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Part IV: Concentration of Radionuclides

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Concentration of radionuclides in different media

Time= 0.000E+00 .....	2
Time= 1.000E+00 .....	6
Time= 3.000E+00 .....	10
Time= 1.000E+01 .....	14
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Time= 1.000E+02 .....	22
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Concentration of radionuclides in environmental media  
at t = 0.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	0.000E+00	0.000E+00	0.000E+00	9.610E-12	6.199E-13
Ag-108m	1.000E+00	0.000E+00	0.000E+00	3.676E+01	2.371E+00
Am-241	1.000E+00	0.000E+00	0.000E+00	5.643E+00	3.640E-01
Am-243	1.000E+00	0.000E+00	0.000E+00	5.643E+00	3.640E-01
C-14	1.000E+00	0.000E+00	0.000E+00	7.120E+02	4.592E+01
Cm-243	1.000E+00	0.000E+00	0.000E+00	1.122E+00	7.237E-02
Cm-244	1.000E+00	0.000E+00	0.000E+00	1.122E+00	7.237E-02
Co-60	1.000E+00	0.000E+00	0.000E+00	4.480E+00	2.890E-01
Cs-134	1.000E+00	0.000E+00	0.000E+00	2.212E+01	1.427E+00
Cs-137	1.000E+00	0.000E+00	0.000E+00	2.212E+01	1.427E+00
Eu-152	1.000E+00	0.000E+00	0.000E+00	1.050E+01	6.775E-01
Eu-154	1.000E+00	0.000E+00	0.000E+00	1.050E+01	6.775E-01
Eu-155	1.000E+00	0.000E+00	0.000E+00	1.050E+01	6.775E-01
Fe-55	1.000E+00	0.000E+00	0.000E+00	3.500E-01	2.257E-02
Gd-152	0.000E+00	0.000E+00	0.000E+00	3.060E-15	1.974E-16
H-3	1.000E+00	0.000E+00	0.000E+00	4.891E+03	3.155E+02
Nb-94	1.000E+00	0.000E+00	0.000E+00	2.212E+01	1.427E+00
Nd-144	0.000E+00	0.000E+00	0.000E+00	5.616E-37	3.623E-38
Ni-59	1.000E+00	0.000E+00	0.000E+00	1.608E+01	1.037E+00
Ni-63	1.000E+00	0.000E+00	0.000E+00	1.608E+01	1.037E+00
Np-237	1.000E+00	0.000E+00	0.000E+00	8.302E+02	5.355E+01
Pa-231	0.000E+00	0.000E+00	0.000E+00	1.015E-11	6.547E-13
Pb-210	0.000E+00	0.000E+00	0.000E+00	3.002E-11	1.936E-12
Pm-147	1.000E+00	0.000E+00	0.000E+00	1.050E+01	6.775E-01
Po-210	0.000E+00	0.000E+00	0.000E+00	3.619E-11	2.335E-12
Pu-238	1.000E+00	0.000E+00	0.000E+00	5.740E+00	3.703E-01
Pu-239	1.000E+00	0.000E+00	0.000E+00	5.741E+00	3.703E-01
Pu-240	1.000E+00	0.000E+00	0.000E+00	5.741E+00	3.703E-01
Pu-241	1.000E+00	0.000E+00	0.000E+00	5.740E+00	3.703E-01
Ra-226	0.000E+00	0.000E+00	0.000E+00	2.969E-11	1.915E-12
Ra-228	0.000E+00	0.000E+00	0.000E+00	5.891E-19	3.800E-20
Sb-125	1.000E+00	0.000E+00	0.000E+00	5.812E+01	3.749E+00
Sm-147	0.000E+00	0.000E+00	0.000E+00	1.214E-11	7.828E-13
Sm-148	0.000E+00	0.000E+00	0.000E+00	8.152E-29	5.258E-30
Sr-90	1.000E+00	0.000E+00	0.000E+00	3.993E+02	2.575E+01
Tc-99	1.000E+00	0.000E+00	0.000E+00	4.891E+03	3.155E+02
Te-125m	0.000E+00	0.000E+00	0.000E+00	9.386E+02	6.054E+01
Th-228	0.000E+00	0.000E+00	0.000E+00	1.196E-19	7.716E-21
Th-229	0.000E+00	0.000E+00	0.000E+00	1.442E-05	9.304E-07
Th-230	0.000E+00	0.000E+00	0.000E+00	4.096E-11	2.642E-12
Th-232	0.000E+00	0.000E+00	0.000E+00	1.440E-19	9.288E-21
U-233	0.000E+00	0.000E+00	0.000E+00	2.170E-04	1.400E-05
U-234	0.000E+00	0.000E+00	0.000E+00	2.215E-05	1.429E-06
U-235	0.000E+00	0.000E+00	0.000E+00	7.699E-09	4.966E-10

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 0.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	0.000E+00	0.000E+00	0.000E+00	2.313E-07	1.492E-08

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 0.000E+00 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	9.610E-12	2.349E-12	1.901E-11	1.289E-11	1.289E-11	1.702E-14	2.835E-15	9.298E-12	6.199E-10
Ag-108m	3.676E+01	9.019E+00	7.273E+01	4.933E+01	4.933E+01	1.042E+01	5.151E+01	1.185E+01	1.826E+03
Am-241	5.643E+00	1.380E+00	1.116E+01	7.571E+00	7.571E+00	2.849E-02	2.663E-03	1.092E+01	3.640E+02
Am-243	5.643E+00	1.380E+00	1.116E+01	7.571E+00	7.571E+00	2.849E-02	2.663E-03	1.092E+01	3.640E+02
C-14	7.120E+02	5.392E+03	5.829E+02	7.415E+02	5.357E+02	2.877E+03	6.875E+02	2.296E+06	4.179E+05
Cm-243	1.122E+00	2.744E-01	2.220E+00	1.505E+00	1.505E+00	3.975E-03	6.123E-04	2.171E+00	7.237E+01
Cm-244	1.122E+00	2.744E-01	2.220E+00	1.505E+00	1.505E+00	3.975E-03	6.123E-04	2.171E+00	7.237E+01
Co-60	4.480E+00	1.144E+00	8.874E+00	6.027E+00	6.027E+00	2.304E+01	2.118E+00	8.669E+01	5.779E+01
Cs-134	2.212E+01	5.527E+00	4.379E+01	2.972E+01	2.972E+01	1.274E+02	4.571E+01	2.854E+03	1.427E+02
Cs-137	2.212E+01	5.527E+00	4.379E+01	2.972E+01	2.972E+01	1.274E+02	4.571E+01	2.854E+03	1.427E+02
Eu-152	1.050E+01	2.570E+00	2.078E+01	1.409E+01	1.409E+01	3.721E+00	7.745E-02	3.387E+01	6.775E+02
Eu-154	1.050E+01	2.570E+00	2.078E+01	1.409E+01	1.409E+01	3.721E+00	7.745E-02	3.387E+01	6.775E+02
Eu-155	1.050E+01	2.570E+00	2.078E+01	1.409E+01	1.409E+01	3.721E+00	7.745E-02	3.387E+01	6.775E+02
Fe-55	3.500E-01	8.561E-02	6.924E-01	4.696E-01	4.696E-01	1.209E+00	2.426E-02	4.515E+00	7.224E+01
Gd-152	3.060E-15	7.485E-16	6.054E-15	4.106E-15	4.106E-15	5.421E-16	2.708E-17	4.934E-15	1.974E-13
H-3	4.891E+03	3.962E+03	1.915E+03	1.311E+03	1.311E+03	2.328E+03	2.970E+03	3.155E+02	3.155E+02
Nb-94	2.212E+01	5.469E+00	4.378E+01	2.970E+01	2.970E+01	3.528E-03	1.044E-02	4.281E+02	1.427E+02
Nd-144	5.616E-37	1.374E-37	1.111E-36	7.536E-37	7.536E-37	9.949E-38	4.970E-39	3.623E-36	3.623E-35
Ni-59	1.608E+01	4.038E+00	3.183E+01	2.160E+01	2.160E+01	1.311E+01	7.594E+01	1.037E+02	1.037E+02
Ni-63	1.608E+01	4.038E+00	3.183E+01	2.160E+01	2.160E+01	1.311E+01	7.594E+01	1.037E+02	1.037E+02
Np-237	8.302E+02	2.051E+02	1.643E+03	1.115E+03	1.115E+03	7.355E+01	1.225E+00	1.607E+03	2.142E+04
Pa-231	1.015E-11	2.494E-12	2.008E-11	1.362E-11	1.362E-11	4.496E-15	7.486E-15	6.547E-12	7.202E-11
Pb-210	3.002E-11	7.351E-12	5.939E-11	4.028E-11	4.028E-11	2.127E-12	1.328E-12	5.808E-10	1.936E-10
Pm-147	1.050E+01	2.573E+00	2.078E+01	1.409E+01	1.409E+01	3.721E+00	1.704E-01	2.032E+01	6.775E+02
Po-210	3.619E-11	8.849E-12	7.160E-11	4.856E-11	4.856E-11	1.603E-11	2.135E-12	2.335E-10	4.669E-08
Pu-238	5.740E+00	1.404E+00	1.136E+01	7.702E+00	7.702E+00	5.593E-02	1.160E-03	1.111E+01	3.703E+01
Pu-239	5.741E+00	1.404E+00	1.136E+01	7.702E+00	7.702E+00	5.593E-02	1.160E-03	1.111E+01	3.703E+01
Pu-240	5.741E+00	1.404E+00	1.136E+01	7.703E+00	7.703E+00	5.593E-02	1.160E-03	1.111E+01	3.703E+01
Pu-241	5.740E+00	1.404E+00	1.136E+01	7.702E+00	7.702E+00	5.593E-02	1.160E-03	1.111E+01	3.703E+01
Ra-226	2.969E-11	7.417E-12	5.876E-11	3.988E-11	3.988E-11	2.631E-12	4.381E-12	9.574E-11	4.787E-10
Ra-228	5.891E-19	1.472E-19	1.166E-18	7.914E-19	7.914E-19	5.221E-20	8.695E-20	1.900E-18	9.500E-18
Sb-125	5.812E+01	1.435E+01	1.150E+02	7.803E+01	7.803E+01	9.526E+00	9.433E-01	3.749E+02	3.749E+01
Sm-147	1.214E-11	2.969E-12	2.401E-11	1.628E-11	1.628E-11	2.150E-12	1.074E-13	1.957E-11	7.828E-10
Sm-148	8.152E-29	1.994E-29	1.613E-28	1.094E-28	1.094E-28	1.444E-29	7.213E-31	1.314E-28	5.258E-27
Sr-90	3.993E+02	1.299E+02	7.971E+02	5.463E+02	5.463E+02	4.636E+02	1.609E+02	1.545E+03	2.575E+03
Tc-99	4.891E+03	7.229E+03	1.102E+04	8.558E+03	8.558E+03	7.835E+01	1.362E+03	6.309E+03	1.577E+03
Te-125m	9.386E+02	2.421E+02	1.860E+03	1.263E+03	1.263E+03	5.828E+02	6.935E+01	2.422E+04	4.541E+03
Th-228	1.196E-19	2.925E-20	2.367E-19	1.605E-19	1.605E-19	1.059E-21	8.821E-23	7.716E-19	3.858E-18
Th-229	1.442E-05	3.526E-06	2.854E-05	1.935E-05	1.935E-05	1.278E-07	1.064E-08	9.304E-05	4.652E-04
Th-230	4.096E-11	1.001E-11	8.102E-11	5.495E-11	5.495E-11	3.627E-13	3.020E-14	2.642E-10	1.321E-09
Th-232	1.440E-19	3.520E-20	2.849E-19	1.932E-19	1.932E-19	1.275E-21	1.062E-22	9.288E-19	4.644E-18
U-233	2.170E-04	5.309E-05	4.293E-04	2.912E-04	2.912E-04	1.538E-05	1.280E-05	1.400E-04	8.399E-04
U-234	2.215E-05	5.419E-06	4.382E-05	2.972E-05	2.972E-05	1.570E-06	1.307E-06	1.429E-05	8.573E-05
U-235	7.699E-09	1.883E-09	1.523E-08	1.033E-08	1.033E-08	5.455E-10	4.542E-10	4.966E-09	2.979E-08

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 0.000E+00 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	2.313E-07	5.658E-08	4.576E-07	3.103E-07	3.103E-07	1.639E-08	1.364E-08	1.492E-07	8.951E-07

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 1.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	1.097E-16	0.000E+00	0.000E+00	9.246E-12	5.964E-13
Ag-108m	9.975E-01	0.000E+00	0.000E+00	3.667E+01	2.365E+00
Am-241	9.998E-01	0.000E+00	0.000E+00	5.642E+00	3.639E-01
Am-243	9.998E-01	0.000E+00	0.000E+00	5.641E+00	3.639E-01
C-14	9.845E-01	0.000E+00	0.000E+00	7.010E+02	4.521E+01
Cm-243	9.764E-01	0.000E+00	0.000E+00	1.096E+00	7.067E-02
Cm-244	9.624E-01	0.000E+00	0.000E+00	1.080E+00	6.965E-02
Co-60	8.767E-01	0.000E+00	0.000E+00	3.928E+00	2.533E-01
Cs-134	7.145E-01	0.000E+00	0.000E+00	1.581E+01	1.019E+00
Cs-137	9.768E-01	0.000E+00	0.000E+00	2.161E+01	1.394E+00
Eu-152	9.499E-01	0.000E+00	0.000E+00	9.977E+00	6.435E-01
Eu-154	9.223E-01	0.000E+00	0.000E+00	9.687E+00	6.248E-01
Eu-155	8.643E-01	0.000E+00	0.000E+00	9.079E+00	5.856E-01
Fe-55	7.763E-01	0.000E+00	0.000E+00	2.717E-01	1.752E-02
Gd-152	1.745E-15	0.000E+00	0.000E+00	5.133E-15	3.311E-16
H-3	8.502E-01	0.000E+00	0.000E+00	4.158E+03	2.682E+02
Nb-94	9.995E-01	0.000E+00	0.000E+00	2.211E+01	1.426E+00
Nd-144	0.000E+00	0.000E+00	0.000E+00	5.616E-37	3.622E-38
Ni-59	9.996E-01	0.000E+00	0.000E+00	1.607E+01	1.037E+00
Ni-63	9.928E-01	0.000E+00	0.000E+00	1.596E+01	1.029E+00
Np-237	9.821E-01	0.000E+00	0.000E+00	8.154E+02	5.259E+01
Pa-231	1.041E-14	0.000E+00	0.000E+00	9.799E-12	6.320E-13
Pb-210	1.452E-17	0.000E+00	0.000E+00	3.001E-11	1.936E-12
Pm-147	7.676E-01	0.000E+00	0.000E+00	8.063E+00	5.201E-01
Po-210	4.039E-18	0.000E+00	0.000E+00	3.471E-11	2.239E-12
Pu-238	9.920E-01	0.000E+00	0.000E+00	5.694E+00	3.673E-01
Pu-239	9.999E-01	0.000E+00	0.000E+00	5.740E+00	3.702E-01
Pu-240	9.999E-01	0.000E+00	0.000E+00	5.740E+00	3.702E-01
Pu-241	9.527E-01	0.000E+00	0.000E+00	5.469E+00	3.528E-01
Ra-226	1.871E-15	0.000E+00	0.000E+00	2.975E-11	1.919E-12
Ra-228	2.847E-20	0.000E+00	0.000E+00	2.924E-19	1.886E-20
Sb-125	7.768E-01	0.000E+00	0.000E+00	4.515E+01	2.912E+00
Sm-147	5.746E-12	0.000E+00	0.000E+00	1.839E-11	1.186E-12
Sm-148	8.715E-32	0.000E+00	0.000E+00	7.743E-29	4.994E-30
Sr-90	9.678E-01	0.000E+00	0.000E+00	3.864E+02	2.492E+01
Tc-99	8.994E-01	0.000E+00	0.000E+00	4.399E+03	2.837E+02
Te-125m	1.833E-01	0.000E+00	0.000E+00	7.418E+02	4.784E+01
Th-228	2.418E-21	0.000E+00	0.000E+00	5.208E-20	3.359E-21
Th-229	2.043E-10	0.000E+00	0.000E+00	1.417E-05	9.137E-07
Th-230	1.295E-11	0.000E+00	0.000E+00	5.776E-11	3.726E-12
Th-232	7.300E-19	0.000E+00	0.000E+00	1.480E-19	9.544E-21
U-233	4.314E-06	0.000E+00	0.000E+00	2.479E-04	1.599E-05
U-234	2.812E-06	0.000E+00	0.000E+00	4.443E-05	2.866E-06
U-235	9.845E-10	0.000E+00	0.000E+00	1.550E-08	9.996E-10

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3



concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 1.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	2.959E-08	0.000E+00	0.000E+00	4.658E-07	3.004E-08

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 1.000E+00 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	9.259E-12	2.264E-12	1.834E-11	1.247E-11	1.247E-11	1.644E-14	2.739E-15	9.013E-12	6.006E-10
Ag-108m	3.667E+01	8.997E+00	7.255E+01	4.921E+01	4.921E+01	1.039E+01	5.138E+01	1.183E+01	1.821E+03
Am-241	5.642E+00	1.380E+00	1.116E+01	7.570E+00	7.570E+00	2.849E-02	2.663E-03	1.092E+01	3.639E+02
Am-243	5.641E+00	1.380E+00	1.116E+01	7.569E+00	7.569E+00	2.848E-02	2.662E-03	1.092E+01	3.639E+02
C-14	7.010E+02	5.312E+03	5.739E+02	7.315E+02	5.284E+02	2.835E+03	6.775E+02	2.261E+06	4.116E+05
Cm-243	1.096E+00	2.680E-01	2.168E+00	1.470E+00	1.470E+00	3.882E-03	5.979E-04	2.120E+00	7.067E+01
Cm-244	1.080E+00	2.641E-01	2.136E+00	1.449E+00	1.449E+00	3.826E-03	5.893E-04	2.090E+00	6.965E+01
Co-60	3.928E+00	1.003E+00	7.780E+00	5.286E+00	5.286E+00	2.020E+01	1.857E+00	7.600E+01	5.067E+01
Cs-134	1.581E+01	3.949E+00	3.129E+01	2.125E+01	2.125E+01	9.105E+01	3.266E+01	2.039E+03	1.019E+02
Cs-137	2.161E+01	5.399E+00	4.278E+01	2.903E+01	2.903E+01	1.245E+02	4.465E+01	2.788E+03	1.394E+02
Eu-152	9.977E+00	2.441E+00	1.974E+01	1.339E+01	1.339E+01	3.535E+00	7.357E-02	3.218E+01	6.435E+02
Eu-154	9.688E+00	2.370E+00	1.917E+01	1.300E+01	1.300E+01	3.432E+00	7.144E-02	3.124E+01	6.248E+02
Eu-155	9.079E+00	2.221E+00	1.796E+01	1.219E+01	1.219E+01	3.216E+00	6.695E-02	2.928E+01	5.856E+02
Fe-55	2.717E-01	6.646E-02	5.375E-01	3.648E-01	3.648E-01	9.385E-01	1.883E-02	3.505E+00	5.608E+01
Gd-152	5.177E-15	1.415E-15	1.033E-14	9.566E-15	9.566E-15	1.082E-15	5.640E-17	9.320E-15	3.507E-13
H-3	4.159E+03	3.383E+03	1.629E+03	1.130E+03	1.130E+03	1.984E+03	2.534E+03	2.687E+02	2.687E+02
Nb-94	2.211E+01	5.466E+00	4.376E+01	2.969E+01	2.969E+01	3.526E-03	1.044E-02	4.278E+02	1.426E+02
Nd-144	5.616E-37	1.374E-37	1.111E-36	7.535E-37	7.535E-37	9.948E-38	4.969E-39	3.622E-36	3.622E-35
Ni-59	1.607E+01	4.037E+00	3.182E+01	2.160E+01	2.160E+01	1.310E+01	7.592E+01	1.037E+02	1.037E+02
Ni-63	1.596E+01	4.009E+00	3.160E+01	2.145E+01	2.145E+01	1.301E+01	7.539E+01	1.029E+02	1.029E+02
Np-237	8.154E+02	2.016E+02	1.614E+03	1.097E+03	1.097E+03	7.231E+01	1.205E+00	1.578E+03	2.104E+04
Pa-231	9.808E-12	2.391E-12	1.942E-11	1.298E-11	1.298E-11	4.383E-15	7.229E-15	6.347E-12	6.980E-11
Pb-210	3.001E-11	7.375E-12	5.938E-11	4.028E-11	4.028E-11	2.127E-12	1.328E-12	5.810E-10	1.939E-10
Pm-147	8.063E+00	1.975E+00	1.595E+01	1.083E+01	1.083E+01	2.857E+00	1.308E-01	1.560E+01	5.201E+02
Po-210	3.466E-11	8.730E-12	6.849E-11	4.564E-11	4.564E-11	1.516E-11	2.018E-12	2.362E-10	4.325E-08
Pu-238	5.694E+00	1.393E+00	1.127E+01	7.641E+00	7.641E+00	5.548E-02	1.151E-03	1.102E+01	3.673E+01
Pu-239	5.740E+00	1.404E+00	1.136E+01	7.701E+00	7.701E+00	5.592E-02	1.160E-03	1.111E+01	3.702E+01
Pu-240	5.740E+00	1.404E+00	1.136E+01	7.702E+00	7.702E+00	5.593E-02	1.160E-03	1.111E+01	3.702E+01
Pu-241	5.469E+00	1.338E+00	1.082E+01	7.339E+00	7.339E+00	5.328E-02	1.105E-03	1.058E+01	3.528E+01
Ra-226	2.975E-11	7.439E-12	5.890E-11	3.999E-11	3.999E-11	2.637E-12	4.393E-12	9.598E-11	4.799E-10
Ra-228	2.904E-19	9.468E-20	5.713E-19	5.395E-19	5.395E-19	2.987E-20	5.248E-20	9.355E-19	4.678E-18
Sb-125	4.515E+01	1.115E+01	8.935E+01	6.067E+01	6.067E+01	7.401E+00	7.328E-01	2.912E+02	2.912E+01
Sm-147	1.852E-11	4.976E-12	3.689E-11	3.278E-11	3.278E-11	3.779E-12	1.972E-13	3.144E-11	1.244E-09
Sm-148	7.744E-29	1.899E-29	1.532E-28	1.047E-28	1.047E-28	1.376E-29	6.884E-31	1.250E-28	5.000E-27
Sr-90	3.864E+02	1.257E+02	7.714E+02	5.293E+02	5.293E+02	4.489E+02	1.558E+02	1.496E+03	2.493E+03
Tc-99	4.400E+03	6.530E+03	9.918E+03	7.803E+03	7.803E+03	7.097E+01	1.237E+03	5.686E+03	1.421E+03
Te-125m	7.335E+02	1.617E+02	1.437E+03	5.978E+02	5.978E+02	3.739E+02	4.101E+01	1.768E+04	3.314E+03
Th-228	4.982E-20	1.012E-20	9.415E-20	7.686E-20	7.686E-20	4.863E-22	9.131E-23	2.417E-19	1.209E-18
Th-229	1.417E-05	3.466E-06	2.803E-05	1.906E-05	1.906E-05	1.256E-07	1.047E-08	9.140E-05	4.570E-04
Th-230	5.883E-11	1.799E-11	1.185E-10	1.405E-10	1.405E-10	7.735E-13	1.286E-13	3.753E-10	1.881E-09
Th-232	2.020E-19	2.628E-19	5.069E-19	3.891E-18	3.891E-18	1.641E-20	4.994E-21	9.240E-19	4.896E-18
U-233	2.576E-04	9.637E-05	5.286E-04	9.290E-04	9.290E-04	3.232E-05	3.042E-05	2.912E-04	2.713E-03
U-234	4.441E-05	1.081E-05	8.783E-05	5.850E-05	5.850E-05	3.120E-06	2.590E-06	2.898E-05	1.723E-04
U-235	1.549E-08	3.769E-09	3.063E-08	2.040E-08	2.040E-08	1.088E-09	9.033E-10	1.011E-08	6.009E-08

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 1.000E+00 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	4.656E-07	1.133E-07	9.208E-07	6.131E-07	6.131E-07	3.271E-08	2.715E-08	3.038E-07	1.806E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 3.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	2.914E-15	0.000E+00	0.000E+00	9.271E-12	5.980E-13
Ag-108m	9.926E-01	0.000E+00	0.000E+00	3.649E+01	2.354E+00
Am-241	9.993E-01	0.000E+00	0.000E+00	5.639E+00	3.637E-01
Am-243	9.993E-01	0.000E+00	0.000E+00	5.639E+00	3.637E-01
C-14	9.542E-01	0.000E+00	0.000E+00	6.794E+02	4.382E+01
Cm-243	9.310E-01	0.000E+00	0.000E+00	1.045E+00	6.738E-02
Cm-244	8.914E-01	0.000E+00	0.000E+00	1.000E+00	6.451E-02
Co-60	6.738E-01	0.000E+00	0.000E+00	3.019E+00	1.947E-01
Cs-134	3.648E-01	0.000E+00	0.000E+00	8.069E+00	5.204E-01
Cs-137	9.320E-01	0.000E+00	0.000E+00	2.062E+01	1.330E+00
Eu-152	8.570E-01	0.000E+00	0.000E+00	9.002E+00	5.806E-01
Eu-154	7.845E-01	0.000E+00	0.000E+00	8.240E+00	5.315E-01
Eu-155	6.457E-01	0.000E+00	0.000E+00	6.782E+00	4.374E-01
Fe-55	4.678E-01	0.000E+00	0.000E+00	1.637E-01	1.056E-02
Gd-152	4.978E-15	0.000E+00	0.000E+00	8.973E-15	5.787E-16
H-3	6.146E-01	0.000E+00	0.000E+00	3.006E+03	1.939E+02
Nb-94	9.985E-01	0.000E+00	0.000E+00	2.209E+01	1.425E+00
Nd-144	0.000E+00	0.000E+00	0.000E+00	5.614E-37	3.621E-38
Ni-59	9.989E-01	0.000E+00	0.000E+00	1.606E+01	1.036E+00
Ni-63	9.784E-01	0.000E+00	0.000E+00	1.573E+01	1.015E+00
Np-237	9.472E-01	0.000E+00	0.000E+00	7.864E+02	5.072E+01
Pa-231	9.371E-14	0.000E+00	0.000E+00	9.989E-12	6.443E-13
Pb-210	1.157E-15	0.000E+00	0.000E+00	3.019E-11	1.947E-12
Pm-147	4.523E-01	0.000E+00	0.000E+00	4.751E+00	3.064E-01
Po-210	6.388E-16	0.000E+00	0.000E+00	3.531E-11	2.277E-12
Pu-238	9.762E-01	0.000E+00	0.000E+00	5.604E+00	3.614E-01
Pu-239	9.997E-01	0.000E+00	0.000E+00	5.739E+00	3.702E-01
Pu-240	9.996E-01	0.000E+00	0.000E+00	5.739E+00	3.701E-01
Pu-241	8.648E-01	0.000E+00	0.000E+00	4.964E+00	3.202E-01
Ra-226	5.029E-14	0.000E+00	0.000E+00	2.994E-11	1.931E-12
Ra-228	7.252E-19	0.000E+00	0.000E+00	4.452E-19	2.872E-20
Sb-125	4.688E-01	0.000E+00	0.000E+00	2.725E+01	1.757E+00
Sm-147	1.354E-11	0.000E+00	0.000E+00	2.687E-11	1.733E-12
Sm-148	7.584E-31	0.000E+00	0.000E+00	6.986E-29	4.506E-30
Sr-90	9.064E-01	0.000E+00	0.000E+00	3.619E+02	2.334E+01
Tc-99	7.276E-01	0.000E+00	0.000E+00	3.558E+03	2.295E+02
Te-125m	1.122E-01	0.000E+00	0.000E+00	4.477E+02	2.888E+01
Th-228	1.635E-19	0.000E+00	0.000E+00	7.018E-20	4.527E-21
Th-229	1.817E-09	0.000E+00	0.000E+00	1.366E-05	8.813E-07
Th-230	1.159E-10	0.000E+00	0.000E+00	1.044E-10	6.731E-12
Th-232	6.569E-18	0.000E+00	0.000E+00	1.282E-18	8.267E-20
U-233	1.271E-05	0.000E+00	0.000E+00	3.081E-04	1.987E-05
U-234	8.367E-06	0.000E+00	0.000E+00	8.844E-05	5.705E-06
U-235	2.953E-09	0.000E+00	0.000E+00	3.109E-08	2.005E-09

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3





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Concentration of radionuclides in environmental media (cont.)

at t = 3.000E+00 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	8.875E-08	0.000E+00	0.000E+00	9.344E-07	6.027E-08

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 3.000E+00 years\*

Radio- Nuclide	Drinking	Nonleafy	Leafy	Fodder	Fodder	Meat	Milk	Fish	Crustacea
	Water	Vegetable	Vegetable	Meat	Milk				
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	9.285E-12	2.300E-12	1.840E-11	1.250E-11	1.250E-11	1.649E-14	2.747E-15	9.054E-12	6.034E-10
Ag-108m	3.649E+01	8.953E+00	7.219E+01	4.897E+01	4.897E+01	1.034E+01	5.113E+01	1.177E+01	1.812E+03
Am-241	5.639E+00	1.379E+00	1.116E+01	7.566E+00	7.566E+00	2.847E-02	2.661E-03	1.091E+01	3.637E+02
Am-243	5.639E+00	1.379E+00	1.116E+01	7.566E+00	7.566E+00	2.847E-02	2.661E-03	1.091E+01	3.637E+02
C-14	6.794E+02	5.148E+03	5.563E+02	7.090E+02	5.122E+02	2.747E+03	6.567E+02	2.192E+06	3.989E+05
Cm-243	1.045E+00	2.555E-01	2.067E+00	1.402E+00	1.402E+00	3.701E-03	5.700E-04	2.021E+00	6.738E+01
Cm-244	1.000E+00	2.446E-01	1.979E+00	1.342E+00	1.342E+00	3.544E-03	5.458E-04	1.935E+00	6.451E+01
Co-60	3.019E+00	7.707E-01	5.980E+00	4.063E+00	4.063E+00	1.553E+01	1.427E+00	5.842E+01	3.894E+01
Cs-134	8.069E+00	2.016E+00	1.597E+01	1.085E+01	1.085E+01	4.648E+01	1.667E+01	1.041E+03	5.205E+01
Cs-137	2.062E+01	5.151E+00	4.081E+01	2.770E+01	2.770E+01	1.188E+02	4.260E+01	2.660E+03	1.330E+02
Eu-152	9.002E+00	2.203E+00	1.781E+01	1.208E+01	1.208E+01	3.189E+00	6.638E-02	2.903E+01	5.806E+02
Eu-154	8.240E+00	2.016E+00	1.630E+01	1.106E+01	1.106E+01	2.919E+00	6.077E-02	2.658E+01	5.315E+02
Eu-155	6.782E+00	1.659E+00	1.342E+01	9.104E+00	9.104E+00	2.403E+00	5.001E-02	2.187E+01	4.374E+02
Fe-55	1.637E-01	4.005E-02	3.239E-01	2.198E-01	2.198E-01	5.655E-01	1.135E-02	2.112E+00	3.379E+01
Gd-152	9.012E-15	2.339E-15	1.791E-14	1.446E-14	1.446E-14	1.745E-15	8.930E-17	1.541E-14	5.964E-13
H-3	3.007E+03	2.445E+03	1.177E+03	8.169E+02	8.169E+02	1.434E+03	1.832E+03	1.943E+02	1.943E+02
Nb-94	2.209E+01	5.461E+00	4.371E+01	2.966E+01	2.966E+01	3.522E-03	1.043E-02	4.274E+02	1.425E+02
Nd-144	5.614E-37	1.373E-37	1.111E-36	7.533E-37	7.533E-37	9.945E-38	4.968E-39	3.621E-36	3.621E-35
Ni-59	1.606E+01	4.034E+00	3.179E+01	2.158E+01	2.158E+01	1.309E+01	7.586E+01	1.036E+02	1.036E+02
Ni-63	1.573E+01	3.951E+00	3.114E+01	2.114E+01	2.114E+01	1.283E+01	7.430E+01	1.015E+02	1.015E+02
Np-237	7.865E+02	1.945E+02	1.556E+03	1.058E+03	1.058E+03	6.974E+01	1.162E+00	1.522E+03	2.030E+04
Pa-231	1.001E-11	2.490E-12	1.984E-11	1.332E-11	1.332E-11	4.549E-15	7.456E-15	6.522E-12	7.170E-11
Pb-210	3.018E-11	7.381E-12	5.970E-11	4.046E-11	4.046E-11	2.137E-12	1.335E-12	5.828E-10	1.945E-10
Pm-147	4.751E+00	1.164E+00	9.400E+00	6.380E+00	6.380E+00	1.683E+00	7.708E-02	9.194E+00	3.065E+02
Po-210	3.524E-11	8.497E-12	6.959E-11	4.580E-11	4.580E-11	1.532E-11	2.036E-12	2.385E-10	4.368E-08
Pu-238	5.604E+00	1.371E+00	1.109E+01	7.519E+00	7.519E+00	5.460E-02	1.132E-03	1.084E+01	3.614E+01
Pu-239	5.739E+00	1.404E+00	1.135E+01	7.700E+00	7.700E+00	5.591E-02	1.160E-03	1.110E+01	3.702E+01
Pu-240	5.739E+00	1.404E+00	1.135E+01	7.700E+00	7.700E+00	5.591E-02	1.159E-03	1.110E+01	3.701E+01
Pu-241	4.964E+00	1.214E+00	9.821E+00	6.661E+00	6.661E+00	4.836E-02	1.003E-03	9.606E+00	3.202E+01
Ra-226	2.994E-11	7.479E-12	5.926E-11	4.019E-11	4.019E-11	2.652E-12	4.417E-12	9.651E-11	4.826E-10
Ra-228	4.698E-19	1.178E-19	9.775E-19	1.281E-18	1.281E-18	6.123E-20	1.131E-19	1.890E-18	9.452E-18
Sb-125	2.725E+01	6.729E+00	5.392E+01	3.661E+01	3.661E+01	4.466E+00	4.422E-01	1.758E+02	1.758E+01
Sm-147	2.694E-11	6.854E-12	5.345E-11	4.082E-11	4.082E-11	5.067E-12	2.580E-13	4.438E-11	1.767E-09
Sm-148	6.987E-29	1.713E-29	1.383E-28	9.452E-29	9.452E-29	1.242E-29	6.214E-31	1.128E-28	4.512E-27
Sr-90	3.619E+02	1.177E+02	7.225E+02	4.957E+02	4.957E+02	4.204E+02	1.459E+02	1.401E+03	2.335E+03
Tc-99	3.559E+03	5.282E+03	8.023E+03	6.312E+03	6.312E+03	5.741E+01	1.000E+03	4.600E+03	1.150E+03
Te-125m	4.427E+02	9.760E+01	8.674E+02	3.609E+02	3.609E+02	2.257E+02	2.476E+01	1.067E+04	2.000E+03
Th-228	6.850E-20	1.798E-20	1.324E-19	1.392E-19	1.392E-19	7.904E-22	1.775E-22	3.878E-19	1.939E-18
Th-229	1.366E-05	3.343E-06	2.703E-05	1.838E-05	1.838E-05	1.212E-07	1.010E-08	8.816E-05	4.408E-04
Th-230	1.065E-10	3.335E-11	2.149E-10	2.698E-10	2.698E-10	1.459E-12	2.505E-13	6.797E-10	3.408E-09
Th-232	1.438E-18	7.680E-19	3.150E-18	9.498E-18	9.498E-18	4.320E-20	1.094E-20	9.875E-18	4.994E-17
U-233	3.174E-04	1.098E-04	6.463E-04	9.885E-04	9.885E-04	3.606E-05	3.341E-05	3.254E-04	2.884E-03
U-234	8.843E-05	2.157E-05	1.749E-04	1.176E-04	1.176E-04	6.239E-06	5.187E-06	5.736E-05	3.426E-04
U-235	3.109E-08	7.584E-09	6.149E-08	4.134E-08	4.134E-08	2.194E-09	1.824E-09	2.017E-08	1.205E-07

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 3.000E+00 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	9.343E-07	2.279E-07	1.848E-06	1.242E-06	1.242E-06	6.592E-08	5.480E-08	6.062E-07	3.620E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 1.000E+01 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	1.022E-13	0.000E+00	0.000E+00	9.820E-12	6.334E-13
Ag-108m	9.757E-01	0.000E+00	0.000E+00	3.587E+01	2.313E+00
Am-241	9.955E-01	0.000E+00	0.000E+00	5.618E+00	3.623E-01
Am-243	9.978E-01	0.000E+00	0.000E+00	5.630E+00	3.632E-01
C-14	8.553E-01	0.000E+00	0.000E+00	6.090E+02	3.928E+01
Cm-243	7.879E-01	0.000E+00	0.000E+00	8.840E-01	5.702E-02
Cm-244	6.817E-01	0.000E+00	0.000E+00	7.649E-01	4.934E-02
Co-60	2.682E-01	0.000E+00	0.000E+00	1.202E+00	7.751E-02
Cs-134	3.467E-02	0.000E+00	0.000E+00	7.670E-01	4.947E-02
Cs-137	7.909E-01	0.000E+00	0.000E+00	1.750E+01	1.128E+00
Eu-152	5.979E-01	0.000E+00	0.000E+00	6.280E+00	4.051E-01
Eu-154	4.453E-01	0.000E+00	0.000E+00	4.678E+00	3.017E-01
Eu-155	2.327E-01	0.000E+00	0.000E+00	2.444E+00	1.576E-01
Fe-55	7.945E-02	0.000E+00	0.000E+00	2.781E-02	1.794E-03
Gd-152	1.400E-14	0.000E+00	0.000E+00	1.969E-14	1.270E-15
H-3	1.974E-01	0.000E+00	0.000E+00	9.652E+02	6.226E+01
Nb-94	9.949E-01	0.000E+00	0.000E+00	2.201E+01	1.420E+00
Nd-144	8.408E-45	0.000E+00	0.000E+00	5.609E-37	3.618E-38
Ni-59	9.964E-01	0.000E+00	0.000E+00	1.602E+01	1.033E+00
Ni-63	9.298E-01	0.000E+00	0.000E+00	1.495E+01	9.642E-01
Np-237	8.346E-01	0.000E+00	0.000E+00	6.930E+02	4.470E+01
Pa-231	1.040E-12	0.000E+00	0.000E+00	1.286E-11	8.298E-13
Pb-210	1.353E-13	0.000E+00	0.000E+00	3.070E-11	1.980E-12
Pm-147	7.104E-02	0.000E+00	0.000E+00	7.462E-01	4.813E-02
Po-210	1.104E-13	0.000E+00	0.000E+00	3.705E-11	2.390E-12
Pu-238	9.229E-01	0.000E+00	0.000E+00	5.298E+00	3.417E-01
Pu-239	9.990E-01	0.000E+00	0.000E+00	5.735E+00	3.699E-01
Pu-240	9.986E-01	0.000E+00	0.000E+00	5.733E+00	3.698E-01
Pu-241	6.161E-01	0.000E+00	0.000E+00	3.537E+00	2.281E-01
Ra-226	1.835E-12	0.000E+00	0.000E+00	3.086E-11	1.990E-12
Ra-228	2.224E-17	0.000E+00	0.000E+00	8.066E-18	5.203E-19
Sb-125	8.003E-02	0.000E+00	0.000E+00	4.652E+00	3.000E-01
Sm-147	2.297E-11	0.000E+00	0.000E+00	3.712E-11	2.394E-12
Sm-148	7.521E-30	0.000E+00	0.000E+00	4.874E-29	3.144E-30
Sr-90	7.206E-01	0.000E+00	0.000E+00	2.877E+02	1.856E+01
Tc-99	3.464E-01	0.000E+00	0.000E+00	1.694E+03	1.093E+02
Te-125m	1.915E-02	0.000E+00	0.000E+00	7.643E+01	4.930E+00
Th-228	1.165E-17	0.000E+00	0.000E+00	2.232E-18	1.439E-19
Th-229	1.936E-08	0.000E+00	0.000E+00	1.204E-05	7.769E-07
Th-230	1.263E-09	0.000E+00	0.000E+00	3.983E-10	2.569E-11
Th-232	7.293E-17	0.000E+00	0.000E+00	1.428E-17	9.210E-19
U-233	3.979E-05	0.000E+00	0.000E+00	5.021E-04	3.239E-05
U-234	2.711E-05	0.000E+00	0.000E+00	2.369E-04	1.528E-05
U-235	9.832E-09	0.000E+00	0.000E+00	8.560E-08	5.521E-09

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 1.000E+01 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	2.955E-07	0.000E+00	0.000E+00	2.573E-06	1.659E-07

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 1.000E+01 years\*

Radio- Nuclide	Drinking	Nonleafy	Leafy	Fodder	Fodder	Meat	Milk	Fish	Crustacea
	Water	Vegetable	Vegetable	Meat	Milk				
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	9.840E-12	2.430E-12	1.951E-11	1.316E-11	1.316E-11	1.742E-14	2.900E-15	9.617E-12	6.408E-10
Ag-108m	3.587E+01	8.800E+00	7.096E+01	4.814E+01	4.814E+01	1.017E+01	5.026E+01	1.157E+01	1.781E+03
Am-241	5.618E+00	1.374E+00	1.111E+01	7.537E+00	7.537E+00	2.836E-02	2.651E-03	1.087E+01	3.623E+02
Am-243	5.630E+00	1.377E+00	1.114E+01	7.554E+00	7.554E+00	2.843E-02	2.657E-03	1.089E+01	3.632E+02
C-14	6.090E+02	4.615E+03	4.986E+02	6.355E+02	4.591E+02	2.463E+03	5.886E+02	1.965E+06	3.576E+05
Cm-243	8.840E-01	2.162E-01	1.749E+00	1.186E+00	1.186E+00	3.132E-03	4.824E-04	1.711E+00	5.702E+01
Cm-244	7.649E-01	1.871E-01	1.513E+00	1.026E+00	1.026E+00	2.710E-03	4.174E-04	1.480E+00	4.934E+01
Co-60	1.202E+00	3.068E-01	2.380E+00	1.617E+00	1.617E+00	6.180E+00	5.680E-01	2.325E+01	1.550E+01
Cs-134	7.670E-01	1.916E-01	1.518E+00	1.031E+00	1.031E+00	4.418E+00	1.585E+00	9.895E+01	4.947E+00
Cs-137	1.750E+01	4.371E+00	3.463E+01	2.351E+01	2.351E+01	1.008E+02	3.615E+01	2.257E+03	1.129E+02
Eu-152	6.280E+00	1.537E+00	1.242E+01	8.428E+00	8.428E+00	2.225E+00	4.631E-02	2.025E+01	4.051E+02
Eu-154	4.678E+00	1.145E+00	9.254E+00	6.278E+00	6.278E+00	1.657E+00	3.449E-02	1.509E+01	3.017E+02
Eu-155	2.444E+00	5.980E-01	4.835E+00	3.280E+00	3.280E+00	8.658E-01	1.802E-02	7.882E+00	1.576E+02
Fe-55	2.781E-02	6.802E-03	5.501E-02	3.734E-02	3.734E-02	9.606E-02	1.928E-03	3.587E-01	5.740E+00
Gd-152	1.971E-14	4.916E-15	3.905E-14	2.810E-14	2.810E-14	3.596E-15	1.811E-16	3.240E-14	1.282E-12
H-3	9.655E+02	7.853E+02	3.781E+02	2.623E+02	2.623E+02	4.605E+02	5.883E+02	6.238E+01	6.238E+01
Nb-94	2.201E+01	5.441E+00	4.355E+01	2.955E+01	2.955E+01	3.510E-03	1.039E-02	4.259E+02	1.420E+02
Nd-144	5.609E-37	1.372E-37	1.110E-36	7.525E-37	7.525E-37	9.935E-38	4.963E-39	3.618E-36	3.618E-35
Ni-59	1.602E+01	4.024E+00	3.171E+01	2.153E+01	2.153E+01	1.306E+01	7.567E+01	1.033E+02	1.033E+02
Ni-63	1.495E+01	3.755E+00	2.959E+01	2.009E+01	2.009E+01	1.219E+01	7.061E+01	9.642E+01	9.642E+01
Np-237	6.930E+02	1.713E+02	1.371E+03	9.325E+02	9.325E+02	6.146E+01	1.024E+00	1.341E+03	1.788E+04
Pa-231	1.292E-11	3.263E-12	2.568E-11	1.735E-11	1.735E-11	6.087E-15	9.838E-15	8.524E-12	9.365E-11
Pb-210	3.070E-11	7.520E-12	6.072E-11	4.114E-11	4.114E-11	2.174E-12	1.357E-12	5.933E-10	1.980E-10
Pm-147	7.462E-01	1.828E-01	1.476E+00	1.002E+00	1.002E+00	2.644E-01	1.211E-02	1.444E+00	4.813E+01
Po-210	3.699E-11	8.958E-12	7.305E-11	4.772E-11	4.772E-11	1.603E-11	2.128E-12	2.501E-10	4.595E-08
Pu-238	5.298E+00	1.296E+00	1.048E+01	7.108E+00	7.108E+00	5.161E-02	1.070E-03	1.025E+01	3.417E+01
Pu-239	5.735E+00	1.403E+00	1.135E+01	7.695E+00	7.695E+00	5.587E-02	1.159E-03	1.110E+01	3.699E+01
Pu-240	5.733E+00	1.402E+00	1.134E+01	7.692E+00	7.692E+00	5.585E-02	1.158E-03	1.109E+01	3.698E+01
Pu-241	3.537E+00	8.651E-01	6.997E+00	4.746E+00	4.746E+00	3.446E-02	7.146E-04	6.844E+00	2.281E+01
Ra-226	3.086E-11	7.709E-12	6.107E-11	4.142E-11	4.142E-11	2.733E-12	4.552E-12	9.949E-11	4.975E-10
Ra-228	8.086E-18	2.053E-18	1.604E-17	1.062E-17	1.062E-17	7.104E-19	1.178E-18	2.651E-17	1.326E-16
Sb-125	4.652E+00	1.149E+00	9.205E+00	6.250E+00	6.250E+00	7.624E-01	7.549E-02	3.000E+01	3.000E+00
Sm-147	3.713E-11	9.124E-12	7.348E-11	5.055E-11	5.055E-11	6.623E-12	3.316E-13	6.002E-11	2.400E-09
Sm-148	4.875E-29	1.197E-29	9.647E-29	6.617E-29	6.617E-29	8.680E-30	4.344E-31	7.873E-29	3.149E-27
Sr-90	2.877E+02	9.360E+01	5.744E+02	3.941E+02	3.941E+02	3.342E+02	1.160E+02	1.114E+03	1.856E+03
Tc-99	1.695E+03	2.515E+03	3.820E+03	3.005E+03	3.005E+03	2.733E+01	4.762E+02	2.190E+03	5.475E+02
Te-125m	7.558E+01	1.666E+01	1.481E+02	6.161E+01	6.161E+01	3.853E+01	4.226E+00	1.822E+03	3.415E+02
Th-228	2.249E-18	5.879E-19	4.484E-18	3.101E-18	3.101E-18	2.090E-20	2.857E-21	1.494E-17	7.471E-17
Th-229	1.205E-05	2.947E-06	2.383E-05	1.621E-05	1.621E-05	1.068E-07	8.909E-09	7.771E-05	3.886E-04
Th-230	4.041E-10	1.186E-10	8.109E-10	8.902E-10	8.902E-10	4.985E-12	7.625E-13	2.589E-09	1.297E-08
Th-232	1.463E-17	4.764E-18	2.965E-17	3.988E-17	3.988E-17	2.115E-19	3.785E-20	9.390E-17	4.711E-16
U-233	5.103E-04	1.532E-04	1.026E-03	1.181E-03	1.181E-03	4.812E-05	4.305E-05	4.355E-04	3.434E-03
U-234	2.369E-04	5.790E-05	4.686E-04	3.168E-04	3.168E-04	1.676E-05	1.395E-05	1.531E-04	9.172E-04
U-235	8.559E-08	2.092E-08	1.693E-07	1.145E-07	1.145E-07	6.055E-09	5.039E-09	5.532E-08	3.314E-07

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.



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## Concentration of radionuclides in foodstuff media (cont.)

at t = 1.000E+01 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	2.572E-06	6.287E-07	5.089E-06	3.440E-06	3.440E-06	1.820E-07	1.514E-07	1.663E-06	9.960E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 5.280E+01 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	1.116E-11	0.000E+00	0.000E+00	2.305E-11	1.487E-12
Ag-108m	8.782E-01	0.000E+00	0.000E+00	3.228E+01	2.082E+00
Am-241	9.415E-01	0.000E+00	0.000E+00	5.313E+00	3.427E-01
Am-243	9.886E-01	0.000E+00	0.000E+00	5.578E+00	3.598E-01
C-14	4.382E-01	0.000E+00	0.000E+00	3.120E+02	2.013E+01
Cm-243	2.839E-01	0.000E+00	0.000E+00	3.186E-01	2.055E-02
Cm-244	1.322E-01	0.000E+00	0.000E+00	1.484E-01	9.569E-03
Co-60	9.605E-04	0.000E+00	0.000E+00	4.303E-03	2.776E-04
Cs-134	1.955E-08	0.000E+00	0.000E+00	4.325E-07	2.790E-08
Cs-137	2.898E-01	0.000E+00	0.000E+00	6.410E+00	4.135E-01
Eu-152	6.616E-02	0.000E+00	0.000E+00	6.949E-01	4.482E-02
Eu-154	1.397E-02	0.000E+00	0.000E+00	1.467E-01	9.461E-03
Eu-155	4.533E-04	0.000E+00	0.000E+00	4.761E-03	3.071E-04
Fe-55	1.558E-06	0.000E+00	0.000E+00	5.453E-07	3.517E-08
Gd-152	3.248E-14	0.000E+00	0.000E+00	4.164E-14	2.686E-15
H-3	1.901E-04	0.000E+00	0.000E+00	9.296E-01	5.996E-02
Nb-94	9.731E-01	0.000E+00	0.000E+00	2.153E+01	1.388E+00
Nd-144	7.497E-43	0.000E+00	0.000E+00	5.576E-37	3.596E-38
Ni-59	9.813E-01	0.000E+00	0.000E+00	1.578E+01	1.018E+00
Ni-63	6.811E-01	0.000E+00	0.000E+00	1.095E+01	7.062E-01
Np-237	3.850E-01	0.000E+00	0.000E+00	3.197E+02	2.062E+01
Pa-231	2.886E-11	0.000E+00	0.000E+00	8.681E-11	5.599E-12
Pb-210	7.698E-11	0.000E+00	0.000E+00	6.863E-11	4.427E-12
Pm-147	8.631E-07	0.000E+00	0.000E+00	9.065E-06	5.847E-07
Po-210	7.415E-11	0.000E+00	0.000E+00	4.454E-10	2.873E-11
Pu-238	6.545E-01	0.000E+00	0.000E+00	3.757E+00	2.423E-01
Pu-239	9.943E-01	0.000E+00	0.000E+00	5.708E+00	3.681E-01
Pu-240	9.903E-01	0.000E+00	0.000E+00	5.685E+00	3.667E-01
Pu-241	7.754E-02	0.000E+00	0.000E+00	4.451E-01	2.871E-02
Ra-226	2.469E-10	0.000E+00	0.000E+00	1.078E-10	6.955E-12
Ra-228	1.488E-15	0.000E+00	0.000E+00	4.380E-16	2.825E-17
Sb-125	1.619E-06	0.000E+00	0.000E+00	9.407E-05	6.068E-06
Sm-147	2.470E-11	0.000E+00	0.000E+00	3.898E-11	2.514E-12
Sm-148	1.193E-28	0.000E+00	0.000E+00	5.393E-30	3.479E-31
Sr-90	1.772E-01	0.000E+00	0.000E+00	7.076E+01	4.564E+00
Tc-99	3.707E-03	0.000E+00	0.000E+00	1.813E+01	1.169E+00
Te-125m	3.873E-07	0.000E+00	0.000E+00	1.546E-03	9.970E-05
Th-228	1.321E-15	0.000E+00	0.000E+00	2.375E-16	1.532E-17
Th-229	4.249E-07	0.000E+00	0.000E+00	5.614E-06	3.621E-07
Th-230	3.147E-08	0.000E+00	0.000E+00	6.060E-09	3.909E-10
Th-232	2.023E-15	0.000E+00	0.000E+00	3.564E-16	2.299E-17
U-233	1.473E-04	0.000E+00	0.000E+00	1.272E-03	8.204E-05
U-234	1.209E-04	0.000E+00	0.000E+00	9.801E-04	6.321E-05
U-235	5.161E-08	0.000E+00	0.000E+00	4.166E-07	2.687E-08

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 5.280E+01 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	1.549E-06	0.000E+00	0.000E+00	1.250E-05	8.063E-07

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 5.280E+01 years\*

Radio- Nuclide	Drinking	Nonleafy	Leafy	Fodder	Fodder	Meat	Milk	Fish	Crustacea
	Water	Vegetable	Vegetable	Meat	Milk				
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	2.307E-11	5.684E-12	4.566E-11	3.169E-11	3.169E-11	4.129E-14	6.907E-15	2.238E-11	1.490E-09
Ag-108m	3.228E+01	7.921E+00	6.387E+01	4.333E+01	4.333E+01	9.151E+00	4.524E+01	1.041E+01	1.603E+03
Am-241	5.313E+00	1.300E+00	1.051E+01	7.129E+00	7.129E+00	2.682E-02	2.508E-03	1.028E+01	3.427E+02
Am-243	5.578E+00	1.364E+00	1.104E+01	7.485E+00	7.485E+00	2.816E-02	2.633E-03	1.079E+01	3.598E+02
C-14	3.120E+02	2.364E+03	2.555E+02	3.256E+02	2.352E+02	1.262E+03	3.016E+02	1.007E+06	1.832E+05
Cm-243	3.186E-01	7.793E-02	6.303E-01	4.275E-01	4.275E-01	1.129E-03	1.739E-04	6.165E-01	2.055E+01
Cm-244	1.484E-01	3.629E-02	2.935E-01	1.991E-01	1.991E-01	5.256E-04	8.095E-05	2.871E-01	9.569E+00
Co-60	4.303E-03	1.099E-03	8.523E-03	5.791E-03	5.791E-03	2.213E-02	2.034E-03	8.327E-02	5.551E-02
Cs-134	4.325E-07	1.081E-07	8.561E-07	5.816E-07	5.816E-07	2.491E-06	8.937E-07	5.579E-05	2.790E-06
Cs-137	6.410E+00	1.602E+00	1.269E+01	8.613E+00	8.613E+00	3.693E+01	1.325E+01	8.269E+02	4.135E+01
Eu-152	6.949E-01	1.700E-01	1.375E+00	9.326E-01	9.326E-01	2.462E-01	5.125E-03	2.241E+00	4.482E+01
Eu-154	1.467E-01	3.589E-02	2.902E-01	1.969E-01	1.969E-01	5.197E-02	1.082E-03	4.731E-01	9.461E+00
Eu-155	4.761E-03	1.165E-03	9.419E-03	6.391E-03	6.391E-03	1.687E-03	3.511E-05	1.535E-02	3.071E-01
Fe-55	5.453E-07	1.334E-07	1.079E-06	7.322E-07	7.322E-07	1.884E-06	3.780E-08	7.035E-06	1.126E-04
Gd-152	4.164E-14	1.020E-14	8.239E-14	5.605E-14	5.605E-14	7.388E-15	3.692E-16	6.721E-14	2.687E-12
H-3	9.299E-01	7.563E-01	3.641E-01	2.527E-01	2.527E-01	4.435E-01	5.666E-01	6.008E-02	6.008E-02
Nb-94	2.153E+01	5.322E+00	4.260E+01	2.890E+01	2.890E+01	3.433E-03	1.016E-02	4.165E+02	1.388E+02
Nd-144	5.576E-37	1.364E-37	1.103E-36	7.481E-37	7.481E-37	9.877E-38	4.933E-39	3.596E-36	3.596E-35
Ni-59	1.578E+01	3.963E+00	3.123E+01	2.120E+01	2.120E+01	1.286E+01	7.452E+01	1.018E+02	1.018E+02
Ni-63	1.095E+01	2.750E+00	2.168E+01	1.471E+01	1.471E+01	8.928E+00	5.172E+01	7.062E+01	7.062E+01
Np-237	3.197E+02	7.904E+01	6.327E+02	4.302E+02	4.302E+02	2.835E+01	4.723E-01	6.188E+02	8.251E+03
Pa-231	8.686E-11	2.149E-11	1.719E-10	1.190E-10	1.190E-10	4.053E-14	6.628E-14	5.619E-11	6.176E-10
Pb-210	6.861E-11	1.683E-11	1.357E-10	9.170E-11	9.170E-11	4.853E-12	3.029E-12	1.326E-09	4.428E-10
Pm-147	9.066E-06	2.220E-06	1.794E-05	1.217E-05	1.217E-05	3.212E-06	1.471E-07	1.754E-05	5.847E-04
Po-210	4.433E-10	1.023E-10	8.728E-10	4.878E-10	4.878E-10	1.802E-10	2.325E-11	2.812E-09	5.533E-07
Pu-238	3.757E+00	9.189E-01	7.433E+00	5.041E+00	5.041E+00	3.660E-02	7.591E-04	7.270E+00	2.423E+01
Pu-239	5.708E+00	1.396E+00	1.129E+01	7.658E+00	7.658E+00	5.561E-02	1.153E-03	1.104E+01	3.681E+01
Pu-240	5.685E+00	1.390E+00	1.125E+01	7.628E+00	7.628E+00	5.539E-02	1.149E-03	1.100E+01	3.667E+01
Pu-241	4.451E-01	1.089E-01	8.805E-01	5.973E-01	5.973E-01	4.336E-03	8.993E-05	8.612E-01	2.871E+00
Ra-226	1.078E-10	2.694E-11	2.134E-10	1.445E-10	1.445E-10	9.545E-12	1.589E-11	3.477E-10	1.739E-09
Ra-228	4.379E-16	1.092E-16	8.667E-16	5.841E-16	5.841E-16	3.868E-17	6.434E-17	1.413E-15	7.066E-15
Sb-125	9.407E-05	2.323E-05	1.862E-04	1.264E-04	1.264E-04	1.542E-05	1.527E-06	6.068E-04	6.068E-05
Sm-147	3.898E-11	9.536E-12	7.712E-11	5.231E-11	5.231E-11	6.906E-12	3.450E-13	6.286E-11	2.514E-09
Sm-148	5.405E-30	1.364E-30	1.072E-29	7.982E-30	7.982E-30	1.001E-30	5.079E-32	8.833E-30	3.533E-28
Sr-90	7.076E+01	2.302E+01	1.413E+02	9.692E+01	9.692E+01	8.220E+01	2.852E+01	2.739E+02	4.565E+02
Tc-99	1.813E+01	2.691E+01	4.088E+01	3.216E+01	3.216E+01	2.925E-01	5.096E+00	2.343E+01	5.858E+00
Te-125m	1.529E-03	3.370E-04	2.995E-03	1.246E-03	1.246E-03	7.792E-04	8.548E-05	3.684E-02	6.906E-03
Th-228	2.376E-16	5.874E-17	4.704E-16	3.286E-16	3.286E-16	2.168E-18	2.421E-19	1.529E-15	7.645E-15
Th-229	5.615E-06	1.375E-06	1.111E-05	7.571E-06	7.571E-06	4.986E-08	4.174E-09	3.623E-05	1.811E-04
Th-230	6.084E-09	1.570E-09	1.208E-08	9.617E-09	9.617E-09	5.975E-11	6.415E-12	3.918E-08	1.960E-07
Th-232	3.580E-16	9.322E-17	7.115E-16	5.798E-16	5.798E-16	3.572E-18	3.960E-19	2.304E-15	1.153E-14
U-233	1.276E-03	3.252E-04	2.531E-03	1.940E-03	1.940E-03	9.591E-05	8.123E-05	8.719E-04	5.610E-03
U-234	9.800E-04	2.397E-04	1.939E-03	1.314E-03	1.314E-03	6.943E-05	5.780E-05	6.324E-04	3.793E-03
U-235	4.165E-07	1.019E-07	8.241E-07	5.585E-07	5.585E-07	2.951E-08	2.456E-08	2.688E-07	1.612E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 5.280E+01 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	1.250E-05	3.057E-06	2.473E-05	1.676E-05	1.676E-05	8.855E-07	7.371E-07	8.066E-06	4.838E-05

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 1.000E+02 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	5.782E-11	0.000E+00	0.000E+00	8.079E-11	5.211E-12
Ag-108m	7.820E-01	0.000E+00	0.000E+00	2.874E+01	1.854E+00
Am-241	8.700E-01	0.000E+00	0.000E+00	4.910E+00	3.167E-01
Am-243	9.785E-01	0.000E+00	0.000E+00	5.521E+00	3.561E-01
C-14	2.096E-01	0.000E+00	0.000E+00	1.492E+02	9.626E+00
Cm-243	9.214E-02	0.000E+00	0.000E+00	1.034E-01	6.669E-03
Cm-244	2.167E-02	0.000E+00	0.000E+00	2.431E-02	1.568E-03
Co-60	1.928E-06	0.000E+00	0.000E+00	8.636E-06	5.570E-07
Cs-134	2.511E-15	0.000E+00	0.000E+00	5.556E-14	3.583E-15
Cs-137	9.576E-02	0.000E+00	0.000E+00	2.118E+00	1.366E-01
Eu-152	5.839E-03	0.000E+00	0.000E+00	6.133E-02	3.955E-03
Eu-154	3.068E-04	0.000E+00	0.000E+00	3.223E-03	2.079E-04
Eu-155	4.649E-07	0.000E+00	0.000E+00	4.883E-06	3.150E-07
Fe-55	1.003E-11	0.000E+00	0.000E+00	3.509E-12	2.263E-13
Gd-152	3.454E-14	0.000E+00	0.000E+00	4.408E-14	2.843E-15
H-3	8.965E-08	0.000E+00	0.000E+00	4.384E-04	2.828E-05
Nb-94	9.497E-01	0.000E+00	0.000E+00	2.101E+01	1.355E+00
Nd-144	3.561E-42	0.000E+00	0.000E+00	5.539E-37	3.573E-38
Ni-59	9.649E-01	0.000E+00	0.000E+00	1.551E+01	1.001E+00
Ni-63	4.831E-01	0.000E+00	0.000E+00	7.767E+00	5.009E-01
Np-237	1.641E-01	0.000E+00	0.000E+00	1.362E+02	8.785E+00
Pa-231	1.029E-10	0.000E+00	0.000E+00	2.853E-10	1.840E-11
Pb-210	7.311E-10	0.000E+00	0.000E+00	3.541E-10	2.284E-11
Pm-147	3.275E-12	0.000E+00	0.000E+00	3.440E-11	2.219E-12
Po-210	7.177E-10	0.000E+00	0.000E+00	3.839E-09	2.476E-10
Pu-238	4.480E-01	0.000E+00	0.000E+00	2.572E+00	1.659E-01
Pu-239	9.886E-01	0.000E+00	0.000E+00	5.675E+00	3.661E-01
Pu-240	9.798E-01	0.000E+00	0.000E+00	5.625E+00	3.628E-01
Pu-241	7.885E-03	0.000E+00	0.000E+00	4.526E-02	2.919E-03
Ra-226	1.526E-09	0.000E+00	0.000E+00	4.828E-10	3.114E-11
Ra-228	6.122E-15	0.000E+00	0.000E+00	1.766E-15	1.139E-16
Sb-125	1.077E-11	0.000E+00	0.000E+00	6.263E-10	4.040E-11
Sm-147	2.466E-11	0.000E+00	0.000E+00	3.894E-11	2.511E-12
Sm-148	2.775E-28	0.000E+00	0.000E+00	4.759E-31	3.070E-32
Sr-90	3.773E-02	0.000E+00	0.000E+00	1.506E+01	9.717E-01
Tc-99	2.488E-05	0.000E+00	0.000E+00	1.217E-01	7.848E-03
Te-125m	2.579E-12	0.000E+00	0.000E+00	1.029E-08	6.638E-10
Th-228	5.770E-15	0.000E+00	0.000E+00	1.015E-15	6.547E-17
Th-229	1.210E-06	0.000E+00	0.000E+00	2.742E-06	1.769E-07
Th-230	1.004E-07	0.000E+00	0.000E+00	1.824E-08	1.176E-09
Th-232	7.214E-15	0.000E+00	0.000E+00	1.250E-15	8.064E-17
U-233	1.991E-04	0.000E+00	0.000E+00	1.642E-03	1.059E-04
U-234	1.922E-04	0.000E+00	0.000E+00	1.545E-03	9.964E-05
U-235	9.708E-08	0.000E+00	0.000E+00	7.768E-07	5.010E-08

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3



concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 1.000E+02 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	2.907E-06	0.000E+00	0.000E+00	2.326E-05	1.500E-06

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

Concent : RESRAD Default

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Concentration of radionuclides in foodstuff media  
at t = 1.000E+02 years\*

Radio- Nuclide	Drinking	Nonleafy	Leafy	Fodder	Fodder	Meat	Milk	Fish	Crustacea
	Water	Vegetable	Vegetable	Meat	Milk				
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	8.079E-11	1.978E-11	1.598E-10	1.090E-10	1.090E-10	1.435E-13	2.393E-14	7.811E-11	5.201E-09
Ag-108m	2.874E+01	7.053E+00	5.687E+01	3.858E+01	3.858E+01	8.148E+00	4.028E+01	9.270E+00	1.428E+03
Am-241	4.910E+00	1.201E+00	9.713E+00	6.587E+00	6.587E+00	2.479E-02	2.317E-03	9.500E+00	3.167E+02
Am-243	5.521E+00	1.351E+00	1.092E+01	7.408E+00	7.408E+00	2.788E-02	2.606E-03	1.068E+01	3.561E+02
C-14	1.492E+02	1.131E+03	1.222E+02	1.557E+02	1.125E+02	6.035E+02	1.442E+02	4.814E+05	8.762E+04
Cm-243	1.034E-01	2.529E-02	2.045E-01	1.387E-01	1.387E-01	3.663E-04	5.642E-05	2.001E-01	6.669E+00
Cm-244	2.431E-02	5.946E-03	4.810E-02	3.262E-02	3.262E-02	8.613E-05	1.327E-05	4.704E-02	1.568E+00
Co-60	8.636E-06	2.205E-06	1.711E-05	1.162E-05	1.162E-05	4.441E-05	4.082E-06	1.671E-04	1.114E-04
Cs-134	5.556E-14	1.388E-14	1.100E-13	7.471E-14	7.471E-14	3.200E-13	1.148E-13	7.167E-12	3.584E-13
Cs-137	2.118E+00	5.292E-01	4.193E+00	2.846E+00	2.846E+00	1.220E+01	4.377E+00	2.733E+02	1.366E+01
Eu-152	6.133E-02	1.501E-02	1.213E-01	8.230E-02	8.230E-02	2.173E-02	4.522E-04	1.978E-01	3.955E+00
Eu-154	3.223E-03	7.885E-04	6.375E-03	4.325E-03	4.325E-03	1.142E-03	2.376E-05	1.039E-02	2.079E-01
Eu-155	4.883E-06	1.195E-06	9.661E-06	6.555E-06	6.555E-06	1.730E-06	3.601E-08	1.575E-05	3.150E-04
Fe-55	3.509E-12	8.583E-13	6.942E-12	4.711E-12	4.711E-12	1.212E-11	2.432E-13	4.527E-11	7.243E-10
Gd-152	4.408E-14	1.078E-14	8.720E-14	5.916E-14	5.916E-14	7.809E-15	3.901E-16	7.108E-14	2.843E-12
H-3	4.386E-04	3.567E-04	1.717E-04	1.192E-04	1.192E-04	2.092E-04	2.672E-04	2.834E-05	2.834E-05
Nb-94	2.101E+01	5.194E+00	4.157E+01	2.821E+01	2.821E+01	3.350E-03	9.919E-03	4.065E+02	1.355E+02
Nd-144	5.539E-37	1.355E-37	1.096E-36	7.432E-37	7.432E-37	9.813E-38	4.902E-39	3.573E-36	3.573E-35
Ni-59	1.551E+01	3.897E+00	3.071E+01	2.085E+01	2.085E+01	1.265E+01	7.328E+01	1.001E+02	1.001E+02
Ni-63	7.767E+00	1.951E+00	1.538E+01	1.044E+01	1.044E+01	6.333E+00	3.669E+01	5.009E+01	5.009E+01
Np-237	1.362E+02	3.368E+01	2.696E+02	1.833E+02	1.833E+02	1.208E+01	2.012E-01	2.637E+02	3.515E+03
Pa-231	2.853E-10	7.016E-11	5.645E-10	3.845E-10	3.845E-10	1.298E-13	2.136E-13	1.840E-10	2.023E-09
Pb-210	3.540E-10	8.660E-11	7.004E-10	4.736E-10	4.736E-10	2.505E-11	1.564E-11	6.841E-09	2.285E-09
Pm-147	3.440E-11	8.426E-12	6.806E-11	4.620E-11	4.620E-11	1.219E-11	5.581E-13	6.657E-11	2.219E-09
Po-210	3.821E-09	8.752E-10	7.524E-09	4.168E-09	4.168E-09	1.549E-09	1.995E-10	2.412E-08	4.776E-06
Pu-238	2.572E+00	6.291E-01	5.088E+00	3.451E+00	3.451E+00	2.506E-02	5.196E-04	4.977E+00	1.659E+01
Pu-239	5.675E+00	1.388E+00	1.123E+01	7.615E+00	7.615E+00	5.529E-02	1.147E-03	1.098E+01	3.661E+01
Pu-240	5.625E+00	1.376E+00	1.113E+01	7.547E+00	7.547E+00	5.480E-02	1.137E-03	1.088E+01	3.628E+01
Pu-241	4.526E-02	1.107E-02	8.954E-02	6.074E-02	6.074E-02	4.410E-04	9.145E-06	8.758E-02	2.919E-01
Ra-226	4.828E-10	1.206E-10	9.556E-10	6.476E-10	6.476E-10	4.275E-11	7.119E-11	1.557E-09	7.785E-09
Ra-228	1.766E-15	4.401E-16	3.495E-15	2.356E-15	2.356E-15	1.560E-16	2.595E-16	5.698E-15	2.849E-14
Sb-125	6.263E-10	1.547E-10	1.239E-09	8.415E-10	8.415E-10	1.027E-10	1.016E-11	4.040E-09	4.040E-10
Sm-147	3.894E-11	9.524E-12	7.703E-11	5.224E-11	5.224E-11	6.897E-12	3.445E-13	6.278E-11	2.511E-09
Sm-148	4.880E-31	1.605E-31	9.891E-31	1.380E-30	1.380E-30	1.296E-31	7.263E-33	9.031E-31	3.612E-29
Sr-90	1.506E+01	4.901E+00	3.007E+01	2.064E+01	2.064E+01	1.750E+01	6.073E+00	5.831E+01	9.718E+01
Tc-99	1.217E-01	1.806E-01	2.743E-01	2.158E-01	2.158E-01	1.963E-03	3.420E-02	1.573E-01	3.932E-02
Te-125m	1.018E-08	2.243E-09	1.994E-08	8.295E-09	8.295E-09	5.188E-09	5.690E-10	2.452E-07	4.598E-08
Th-228	1.016E-15	2.507E-16	2.011E-15	1.402E-15	1.402E-15	9.254E-18	1.019E-18	6.537E-15	3.268E-14
Th-229	2.743E-06	6.724E-07	5.427E-06	3.713E-06	3.713E-06	2.442E-08	2.059E-09	1.769E-05	8.848E-05
Th-230	1.828E-08	4.598E-09	3.623E-08	2.681E-08	2.681E-08	1.711E-10	1.652E-11	1.178E-07	5.890E-07
Th-232	1.253E-15	3.168E-16	2.485E-15	1.866E-15	1.866E-15	1.185E-17	1.170E-18	8.073E-15	4.038E-14
U-233	1.643E-03	4.075E-04	3.254E-03	2.302E-03	2.302E-03	1.188E-04	9.948E-05	1.081E-03	6.646E-03
U-234	1.545E-03	3.778E-04	3.056E-03	2.072E-03	2.072E-03	1.094E-04	9.111E-05	9.965E-04	5.978E-03
U-235	7.768E-07	1.900E-07	1.537E-06	1.042E-06	1.042E-06	5.503E-08	4.581E-08	5.011E-07	3.006E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 1.000E+02 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	2.326E-05	5.689E-06	4.602E-05	3.120E-05	3.120E-05	1.648E-06	1.372E-06	1.501E-05	9.002E-05

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 3.000E+02 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	7.360E-10	0.000E+00	0.000E+00	9.094E-10	5.866E-11
Ag-108m	4.782E-01	0.000E+00	0.000E+00	1.758E+01	1.134E+00
Am-241	6.162E-01	0.000E+00	0.000E+00	3.477E+00	2.243E-01
Am-243	9.370E-01	0.000E+00	0.000E+00	5.287E+00	3.410E-01
C-14	9.209E-03	0.000E+00	0.000E+00	6.557E+00	4.229E-01
Cm-243	7.824E-04	0.000E+00	0.000E+00	8.779E-04	5.663E-05
Cm-244	1.017E-05	0.000E+00	0.000E+00	1.141E-05	7.362E-07
Co-60	7.163E-18	0.000E+00	0.000E+00	3.209E-17	2.070E-18
Cs-134	1.541E-44	0.000E+00	0.000E+00	3.405E-43	2.242E-44
Cs-137	8.782E-04	0.000E+00	0.000E+00	1.943E-02	1.253E-03
Eu-152	1.990E-07	0.000E+00	0.000E+00	2.091E-06	1.348E-07
Eu-154	2.888E-11	0.000E+00	0.000E+00	3.034E-10	1.957E-11
Eu-155	1.005E-19	0.000E+00	0.000E+00	1.055E-18	6.808E-20
Fe-55	1.008E-33	0.000E+00	0.000E+00	3.528E-34	2.275E-35
Gd-152	3.456E-14	0.000E+00	0.000E+00	4.409E-14	2.844E-15
H-3	7.205E-22	0.000E+00	0.000E+00	3.524E-18	2.273E-19
Nb-94	8.565E-01	0.000E+00	0.000E+00	1.895E+01	1.222E+00
Nd-144	4.053E-41	0.000E+00	0.000E+00	5.389E-37	3.476E-38
Ni-59	8.984E-01	0.000E+00	0.000E+00	1.444E+01	9.316E-01
Ni-63	1.128E-01	0.000E+00	0.000E+00	1.813E+00	1.169E-01
Np-237	4.427E-03	0.000E+00	0.000E+00	3.675E+00	2.371E-01
Pa-231	9.037E-10	0.000E+00	0.000E+00	2.403E-09	1.550E-10
Pb-210	2.228E-08	0.000E+00	0.000E+00	9.515E-09	6.137E-10
Pm-147	3.514E-35	0.000E+00	0.000E+00	3.691E-34	2.381E-35
Po-210	2.217E-08	0.000E+00	0.000E+00	1.146E-07	7.390E-09
Pu-238	8.994E-02	0.000E+00	0.000E+00	5.163E-01	3.330E-02
Pu-239	9.642E-01	0.000E+00	0.000E+00	5.535E+00	3.570E-01
Pu-240	9.357E-01	0.000E+00	0.000E+00	5.372E+00	3.465E-01
Pu-241	4.902E-07	0.000E+00	0.000E+00	2.814E-06	1.815E-07
Ra-226	2.895E-08	0.000E+00	0.000E+00	8.369E-09	5.398E-10
Ra-228	5.990E-14	0.000E+00	0.000E+00	1.703E-14	1.098E-15
Sb-125	1.251E-33	0.000E+00	0.000E+00	7.272E-32	4.690E-33
Sm-147	2.453E-11	0.000E+00	0.000E+00	3.873E-11	2.498E-12
Sm-148	9.600E-28	0.000E+00	0.000E+00	1.623E-35	1.047E-36
Sr-90	5.371E-05	0.000E+00	0.000E+00	2.145E-02	1.383E-03
Tc-99	1.540E-14	0.000E+00	0.000E+00	7.531E-11	4.858E-12
Te-125m	2.994E-34	0.000E+00	0.000E+00	1.195E-30	7.707E-32
Th-228	5.880E-14	0.000E+00	0.000E+00	1.018E-14	6.569E-16
Th-229	5.378E-06	0.000E+00	0.000E+00	1.008E-06	6.502E-08
Th-230	5.905E-07	0.000E+00	0.000E+00	1.028E-07	6.631E-09
Th-232	6.324E-14	0.000E+00	0.000E+00	1.082E-14	6.977E-16
U-233	2.296E-04	0.000E+00	0.000E+00	1.853E-03	1.195E-04
U-234	3.087E-04	0.000E+00	0.000E+00	2.468E-03	1.592E-04
U-235	2.828E-07	0.000E+00	0.000E+00	2.248E-06	1.450E-07

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3





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Concentration of radionuclides in environmental media (cont.)

at t = 3.000E+02 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	8.379E-06	0.000E+00	0.000E+00	6.662E-05	4.297E-06

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

Concent : RESRAD Default

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Concentration of radionuclides in foodstuff media  
at t = 3.000E+02 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	9.095E-10	2.227E-10	1.799E-09	1.227E-09	1.227E-09	1.615E-12	2.692E-13	8.800E-10	5.861E-08
Ag-108m	1.758E+01	4.313E+00	3.478E+01	2.359E+01	2.359E+01	4.983E+00	2.463E+01	5.669E+00	8.730E+02
Am-241	3.477E+00	8.505E-01	6.879E+00	4.666E+00	4.666E+00	1.756E-02	1.641E-03	6.729E+00	2.243E+02
Am-243	5.287E+00	1.293E+00	1.046E+01	7.094E+00	7.094E+00	2.669E-02	2.495E-03	1.023E+01	3.410E+02
C-14	6.557E+00	4.969E+01	5.369E+00	6.843E+00	4.943E+00	2.652E+01	6.338E+00	2.115E+04	3.850E+03
Cm-243	8.779E-04	2.147E-04	1.737E-03	1.178E-03	1.178E-03	3.110E-06	4.791E-07	1.699E-03	5.663E-02
Cm-244	1.141E-05	2.792E-06	2.258E-05	1.531E-05	1.531E-05	4.044E-08	6.228E-09	2.208E-05	7.362E-04
Co-60	3.209E-17	8.193E-18	6.357E-17	4.319E-17	4.319E-17	1.650E-16	1.517E-17	6.210E-16	4.140E-16
Cs-134	3.405E-43	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.455E-41	2.228E-42
Cs-137	1.943E-02	4.854E-03	3.846E-02	2.610E-02	2.610E-02	1.119E-01	4.014E-02	2.506E+00	1.253E-01
Eu-152	2.091E-06	5.115E-07	4.136E-06	2.806E-06	2.806E-06	7.407E-07	1.542E-08	6.742E-06	1.348E-04
Eu-154	3.034E-10	7.423E-11	6.001E-10	4.071E-10	4.071E-10	1.075E-10	2.237E-12	9.783E-10	1.957E-08
Eu-155	1.055E-18	2.583E-19	2.088E-18	1.417E-18	1.417E-18	3.739E-19	7.783E-21	3.404E-18	6.808E-17
Fe-55	3.528E-34	8.629E-35	6.979E-34	4.736E-34	4.736E-34	1.219E-33	2.445E-35	4.551E-33	7.281E-32
Gd-152	4.409E-14	1.079E-14	8.723E-14	5.916E-14	5.916E-14	7.810E-15	3.901E-16	7.109E-14	2.844E-12
H-3	3.525E-18	2.867E-18	1.380E-18	9.577E-19	9.577E-19	1.681E-18	2.148E-18	2.277E-19	2.277E-19
Nb-94	1.895E+01	4.685E+00	3.750E+01	2.544E+01	2.544E+01	3.022E-03	8.946E-03	3.667E+02	1.222E+02
Nd-144	5.389E-37	1.318E-37	1.066E-36	7.231E-37	7.231E-37	9.547E-38	4.770E-39	3.476E-36	3.476E-35
Ni-59	1.444E+01	3.628E+00	2.860E+01	1.941E+01	1.941E+01	1.178E+01	6.823E+01	9.316E+01	9.316E+01
Ni-63	1.813E+00	4.554E-01	3.589E+00	2.436E+00	2.436E+00	1.478E+00	8.564E+00	1.169E+01	1.169E+01
Np-237	3.676E+00	9.088E-01	7.274E+00	4.946E+00	4.946E+00	3.260E-01	5.430E-03	7.115E+00	9.486E+01
Pa-231	2.403E-09	5.908E-10	4.755E-09	3.230E-09	3.230E-09	1.074E-12	1.782E-12	1.550E-09	1.705E-08
Pb-210	9.514E-09	2.329E-09	1.882E-08	1.275E-08	1.275E-08	6.737E-10	4.206E-10	1.840E-07	6.140E-08
Pm-147	3.691E-34	9.040E-35	7.302E-34	4.956E-34	4.956E-34	1.308E-34	5.988E-36	7.142E-34	2.381E-32
Po-210	1.140E-07	2.614E-08	2.246E-07	1.246E-07	1.246E-07	4.625E-08	5.958E-09	7.197E-07	1.427E-04
Pu-238	5.163E-01	1.263E-01	1.021E+00	6.928E-01	6.928E-01	5.030E-03	1.043E-04	9.991E-01	3.330E+00
Pu-239	5.535E+00	1.354E+00	1.095E+01	7.427E+00	7.427E+00	5.393E-02	1.118E-03	1.071E+01	3.570E+01
Pu-240	5.372E+00	1.314E+00	1.063E+01	7.208E+00	7.208E+00	5.234E-02	1.085E-03	1.040E+01	3.465E+01
Pu-241	2.814E-06	6.883E-07	5.568E-06	3.776E-06	3.776E-06	2.742E-08	5.686E-10	5.446E-06	1.815E-05
Ra-226	8.369E-09	2.091E-09	1.657E-08	1.124E-08	1.124E-08	7.415E-10	1.235E-09	2.699E-08	1.350E-07
Ra-228	1.703E-14	4.246E-15	3.370E-14	2.274E-14	2.274E-14	1.505E-15	2.503E-15	5.495E-14	2.747E-13
Sb-125	7.272E-32	1.796E-32	1.439E-31	9.770E-32	9.770E-32	1.192E-32	1.180E-33	4.690E-31	4.690E-32
Sm-147	3.873E-11	9.475E-12	7.663E-11	5.197E-11	5.197E-11	6.861E-12	3.427E-13	6.246E-11	2.498E-09
Sm-148	1.197E-32	4.386E-32	4.733E-32	7.377E-31	7.377E-31	4.508E-32	3.035E-33	1.349E-31	5.398E-30
Sr-90	2.145E-02	6.977E-03	4.281E-02	2.938E-02	2.938E-02	2.491E-02	8.646E-03	8.301E-02	1.384E-01
Tc-99	7.533E-11	1.118E-10	1.698E-10	1.336E-10	1.336E-10	1.215E-12	2.117E-11	9.735E-11	2.434E-11
Te-125m	1.182E-30	2.604E-31	2.315E-30	9.631E-31	9.631E-31	6.023E-31	6.607E-32	2.847E-29	5.338E-30
Th-228	1.019E-14	2.515E-15	2.018E-14	1.406E-14	1.406E-14	9.276E-17	1.012E-17	6.561E-14	3.281E-13
Th-229	1.009E-06	2.482E-07	1.996E-06	1.382E-06	1.382E-06	9.047E-09	7.813E-10	6.504E-06	3.252E-05
Th-230	1.029E-07	2.536E-08	2.036E-07	1.417E-07	1.417E-07	9.259E-10	8.072E-11	6.634E-07	3.317E-06
Th-232	1.083E-14	2.677E-15	2.144E-14	1.506E-14	1.506E-14	9.803E-17	8.687E-18	6.981E-14	3.491E-13
U-233	1.853E-03	4.535E-04	3.667E-03	2.489E-03	2.489E-03	1.314E-04	1.094E-04	1.196E-03	7.180E-03
U-234	2.468E-03	6.037E-04	4.882E-03	3.311E-03	3.311E-03	1.749E-04	1.456E-04	1.592E-03	9.551E-03
U-235	2.248E-06	5.499E-07	4.447E-06	3.016E-06	3.016E-06	1.593E-07	1.326E-07	1.450E-06	8.700E-06

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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## Concentration of radionuclides in foodstuff media (cont.)

at t = 3.000E+02 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	6.662E-05	1.630E-05	1.318E-04	8.938E-05	8.938E-05	4.720E-06	3.930E-06	4.297E-05	2.578E-04

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in environmental media  
at t = 1.000E+03 years

Radio- Nuclide	Contaminat-	Surface	Air Par-	Well	Surface
	ted Zone	Soil*	ticulate	Water	Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
Ac-227	8.664E-09	0.000E+00	0.000E+00	1.055E-08	6.803E-10
Ag-108m	8.550E-02	0.000E+00	0.000E+00	3.142E+00	2.027E-01
Am-241	1.840E-01	0.000E+00	0.000E+00	1.038E+00	6.695E-02
Am-243	8.049E-01	0.000E+00	0.000E+00	4.541E+00	2.929E-01
C-14	1.637E-07	0.000E+00	0.000E+00	1.165E-04	7.515E-06
Cm-243	4.413E-11	0.000E+00	0.000E+00	4.950E-11	3.193E-12
Cm-244	2.280E-17	0.000E+00	0.000E+00	2.557E-17	1.650E-18
Co-60	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cs-134	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cs-137	6.485E-11	0.000E+00	0.000E+00	1.434E-09	9.251E-11
Eu-152	4.603E-23	0.000E+00	0.000E+00	4.833E-22	3.118E-23
Eu-154	7.389E-36	0.000E+00	0.000E+00	7.759E-35	5.005E-36
Eu-155	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Fe-55	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Gd-152	3.393E-14	0.000E+00	0.000E+00	4.327E-14	2.791E-15
H-3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Nb-94	5.968E-01	0.000E+00	0.000E+00	1.320E+01	8.513E-01
Nd-144	4.717E-40	0.000E+00	0.000E+00	4.892E-37	3.156E-38
Ni-59	6.997E-01	0.000E+00	0.000E+00	1.124E+01	7.253E-01
Ni-63	6.927E-04	0.000E+00	0.000E+00	1.113E-02	7.181E-04
Np-237	3.652E-06	0.000E+00	0.000E+00	3.029E-03	1.954E-04
Pa-231	9.198E-09	0.000E+00	0.000E+00	2.425E-08	1.564E-09
Pb-210	4.256E-07	0.000E+00	0.000E+00	1.796E-07	1.159E-08
Pm-147	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Po-210	4.251E-07	0.000E+00	0.000E+00	2.181E-06	1.407E-07
Pu-238	3.260E-04	0.000E+00	0.000E+00	1.871E-03	1.207E-04
Pu-239	8.823E-01	0.000E+00	0.000E+00	5.064E+00	3.266E-01
Pu-240	7.962E-01	0.000E+00	0.000E+00	4.570E+00	2.948E-01
Pu-241	9.289E-22	0.000E+00	0.000E+00	5.331E-21	3.439E-22
Ra-226	4.547E-07	0.000E+00	0.000E+00	1.300E-07	8.384E-09
Ra-228	6.300E-13	0.000E+00	0.000E+00	1.782E-13	1.149E-14
Sb-125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Sm-147	2.409E-11	0.000E+00	0.000E+00	3.801E-11	2.452E-12
Sm-148	3.294E-27	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Sr-90	5.845E-15	0.000E+00	0.000E+00	2.333E-12	1.505E-13
Tc-99	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Te-125m	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Th-228	6.267E-13	0.000E+00	0.000E+00	1.080E-13	6.965E-15
Th-229	1.887E-05	0.000E+00	0.000E+00	3.275E-06	2.112E-07
Th-230	2.605E-06	0.000E+00	0.000E+00	4.478E-07	2.888E-08
Th-232	6.398E-13	0.000E+00	0.000E+00	1.091E-13	7.035E-15
U-233	2.038E-04	0.000E+00	0.000E+00	1.644E-03	1.060E-04
U-234	3.015E-04	0.000E+00	0.000E+00	2.408E-03	1.553E-04
U-235	8.491E-07	0.000E+00	0.000E+00	6.733E-06	4.343E-07

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters,  
i.e. using parameters appearing in the input screen when the pathways are active.

Concentration of H-3 in soil moisture = 0.000E+00 pCi/ml

Concentration of gaseous H-3 in air = 0.000E+00 pCi/m\*\*3

concentration of gaseous C-14 in air = 0.000E+00 pCi/m\*\*3



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Concentration of radionuclides in environmental media (cont.)

at t = 1.000E+03 years

Radio- Nuclide	Contaminat- ted Zone	Surface Soil*	Air Par- ticulate	Well Water	Surface Water
	pCi/g	pCi/g	pCi/m**3	pCi/L	pCi/L
U-236	2.426E-05	0.000E+00	0.000E+00	1.924E-04	1.241E-05

\*The Surface Soil is the top layer of soil within the user specified mixing zone/depth.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.

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Concentration of radionuclides in foodstuff media  
at t = 1.000E+03 years\*

Radio- Nuclide	Drinking	Nonleafy	Leafy	Fodder	Fodder	Meat	Milk	Fish	Crustacea
	Water	Vegetable	Vegetable	Meat	Milk				
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
Ac-227	1.055E-08	5.409E-09	2.367E-08	1.712E-08	1.712E-08	2.036E-11	3.500E-12	1.021E-08	6.799E-07
Ag-108m	3.142E+00	9.751E-01	6.421E+00	4.421E+00	4.421E+00	9.091E-01	4.529E+00	1.013E+00	1.561E+02
Am-241	1.038E+00	3.607E-01	2.160E+00	1.499E+00	1.499E+00	5.412E-03	5.121E-04	2.008E+00	6.695E+01
Am-243	4.541E+00	1.578E+00	9.451E+00	6.560E+00	6.560E+00	2.368E-02	2.240E-03	8.786E+00	2.929E+02
C-14	1.165E-04	8.970E-04	9.857E-05	1.275E-04	9.210E-05	4.796E-04	1.151E-04	3.759E-01	6.841E-02
Cm-243	4.950E-11	3.773E-11	1.236E-10	9.204E-11	9.204E-11	2.044E-13	3.319E-14	9.579E-11	3.193E-09
Cm-244	2.557E-17	1.949E-17	6.383E-17	4.755E-17	4.755E-17	1.056E-19	1.715E-20	4.949E-17	1.650E-15
Co-60	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cs-134	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Cs-137	1.434E-09	1.195E-09	3.676E-09	2.764E-09	2.764E-09	9.801E-09	3.727E-09	1.850E-07	9.251E-09
Eu-152	4.833E-22	1.554E-22	9.934E-22	6.858E-22	6.858E-22	1.754E-22	3.685E-24	1.559E-21	3.118E-20
Eu-154	7.759E-35	2.495E-35	1.595E-34	1.101E-34	1.101E-34	2.817E-35	5.916E-37	2.502E-34	5.005E-33
Eu-155	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Fe-55	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Gd-152	4.327E-14	3.247E-14	1.075E-13	7.994E-14	7.994E-14	8.903E-15	4.685E-16	6.977E-14	2.791E-12
H-3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Nb-94	1.320E+01	7.306E+00	3.016E+01	2.176E+01	2.176E+01	2.311E-03	7.075E-03	2.554E+02	8.513E+01
Nd-144	4.892E-37	1.200E-37	9.682E-37	6.567E-37	6.567E-37	8.668E-38	4.330E-39	3.156E-36	3.156E-35
Ni-59	1.124E+01	1.411E+01	3.355E+01	2.640E+01	2.640E+01	1.211E+01	7.666E+01	7.253E+01	7.253E+01
Ni-63	1.113E-02	1.397E-02	3.322E-02	2.613E-02	2.613E-02	1.199E-02	7.590E-02	7.181E-02	7.181E-02
Np-237	3.029E-03	7.720E-04	6.017E-03	4.091E-03	4.091E-03	2.690E-04	4.485E-06	5.861E-03	7.815E-02
Pa-231	2.425E-08	3.563E-08	7.765E-08	6.222E-08	6.222E-08	1.497E-11	2.758E-11	1.564E-08	1.720E-07
Pb-210	1.796E-07	5.995E-07	9.050E-07	8.101E-07	8.101E-07	2.562E-08	1.911E-08	3.474E-06	1.159E-06
Pm-147	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Po-210	2.171E-06	6.629E-07	4.414E-06	2.595E-06	2.595E-06	9.119E-07	1.193E-07	1.370E-05	2.716E-03
Pu-238	1.871E-03	6.468E-04	3.890E-03	2.699E-03	2.699E-03	1.882E-05	3.949E-07	3.620E-03	1.207E-02
Pu-239	5.064E+00	1.751E+00	1.053E+01	7.306E+00	7.306E+00	5.093E-02	1.069E-03	9.799E+00	3.266E+01
Pu-240	4.570E+00	1.580E+00	9.503E+00	6.594E+00	6.594E+00	4.596E-02	9.646E-04	8.843E+00	2.948E+01
Pu-241	5.331E-21	1.843E-21	1.109E-20	7.693E-21	7.693E-21	5.362E-23	1.125E-24	1.032E-20	3.439E-20
Ra-226	1.300E-07	5.899E-06	6.124E-06	6.039E-06	6.039E-06	1.775E-07	4.015E-07	4.192E-07	2.096E-06
Ra-228	1.782E-13	8.135E-12	8.479E-12	8.246E-12	8.246E-12	2.423E-13	5.482E-13	5.750E-13	2.875E-12
Sb-125	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Sm-147	3.801E-11	2.484E-11	9.074E-11	6.654E-11	6.654E-11	7.613E-12	3.971E-13	6.130E-11	2.452E-09
Sm-148	0.000E+00	2.125E-27	2.125E-27	2.125E-27	2.125E-27	1.203E-28	8.312E-30	0.000E+00	0.000E+00
Sr-90	2.333E-12	1.872E-12	5.770E-12	4.310E-12	4.310E-12	3.120E-12	1.137E-12	9.031E-12	1.505E-11
Tc-99	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Te-125m	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Th-228	1.081E-13	3.379E-13	4.239E-13	6.947E-13	6.947E-13	2.751E-15	8.026E-16	6.957E-13	3.478E-12
Th-229	3.275E-06	6.888E-06	1.257E-05	1.051E-05	1.051E-05	4.633E-08	4.433E-09	2.112E-05	1.056E-04
Th-230	4.478E-07	9.500E-07	1.726E-06	1.445E-06	1.445E-06	6.359E-09	6.090E-10	2.888E-06	1.444E-05
Th-232	1.091E-13	2.332E-13	4.223E-13	3.543E-13	3.543E-13	1.557E-15	1.498E-16	7.036E-13	3.518E-12
U-233	1.644E-03	5.336E-04	3.383E-03	2.337E-03	2.337E-03	1.194E-04	1.004E-04	1.060E-03	6.361E-03
U-234	2.408E-03	7.835E-04	4.958E-03	3.425E-03	3.425E-03	1.750E-04	1.471E-04	1.553E-03	9.317E-03
U-235	6.733E-06	2.195E-06	1.387E-05	9.581E-06	9.581E-06	4.895E-07	4.115E-07	4.343E-06	2.606E-05

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.



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## Concentration of radionuclides in foodstuff media (cont.)

at t = 1.000E+03 years\*

Radio- Nuclide	Drinking Water	Nonleafy Vegetable	Leafy Vegetable	Fodder Meat	Fodder Milk	Meat	Milk	Fish	Crustacea
	pCi/L	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/kg	pCi/L	pCi/kg	pCi/kg
U-236	1.924E-04	6.271E-05	3.963E-04	2.738E-04	2.738E-04	1.399E-05	1.176E-05	1.241E-04	7.446E-04

\*Concentrations are at consumption time and include radioactive decay and ingrowth during storage time.

For livestock fodder, consumption time is t minus meat or milk storage time.

Concentrations in the media occurring in pathways that are suppressed are calculated using the current input parameters, i.e. using parameters appearing in the input screen when the pathways are active.