO R' SURF	MICRO R' 1 METER	pCi/g					
					0-6" Sample		6" - 1'		1' - 2'	
					Total-U	Th (Nat)	Total-U	Th (Nat)	Total-U	Th (Nat)
1	31W - 1155N	3480	9	9	6.1	0.3	6.1	0.5	4.6	0.3
2	32W - 1160N	2960	10	8	7.8	0.5	7.4	0.4	6	0.3
3	32W - 1165N	2910	10	10	6.8	0.5	5.7	0.7	6.6	0.3
4	32W - 1170N	3240	10	10	6.8	0.4	5.9	0.6	5.6	0.4
5	650W - 785N	3630	9	10	4	0.5	4.3	0.4	3.6	0.8
6	66E - 1158N	2510	8	8	3.4	0.2	5.5	0.2	3.8	0.2
7	66E - 1163N	2420	7	8	6.1	0.1	5.5	0.4	4.5	0.3
8	66E - 1168N	2460	8	8	5.6	0.2	5.2	0.2	6.8	0.4
9	390E - 1200N	3680	8	9	5.6	0.4	7.6	0.6	5	0.2
10	390E - 1205N	2660	9	8	6.1	0.4	5.6	0.3	5.3	0.1
11	390E - 1210N	2970	8	8	6.5	0.5	5.2	0.2	3.3	0.2
12	1156E - 1165N	2090	7	7	4.4	0.1	3.8	0.3	5.3	0.3
13	1156E - 1175N	2100	8	8	2.9	0.2	4	0.1	4.8	0.1
14	1500E - 1160N	2520	8	8	6.2	0.2	4.9	0.1	5	0.1
15	1500E - 1170N	2430	7	7	5.1	0.1	3.6	0.1	5.2	0.1
16	1548E - 1150N	3270	8	9	5.1	0.4	4.6	0.3	5.7	0.1
17	1600E - 1180N	2710	9	10	4.9	0.7	5.4	0.7	4.7	0.2
18	1600E - 1190N	3660	10	10	4	0.6	4.1	0.2	6.7	1

INSTRUMENTS:	RESULTS IN:	BACKGROUND	MDA
LUDLUM MICRO 'R' METER - MODEL 19 S/N 138420	µR/hr	7	2
LUDLUM 2221, SHIELDED 3" X 1/2" NaI DETECTOR #48395	CPM	2500	N/A
		Total U 4	4
CIMMARON SOIL COUNTER 4" X 4" X 16" NaI DETECTOR	pCi/g	Th(Nat) 1.5	0.5

BACKGROUND NOT SUBTRACTED

REVIEWED BY: W. A. Rogers DATE: 7-17-98



LOCATION	MICRO-R SURFACE μR/hr.	MICRO-R 1 METER μR/hr.	3" DET. CPM	THORIUM 0-6" pCi/g	THORIUM 6"-1' pCi/g	THORIUM 1'-2' pCi/g	URANIUM 0-6" pCi/g	URANIUM 6"-1' pCi/g	URANIUM 1'-2' pCi/g
SAMPLE 1	9	10	3630	0.5	0.4	0.8	4.0	4.3	3.6
SAMPLE 2	10	8	2960	0.5	0.4	0.3	7.8	7.4	6.0
SAMPLE 3	10	10	2910	0.5	0.7	0.3	6.8	5.7	6.6
SAMPLE 4	10	10	3240	0.4	0.6	0.4	6.8	5.9	5.6
SAMPLE 5	9	9	3480	0.3	0.5	0.3	6.1	6.1	4.6
SAMPLE 6	8	8	2510	0.2	0.2	0.2	3.4	5.5	3.8
SAMPLE 7	7	8	2420	0.1	0.4	0.3	6.1	5.5	4.5
SAMPLE 8	8	8	2460	0.2	0.2	0.4	5.6	5.2	6.8
SAMPLE 9	8	9	3680	0.4	0.6	0.2	5.6	7.6	5.0
SAMPLE 10	9	8	2660	0.4	0.3	0.1	6.1	5.6	5.3
SAMPLE 11	8	8	2970	0.5	0.2	0.2	6.5	5.2	3.3
SAMPLE 12	7	7	2090	0.1	0.3	0.3	4.4	3.8	5.3
SAMPLE 13	8	8	2100	0.2	0.1	0.1	2.9	4.0	4.8
SAMPLE 14	8	8	2520	0.2	0.1	0.1	6.2	4.9	5.0
SAMPLE 15	7	7	2430	0.1	0.1	0.1	5.1	3.6	5.2
SAMPLE 16	8	9	3270	0.4	0.3	0.1	5.1	4.6	5.7
SAMPLE 17	9	10	2710	0.7	0.7	0.2	4.9	5.4	4.7
SAMPLE 18	10	10	3660	0.6	0.2	1.0	4.0	4.1	6.7

200 0 200

SCALE IN METERS

NORTH

CIMARRON CORPORATION

CIMARRON FACILITY
PHASE II
POST-REMEDIATION - RIVER DEPTH

REV.	DESCRIPTION	DRWN BY:	CK'D BY:	APP'D BY:	DATE
0	DRAWING ISSUED.	JE	WR	JL	11/2/98

DRWN. BY	DATE	SCALE
JE	8/26/98	AS SHOWN
JOB NO.	DRAWING NO.	REV.
	98POAHRV-0	0

...\CIMARRON\SUBAREAH\RIVERDEPTH\98HRIVER