

**Attachment A**  
**DandD Calculation Reports**

# DandD Building Occupancy Scenario



**DandD Version:** 2.1.0

**Run Date/Time:** 6/20/2012 10:01:19 AM

**Site Name:** HBPP

**Description:** Analysis of potential dose of nuclides not discounted for building occupancy

**FileName:** C:\Documents and Settings\mxco\Desktop\TBDs\HBPP nondiscounted occupancy.mcd

## Options:

**Implicit progeny doses NOT included with explicit parent doses**

**Nuclide concentrations are distributed among all progeny**

**Number of simulations:** 100

**Seed for Random Generation:** 8718721

**Averages used for behavioral type parameters**

**External Pathway is ON**

**Inhalation Pathway is ON**

**Secondary Ingestion Pathway is ON**

## Initial Activities:

Nuclide	Area of Contamination (m <sup>2</sup> )	Distribution
<b>3H</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 2.68E-04
<b>14C</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.43E+02
<b>55Fe</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 5.83E+03
<b>60Co</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 9.37E+03
<b>63Ni</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.17E-01
<b>90Sr</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 5.97E-06
<b>94Nb</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 8.80E-07
<b>99Tc</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 5.67E-02
<b>137Cs</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.38E+00
<b>152Eu</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.53E+02

<b>154Eu</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 2.98E-02
<b>239Pu</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 1.27E-03

## Chain Data:

Number of chains: 12

Chain No. 1: **3H**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>3H</b>	1	4.51E+03					1.73E-11	1.73E-11	0.00E+00	0.00E+00

Chain No. 2: **14C**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>14C</b>	1	2.09E+06					5.64E-10	5.64E-10	1.39E-15	6.22E-18

Chain No. 3: **55Fe**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>55Fe</b>	1	9.86E+02					1.64E-10	7.26E-10	0.00E+00	0.00E+00

Chain No. 4: **60Co**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>60Co</b>	1	1.93E+03					7.28E-09	5.91E-08	2.03E-10	6.26E-12

Chain No. 5: **63Ni**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
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							(Sv/Bq)	(Sv/Bq)	((Sv/d)/(Bq/m <sup>2</sup> ))	((Sv/d)/(Bq/m <sup>3</sup> ))
<b>63Ni</b>	1	3.51E+04					1.56E-10	1.70E-09	0.00E+00	0.00E+00

Chain No. 6: **90Sr**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>90Sr</b>	1	1.06E+04					3.85E-08	3.51E-07	2.46E-14	3.21E-16
<b>90Y</b>	2	2.67E+00	1	1	0	0	2.91E-09	2.28E-09	4.60E-13	1.03E-14

Chain No. 7: **94Nb**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>94Nb</b>	1	7.41E+06					1.93E-09	1.12E-07	1.32E-10	3.91E-12

Chain No. 8: **99Tc**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>99Tc</b>	1	7.78E+07					3.95E-10	2.25E-09	6.73E-15	5.79E-17

Chain No. 9: **137Cs**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>137Cs</b>	1	1.10E+04					1.35E-08	8.63E-09	2.46E-14	3.40E-16
<b>137mBa</b>	Implicit		1	0.946			0.00E+00	0.00E+00	5.06E-11	1.48E-12

Chain No. 10: **152Eu**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>152Eu</b>	1	4.87E+03					1.75E-09	5.97E-08	9.53E-11	2.78E-12
<b>152Gd</b>	2	3.94E+16	1	0.2792			4.34E-08	1.01E-06	0.00E+00	0.00E+00



Chain No. 11: **154Eu**

Nuclides in chain: **1**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>154Eu</b>	1	3.21E+03					2.58E-09	7.73E-08	1.02E-10	3.04E-12

Chain No. 12: **239Pu**

Nuclides in chain: **14**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>239Pu</b>	1	8.79E+06					9.56E-07	1.16E-04	3.17E-14	1.31E-16
<b>235U</b>	2	2.57E+11	1	1	0	0	7.19E-08	3.32E-05	1.28E-11	3.24E-13
<b>231Th</b>	3	1.06E+00	2	1	0	0	3.65E-10	2.37E-10	1.60E-12	1.68E-14
<b>231Pa</b>	4	1.20E+07	3	1	0	0	2.86E-06	3.47E-04	3.52E-12	8.30E-14
<b>227Ac</b>	5	7.95E+03	4	1	0	0	3.80E-06	1.81E-03	1.36E-14	2.26E-16
<b>223Fr</b>	Implicit		5	0.0138			2.33E-09	1.68E-09	4.88E-12	8.74E-14
<b>227Th</b>	6	1.87E+01	5	0.9862	0	0	1.03E-08	4.37E-06	8.94E-12	2.29E-13
<b>223Ra</b>	7	1.14E+01	6	1	5	0.0138	1.78E-07	2.12E-06	1.11E-11	2.67E-13
<b>219Rn</b>	Implicit		7	1			0.00E+00	0.00E+00	4.74E-12	1.33E-13
<b>215Po</b>	Implicit		7	1			0.00E+00	0.00E+00	1.51E-14	4.30E-16
<b>211Pb</b>	Implicit		7	1			1.42E-10	2.35E-09	4.38E-12	1.26E-13
<b>211Bi</b>	Implicit		7	1			0.00E+00	0.00E+00	3.96E-12	1.10E-13
<b>211Po</b>	Implicit		7	0.0028			0.00E+00	0.00E+00	6.57E-13	1.94E-14
<b>207Tl</b>	Implicit		7	0.9972			0.00E+00	0.00E+00	3.25E-13	8.19E-15

## Initial Concentrations:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

Nuclide	Surface Concentration (dpm/100 cm**2)
3H	2.68E-04
14C	1.43E+02
55Fe	5.83E+03
60Co	9.37E+03
63Ni	1.17E-01
90Sr	5.97E-06
90Y	0.00E+00
94Nb	8.80E-07
99Tc	5.67E-02
137Cs	1.38E+00
137mBa	1.31E+00

152Eu	1.53E+02
152Gd	0.00E+00
154Eu	2.98E-02
239Pu	1.27E-03
235U	0.00E+00
231Th	0.00E+00
231Pa	0.00E+00
227Ac	0.00E+00
223Fr	0.00E+00
227Th	0.00E+00
223Ra	0.00E+00
219Rn	0.00E+00
215Po	0.00E+00
211Pb	0.00E+00
211Bi	0.00E+00
211Po	0.00E+00
207Tl	0.00E+00

## Model Parameters:

### General Parameters:

Parameter Name	Description	Distribution
<b>To:Time In Building</b>	The time in the building during the occupancy period	CONSTANT(hr/week)
Default value used		Value 4.50E+01
<b>Tto:Occupancy Period</b>	The duration of the occupancy exposure period	CONSTANT(days)
Default value used		Value 3.65E+02
<b>Vo:Breathing Rate</b>	The average volumetric breathing rate during building occupancy for an 8-hour work day	CONSTANT(m**3/hr)
Default value used		Value 1.40E+00
<b>RFo*:Resuspension Factor</b>	Effective resuspension factor during the occupancy period = RFo * FI	DERIVED(1/m)
Default value used		
<b>GO*:Ingestion Rate</b>	Effective secondary ingestion transfer rate of removable surface activity from building surfaces to the mouth during building occupancy = GO * FI	DERIVED(m**2/hr)
Default value used		
<b>Tstart:Start Time</b>	The start time of the scenario in days	CONSTANT(days)
Default value used		Value 0.00E+00
<b>Tend:End Time</b>	The ending time of the scenario in days	CONSTANT(days)
Default value used		Value 3.65E+02
<b>dt:Time Step Size</b>	The time step size	CONSTANT(days)
Default value used		Value 3.65E+02

<b>Pstep:Print Step Size</b>	The time steps for the history file. Doses will be written to the history file every n time steps	CONSTANT(none)	
<u>Default value used</u>		<u>Value</u>	1.00E+00
<b>AOExt:External Exposure Area</b>	Minimum surface area to which occupant is exposed via external radiation during occupancy period	CONSTANT(m**2)	
<u>Default value used</u>		<u>Value</u>	1.00E+01
<b>AOInh:Inhalation Exposure Area</b>	Minimum surface area to which occupant is exposed via inhalation during occupancy period	CONSTANT(m**2)	
<u>Default value used</u>		<u>Value</u>	1.00E+01
<b>AOIng:Secondary Ingestion Exposure Area</b>	Minimum surface area to which occupant is exposed via secondary ingestion during occupancy period	CONSTANT(m**2)	
<u>Default value used</u>		<u>Value</u>	1.00E+01
<b>AO:Exposure Area</b>	Minimum surface area to which occupant is exposed during the occupancy period	DERIVED(m**2)	
<u>Default value used</u>			
<b>Fl:Loose Fraction</b>	Fraction of surface contamination available for resuspension and ingestion	CONSTANT(none)	
<u>Default value used</u>		<u>Value</u>	1.00E-01
<b>Rfo:Loose Resuspension Factor</b>	Resuspension factor for loose contamination	CONTINUOUS LOGARITHMIC(1/m)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		9.12E-06	0.00E+00
		1.10E-04	7.67E-01
		1.46E-04	9.09E-01
		1.62E-04	9.50E-01
		1.85E-04	9.90E-01
		1.90E-04	1.00E+00
<b>GO:Loose Ingestion Rate</b>	The secondary ingestion transfer rate of loose removable surface activity from building surfaces to the mouth during building occupancy	CONSTANT(m**2/hr)	
<u>Default value used</u>		<u>Value</u>	1.10E-04

### Correlation Coefficients:

None

### Summary Results:

90.00% of the 100 calculated TEDE values are < 3.36E+01 mrem/year .

The 95 % Confidence Interval for the 0.9 quantile value of TEDE is 3.31E+01 to 3.42E+01 mrem/year

### Detailed Results:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

### Concentration at Time of Peak Dose:

Nuclide	Surface Concentration (dpm/100 cm**2)
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3H	2.61E-04
14C	1.43E+02
55Fe	5.14E+03
60Co	8.78E+03
63Ni	1.17E-01
90Sr	5.90E-06
90Y	5.84E-06
94Nb	8.80E-07
99Tc	5.67E-02
137Cs	1.36E+00
137mBa	1.29E+00
152Eu	1.49E+02
152Gd	1.35E-13
154Eu	2.87E-02
239Pu	1.27E-03
235U	6.26E-13
231Th	6.20E-13
231Pa	4.34E-18
227Ac	3.42E-20
223Fr	4.72E-22
227Th	2.57E-20
223Ra	2.18E-20
219Rn	2.18E-20
215Po	2.18E-20
211Pb	2.18E-20
211Bi	2.18E-20
211Po	6.10E-23
207Tl	2.17E-20

### Pathway Dose from All Nuclides (mrem)

All Pathways Dose	External	Inhalation	Secondary Ingestion
3.42E+01	2.92E+01	4.68E+00	2.79E-01

### Radionuclide Dose through All Active Pathways (mrem)

Nuclide	All Pathways Dose
3H	5.90E-11
14C	1.06E-03
55Fe	3.65E-02
60Co	3.38E+01
63Ni	1.82E-06
90Sr	1.92E-08

90Y	2.34E-10
94Nb	2.76E-09
99Tc	1.23E-06
137Cs	1.83E-04
137mBa	1.06E-03
152Eu	3.10E-01
152Gd	1.22E-15
154Eu	6.73E-05
239Pu	1.30E-03
235U	1.83E-13
231Th	1.84E-17
231Pa	1.33E-17
227Ac	5.46E-19
223Fr	4.92E-26
227Th	9.93E-22
223Ra	4.27E-22
219Rn	1.68E-24
215Po	5.35E-27
211Pb	2.02E-24
211Bi	1.40E-24
211Po	6.52E-28
207Tl	1.15E-25
All Nuclides	3.42E+01

**Dose from Each Nuclide through Each Active Pathway (mrem)**

Nuclide	External	Inhalation	Secondary Ingestion
3H	0.00E+00	3.97E-11	1.93E-11
14C	3.23E-06	7.10E-04	3.46E-04
55Fe	0.00E+00	3.29E-02	3.62E-03
60Co	2.90E+01	4.57E+00	2.74E-01
63Ni	0.00E+00	1.74E-06	7.80E-08
90Sr	2.36E-12	1.82E-08	9.74E-10
90Y	4.36E-11	1.17E-10	7.29E-11
94Nb	1.89E-09	8.67E-10	7.29E-12
99Tc	6.20E-09	1.12E-06	9.61E-08
137Cs	5.45E-07	1.04E-04	7.90E-05
137mBa	1.06E-03	0.00E+00	0.00E+00
152Eu	2.31E-01	7.83E-02	1.12E-03
152Gd	0.00E+00	1.20E-15	2.51E-17
154Eu	4.75E-05	1.95E-05	3.17E-07
239Pu	6.54E-10	1.30E-03	5.21E-06
235U	1.30E-16	1.83E-13	1.93E-16

231Th	1.61E-17	1.29E-18	9.71E-19
231Pa	2.48E-22	1.33E-17	5.33E-20
227Ac	7.57E-27	5.45E-19	5.58E-22
223Fr	3.75E-26	6.99E-27	4.72E-27
227Th	3.73E-24	9.88E-22	1.13E-24
223Ra	3.93E-24	4.07E-22	1.66E-23
219Rn	1.68E-24	0.00E+00	0.00E+00
215Po	5.35E-27	0.00E+00	0.00E+00
211Pb	1.55E-24	4.51E-25	1.33E-26
211Bi	1.40E-24	0.00E+00	0.00E+00
211Po	6.52E-28	0.00E+00	0.00E+00
207Tl	1.15E-25	0.00E+00	0.00E+00

# DandD Building Occupancy Scenario



**DandD Version:** 2.1.0

**Run Date/Time:** 6/21/2012 12:20:01 PM

**Site Name:** HBPP

**Description:** Analysis of potential dose from nuclides discounted for building occupancy

**FileName:** C:\Documents and Settings\mxco\Desktop\TBDs\HBPP occupancy discounted.mcd

## Options:

**Implicit progeny doses NOT included with explicit parent doses**

**Nuclide concentrations are distributed among all progeny**

**Number of simulations:** 100

**Seed for Random Generation:** 8718721

**Averages used for behavioral type parameters**

**External Pathway is ON**

**Inhalation Pathway is ON**

**Secondary Ingestion Pathway is ON**

## Initial Activities:

Nuclide	Area of Contamination (m <sup>2</sup> )	Distribution
<b>36Cl</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 3.34E+00
<b>41Ca</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 2.98E-02
<b>54Mn</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 3.58E-09
<b>65Zn</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.34E-13
<b>79Se</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 2.09E-03
<b>93Zr</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 2.10E-04
<b>93Mo</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 1.27E-03
<b>134Cs</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 2.68E-04
<b>135Cs</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 5.67E-04
<b>151Sm</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
<u>Justification for concentration:</u> Percent total		<u>Value</u> 6.06E-02

<b>155Eu</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 4.87E-02
<b>166mHo</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 5.74E-01
<b>233U</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 3.36E-03
<b>121mSn</b>	UNLIMITED	CONSTANT(dpm/100 cm**2)
Justification for concentration: Percent total		Value 1.07E-04

## Chain Data:

Number of chains: 14

Chain No. 1: **36Cl**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>36Cl</b>	1	1.10E+08					8.18E-10	5.93E-09	5.81E-14	1.06E-15

Chain No. 2: **41Ca**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>41Ca</b>	1	5.11E+07					3.44E-10	3.64E-10	0.00E+00	0.00E+00

Chain No. 3: **54Mn**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>54Mn</b>	1	3.13E+02					7.48E-10	1.81E-09	7.01E-11	2.07E-12

Chain No. 4: **65Zn**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>65Zn</b>	1	2.44E+02					3.90E-09	5.51E-09	4.78E-11	1.45E-12

Chain No. 5: **79Se**



Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<sup>79</sup> Se	1	2.37E+07					2.35E-09	2.66E-09	1.79E-15	8.60E-18

Chain No. 6: <sup>93</sup>Zr

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<sup>93</sup> Zr	1	5.59E+08					4.48E-10	8.67E-08	0.00E+00	0.00E+00
<sup>93m</sup> Nb	2	4.97E+03	1	1	0	0	1.41E-10	7.90E-09	8.11E-14	4.80E-17

Chain No. 7: <sup>93</sup>Mo

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<sup>93</sup> Mo	1	1.28E+06					3.64E-10	7.68E-09	4.61E-13	2.73E-16
<sup>93m</sup> Nb	2	4.97E+03	1	1	0	0	1.41E-10	7.90E-09	8.11E-14	4.80E-17

Chain No. 8: <sup>121m</sup>Sn

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<sup>121m</sup> Sn	1	2.01E+04					4.19E-10	3.11E-09	4.22E-13	9.11E-16
<sup>121</sup> Sn	2	1.13E+00	1	0.776	0	0	2.44E-10	1.38E-10	9.07E-15	9.02E-17

Chain No. 9: <sup>134</sup>Cs

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<sup>134</sup> Cs	1	7.53E+02					1.98E-08	1.25E-08	1.31E-10	3.86E-12

Chain No. 10: <sup>135</sup>Cs

Nuclides in chain: 1

							Ingestion	Inhalation	Surface	15 cm
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Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	CEDE Factor (Sv/Bq)	CEDE Factor (Sv/Bq)	Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>135Cs</b>	1	8.40E+08					1.91E-09	1.23E-09	2.87E-15	1.77E-17

Chain No. 11: **151Sm**

Nuclides in chain: **1**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>151Sm</b>	1	3.29E+04					1.05E-10	8.10E-09	4.34E-16	4.55E-19

Chain No. 12: **155Eu**

Nuclides in chain: **1**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>155Eu</b>	1	1.81E+03					4.13E-10	1.12E-08	5.10E-12	8.42E-14

Chain No. 13: **166mHo**

Nuclides in chain: **1**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>166mHo</b>	1	4.38E+05					2.18E-09	2.09E-07	1.47E-10	4.23E-12

Chain No. 14: **233U**

Nuclides in chain: **10**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>233U</b>	1	5.79E+07					7.81E-08	3.66E-05	6.18E-14	6.25E-16
<b>229Th</b>	2	2.68E+06	1	1	0	0	9.54E-07	5.80E-04	7.38E-12	1.47E-13
<b>225Ra</b>	3	1.48E+01	2	1	0	0	1.04E-07	2.10E-06	1.15E-12	5.09E-15
<b>225Ac</b>	4	1.00E+01	3	1	0	0	3.00E-08	2.92E-06	1.37E-12	2.89E-14
<b>221Fr</b>	Implicit		4	1			0.00E+00	0.00E+00	2.57E-12	6.82E-14
<b>217At</b>	Implicit		4	1			0.00E+00	0.00E+00	2.61E-14	7.43E-16
<b>213Bi</b>	Implicit		4	1			1.95E-10	4.63E-09	1.14E-11	3.24E-13
<b>213Po</b>	Implicit		4	0.9784			0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>209Tl</b>	Implicit		4	0.0216			0.00E+00	0.00E+00	1.64E-10	4.99E-12
<b>209Pb</b>	Implicit		4	1			5.75E-11	2.56E-11	2.60E-14	3.52E-16

## Initial Concentrations:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

Nuclide	Surface Concentration (dpm/100 cm**2)
36Cl	3.34E+00
41Ca	2.98E-02
54Mn	3.58E-09
65Zn	1.34E-13
79Se	2.09E-03
93Zr	2.10E-04
93mNb	0.00E+00
93Mo	1.27E-03
134Cs	2.68E-04
135Cs	5.67E-04
151Sm	6.06E-02
155Eu	4.87E-02
166mHo	5.74E-01
233U	3.36E-03
229Th	0.00E+00
225Ra	0.00E+00
225Ac	0.00E+00
221Fr	0.00E+00
217At	0.00E+00
213Bi	0.00E+00
213Po	0.00E+00
209Tl	0.00E+00
209Pb	0.00E+00
121mSn	1.07E-04
121Sn	0.00E+00

## Model Parameters:

### General Parameters:

Parameter Name	Description	Distribution
<b>To:Time In Building</b>	The time in the building during the occupancy period	CONSTANT(hr/week)
Default value used		Value 4.50E+01
<b>Tto:Occupancy Period</b>	The duration of the occupancy exposure period	CONSTANT(days)
Default value used		Value 3.65E+02
<b>Vo:Breathing Rate</b>	The average volumetric breathing rate during building occupancy for an 8-hour work day	CONSTANT(m**3/hr)
Default value used		Value 1.40E+00

<b>RFo*:Resuspension Factor</b>	Effective resuspension factor during the occupancy period = RFo * FI	DERIVED(1/m)
Default value used		
<b>GO*:Ingestion Rate</b>	Effective secondary ingestion transfer rate of removable surface activity from building surfaces to the mouth during building occupancy = GO * FI	DERIVED(m**2/hr)
Default value used		
<b>Tstart:Start Time</b>	The start time of the scenario in days	CONSTANT(days)
Default value used		Value 0.00E+00
<b>Tend:End Time</b>	The ending time of the scenario in days	CONSTANT(days)
Default value used		Value 3.65E+02
<b>dt:Time Step Size</b>	The time step size	CONSTANT(days)
Default value used		Value 3.65E+02
<b>Pstep:Print Step Size</b>	The time steps for the history file. Doses will be written to the history file every n time steps	CONSTANT(none)
Default value used		Value 1.00E+00
<b>AOExt:External Exposure Area</b>	Minimum surface area to which occupant is exposed via external radiation during occupancy period	CONSTANT(m**2)
Default value used		Value 1.00E+01
<b>AOInh:Inhalation Exposure Area</b>	Minimum surface area to which occupant is exposed via inhalation during occupancy period	CONSTANT(m**2)
Default value used		Value 1.00E+01
<b>AOIng:Secondary Ingestion Exposure Area</b>	Minimum surface area to which occupant is exposed via secondary ingestion during occupancy period	CONSTANT(m**2)
Default value used		Value 1.00E+01
<b>AO:Exposure Area</b>	Minimum surface area to which occupant is exposed during the occupancy period	DERIVED(m**2)
Default value used		
<b>FI:Loose Fraction</b>	Fraction of surface contamination available for resuspension and ingestion	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Rfo:Loose Resuspension Factor</b>	Resuspension factor for loose contamination	CONTINUOUS LOGARITHMIC(1/m)
Default value used		Value Probability 9.12E-06 0.00E+00 1.10E-04 7.67E-01 1.46E-04 9.09E-01 1.62E-04 9.50E-01 1.85E-04 9.90E-01 1.90E-04 1.00E+00
<b>GO:Loose Ingestion Rate</b>	The secondary ingestion transfer rate of loose removable surface activity from building surfaces to the mouth during building occupancy	CONSTANT(m**2/hr)
Default value used		Value 1.10E-04

**Correlation Coefficients:**

None

## Summary Results:

90.00% of the 100 calculated TEDE values are < 3.44E-03 mrem/year .

The 95 % Confidence Interval for the 0.9 quantile value of TEDE is 3.21E-03 to 3.72E-03 mrem/year

## Detailed Results:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

### Concentration at Time of Peak Dose:

Nuclide	Surface Concentration (dpm/100 cm**2)
36Cl	3.34E+00
41Ca	2.98E-02
54Mn	2.45E-09
65Zn	8.34E-14
79Se	2.09E-03
93Zr	2.10E-04
93mNb	3.71E-05
93Mo	1.27E-03
134Cs	2.28E-04
135Cs	5.67E-04
151Sm	6.04E-02
155Eu	4.54E-02
166mHo	5.74E-01
233U	3.36E-03
229Th	1.59E-07
225Ra	1.41E-07
225Ac	1.30E-07
221Fr	1.30E-07
217At	1.30E-07
213Bi	1.30E-07
213Po	1.27E-07
209Tl	2.81E-09
209Pb	1.30E-07
121mSn	1.06E-04
121Sn	8.21E-05

### Pathway Dose from All Nuclides (mrem)

All Pathways Dose	External	Inhalation	Secondary Ingestion
3.72E-03	1.38E-03	2.32E-03	1.84E-05

**Radionuclide Dose through All Active Pathways (mrem)**

Nuclide	All Pathways Dose
36Cl	1.89E-04
41Ca	1.39E-07
54Mn	2.84E-12
65Zn	7.02E-17
79Se	7.01E-08
93Zr	1.61E-07
93mNb	2.65E-09
93Mo	9.73E-08
134Cs	5.29E-07
135Cs	1.08E-08
151Sm	4.33E-06
155Eu	8.33E-06
166mHo	2.43E-03
233U	1.08E-03
229Th	8.11E-07
225Ra	2.68E-09
225Ac	3.36E-09
221Fr	5.43E-12
217At	5.51E-14
213Bi	2.95E-11
213Po	0.00E+00
209Tl	7.48E-12
209Pb	1.16E-13
121mSn	3.83E-09
121Sn	1.98E-10
All Nuclides	3.72E-03

**Dose from Each Nuclide through Each Active Pathway (mrem)**

Nuclide	External	Inhalation	Secondary Ingestion
36Cl	3.15E-06	1.74E-04	1.17E-05
41Ca	0.00E+00	9.55E-08	4.40E-08
54Mn	2.80E-12	3.91E-14	7.88E-15
65Zn	6.48E-17	4.04E-18	1.40E-18
79Se	6.08E-11	4.89E-08	2.11E-08
93Zr	0.00E+00	1.60E-07	4.04E-10
93mNb	4.88E-11	2.58E-09	2.24E-11
93Mo	9.51E-09	8.58E-08	1.98E-09
134Cs	4.84E-07	2.50E-08	1.93E-08
135Cs	2.64E-11	6.14E-09	4.65E-09

151Sm	4.26E-10	4.30E-06	2.72E-08
155Eu	3.77E-06	4.48E-06	8.05E-08
166mHo	1.37E-03	1.06E-03	5.37E-06
233U	3.37E-09	1.08E-03	1.13E-06
229Th	1.90E-11	8.10E-07	6.50E-10
225Ra	2.64E-12	2.61E-09	6.30E-11
225Ac	2.89E-12	3.34E-09	1.67E-11
221Fr	5.43E-12	0.00E+00	0.00E+00
217At	5.51E-14	0.00E+00	0.00E+00
213Bi	2.41E-11	5.29E-12	1.09E-13
213Po	0.00E+00	0.00E+00	0.00E+00
209Tl	7.48E-12	0.00E+00	0.00E+00
209Pb	5.49E-14	2.93E-14	3.21E-14
121mSn	7.29E-10	2.91E-09	1.91E-10
121Sn	1.21E-11	9.98E-11	8.60E-11



# DandD Residential Scenario

**DandD Version:** 2.1.0

**Run Date/Time:** 6/21/2012 12:30:01 PM

**Site Name:** HBPP

**Description:** Analysis of potential dose from nuclides discounted for resident

**FileName:** C:\Documents and Settings\mxeo\Desktop\TBDs\HBPP resident discounted.mcd

## Options:

**Implicit progeny doses NOT included with explicit parent doses**

**Nuclide concentrations are distributed among all progeny**

**Number of simulations:** 189

**Seed for Random Generation:** 8718721

**Averages used for behavioral type parameters**

**External Pathway is ON**

**Inhalation Pathway is ON**

**Secondary Ingestion Pathway is ON**

**Agricultural Pathway is ON**

**Drinking Water Pathway is ON**

**Irrigation Pathway is ON**

**Surface Water Pathway is ON**

## Initial Activities:

Nuclide	Area of Contamination (m <sup>2</sup> )	Distribution
<b>36Cl</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 3.34E-03
<b>41Ca</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 2.98E-05
<b>54Mn</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 3.58E-12
<b>65Zn</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 1.34E-16
<b>79Se</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 2.09E-06
<b>93Zr</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 2.10E-07
<b>93Mo</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 1.27E-06
<b>134Cs</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 2.68E-07
<b>135Cs</b>	UNLIMITED	CONSTANT(pCi/g)



Justification for concentration: Percent total		Value	5.67E-07
<b>151Sm</b>	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	6.06E-05
<b>155Eu</b>	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	4.87E-05
<b>166mHo</b>	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	5.74E-04
<b>233U</b>	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	3.36E-06
<b>121mSn</b>	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	1.07E-07

## Chain Data:

Number of chains: 14

Chain No. 1: **36Cl**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>36Cl</b>	1	1.10E+08					8.18E-10	5.93E-09	5.81E-14	1.06E-15

Chain No. 2: **41Ca**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>41Ca</b>	1	5.11E+07					3.44E-10	3.64E-10	0.00E+00	0.00E+00

Chain No. 3: **54Mn**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>54Mn</b>	1	3.13E+02					7.48E-10	1.81E-09	7.01E-11	2.07E-12

Chain No. 4: **65Zn**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor <sup>2</sup>	15 cm Dose Rate Factor <sup>3</sup>
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									$((\text{Sv/d})/(\text{Bq/m}^2))$	$((\text{Sv/d})/(\text{Bq/m}^2))$
<b>65Zn</b>	1	2.44E+02					3.90E-09	5.51E-09	4.78E-11	1.45E-12

Chain No. 5: **79Se**  
Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^2))$	15 cm Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^3))$
<b>79Se</b>	1	2.37E+07					2.35E-09	2.66E-09	1.79E-15	8.60E-18

Chain No. 6: **93Zr**  
Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^2))$	15 cm Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^3))$
<b>93Zr</b>	1	5.59E+08					4.48E-10	8.67E-08	0.00E+00	0.00E+00
<b>93mNb</b>	2	4.97E+03	1	1	0	0	1.41E-10	7.90E-09	8.11E-14	4.80E-17

Chain No. 7: **93Mo**  
Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^2))$	15 cm Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^3))$
<b>93Mo</b>	1	1.28E+06					3.64E-10	7.68E-09	4.61E-13	2.73E-16
<b>93mNb</b>	2	4.97E+03	1	1	0	0	1.41E-10	7.90E-09	8.11E-14	4.80E-17

Chain No. 8: **121mSn**  
Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^2))$	15 cm Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^3))$
<b>121mSn</b>	1	2.01E+04					4.19E-10	3.11E-09	4.22E-13	9.11E-16
<b>121Sn</b>	2	1.13E+00	1	0.776	0	0	2.44E-10	1.38E-10	9.07E-15	9.02E-17

Chain No. 9: **134Cs**  
Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^2))$	15 cm Dose Rate Factor $((\text{Sv/d})/(\text{Bq/m}^3))$
<b>134Cs</b>	1	7.53E+02					1.98E-08	1.25E-08	1.31E-10	3.86E-12

Chain No. 10: **135Cs**  
 Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>135Cs</b>	1	8.40E+08					1.91E-09	1.23E-09	2.87E-15	1.77E-17

Chain No. 11: **151Sm**  
 Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>151Sm</b>	1	3.29E+04					1.05E-10	8.10E-09	4.34E-16	4.55E-19

Chain No. 12: **155Eu**  
 Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>155Eu</b>	1	1.81E+03					4.13E-10	1.12E-08	5.10E-12	8.42E-14

Chain No. 13: **166mHo**  
 Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>166mHo</b>	1	4.38E+05					2.18E-09	2.09E-07	1.47E-10	4.23E-12

Chain No. 14: **233U**  
 Nuclides in chain: 10

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>233U</b>	1	5.79E+07					7.81E-08	3.66E-05	6.18E-14	6.25E-16
<b>229Th</b>	2	2.68E+06	1	1	0	0	9.54E-07	5.80E-04	7.38E-12	1.47E-13
<b>225Ra</b>	3	1.48E+01	2	1	0	0	1.04E-07	2.10E-06	1.15E-12	5.09E-15
<b>225Ac</b>	4	1.00E+01	3	1	0	0	3.00E-08	2.92E-06	1.37E-12	2.89E-14
<b>221Fr</b>	Implicit		4	1			0.00E+00	0.00E+00	2.57E-12	6.82E-14
<b>217At</b>	Implicit		4	1			0.00E+00	0.00E+00	2.61E-14	7.43E-16
<b>213Bi</b>	Implicit		4	1			1.95E-10	4.63E-09	1.14E-11	3.24E-13
<b>213Po</b>	Implicit		4	0.9784			0.00E+00	0.00E+00	0.00E+00	0.00E+00

209Tl	Implicit		4	0.0216			0.00E+00	0.00E+00	1.64E-10	4.99E-12
209Pb	Implicit		4	1			5.75E-11	2.56E-11	2.60E-14	3.52E-16

Initial Concentrations:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

Nuclide	Soil Concentration (pCi/g)
36Cl	3.34E-03
41Ca	2.98E-05
54Mn	3.58E-12
65Zn	1.34E-16
79Se	2.09E-06
93Zr	2.10E-07
93mNb	0.00E+00
93Mo	1.27E-06
134Cs	2.68E-07
135Cs	5.67E-07
151Sm	6.06E-05
155Eu	4.87E-05
166mHo	5.74E-04
233U	3.36E-06
229Th	0.00E+00
225Ra	0.00E+00
225Ac	0.00E+00
221Fr	0.00E+00
217At	0.00E+00
213Bi	0.00E+00
213Po	0.00E+00
209Tl	0.00E+00
209Pb	0.00E+00
121mSn	1.07E-07
121Sn	0.00E+00

Model Parameters:

General Parameters:

Parameter Name	Description	Distribution
Tv(1):Translocation:Leafy	Translocation factor for leafy vegetables	CONSTANT(none)
Default value used		Value1.00E+00
Tv(2):Translocation:Root	Translocation factor for other vegetables	CONSTANT(none)
Default value used		Value1.00E-01

<b>Tv(3):Translocation:Fruit</b>	Translocation factor for fruit	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tv(4):Translocation:Grain</b>	Translocation factor for grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tf(1):Translocation:Beef Forage</b>	Translocation factor for forage consumed by beef cattle	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tf(2):Translocation:Poultry Forage</b>	Translocation factor for forage consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tf(3):Translocation:Milk Cow</b>	Translocation factor for forage consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tf(4):Translocation:Layer Hen Forage</b>	Translocation factor for forage consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tg(1):Translocation:Beef Grain</b>	Translocation factor for stored grain consumed by beef cattle	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(2):Translocation:Poultry Grain</b>	Translocation factor for stored grain consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(3):Translocation:Milk Cow Grain</b>	Translocation factor for stored grain consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(4):Translocation:Layer Hen Grain</b>	Translocation factor for stored grain consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Th(1):Translocation:Beef Hay</b>	Translocation factor for stored hay consumed by beef cattle	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(2):Translocation:Poultry Hay</b>	Translocation factor for stored hay consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(3):Translocation:Milk Cow Hay</b>	Translocation factor for stored hay consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(4):Translocation:Layer Hen Hay</b>	Translocation factor for stored hay consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E+00
<b>fca(1):Beef Carbon Fraction</b>	Mass fraction of beef cattle that is carbon	CONSTANT(none)
Default value used		Value 3.60E-01
<b>fca(2):Poultry Carbon Fraction</b>	Mass fraction of poultry that is carbon	CONSTANT(none)
Default value used		Value 1.80E-01
<b>fca(3):Milk Carbon Fraction</b>	Mass fraction of milk that is carbon	CONSTANT(none)

Default value used		Value	6.00E-02
<b>fca(4):Eggs Carbon Fraction</b>	Mass fraction of an egg that is carbon	CONSTANT(none)	
Default value used		Value	1.60E-01
<b>fcf(1):Beef Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(2):Poultry Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(3):Milk Cow Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(4):Layer Hen Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcg(1):Beef Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(2):Poultry Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(3):Milk Cow Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(4):Layer Hen Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fch(1):Beef Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(2):Poultry Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(3):Milk Cow Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(4):Layer Hen Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fCd:Soil Carbon Fraction</b>	Mass fraction of dry soil that is carbon	CONSTANT(none)	
Default value used		Value	3.00E-02
<b>SATac:Animal Product Specific Activity</b>	Specific activity equivalence of animal product and specific activity of animal feed, forage, and soil	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xf(1):Beef Forage Contaminated Fraction</b>	Fraction of forage consumed by beef cattle that is contaminated	CONSTANT(none)	

Default value used		Value	1.00E+00
<b>xf(2):Poultry Forage Contaminated Fraction</b>	Fraction of forage consumed by poultry that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xf(3):Milk Cow Forage Contaminated Fraction</b>	Fraction of forage consumed by milk cows that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xf(4):Layer Hen Forage Contaminated Fraction</b>	Fraction of forage consumed by layer hens that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xg(1):Beef Grain Contaminated Fraction</b>	Fraction of stored grain consumed by beef cattle that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xg(2):Poultry Grain Contaminated Fraction</b>	Fraction of stored grain consumed by poultry that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xg(3):Milk Cow Grain Contaminated Fraction</b>	Fraction of stored grain consumed by milk cows that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xg(4):Layer Hen Grain Contaminated Fraction</b>	Fraction of stored grain that is consumed by layer hens that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xh(1):Beef Hay Contaminated Fraction</b>	Fraction of stored hay consumed by beef cattle that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xh(2):Poultry Hay Contaminated Fraction</b>	Fraction of stored hay consumed by poultry that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xh(3):Milk Cow Hay Contaminated Fraction</b>	Fraction of stored hay consumed by milk cows that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xh(4):Layer Hen Hay Contaminated Fraction</b>	Fraction of stored hay consumed by layer hens that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xw(1):Beef Water Contaminated Fraction</b>	Fraction of water that is consumed by beef cattle that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xw(2):Poultry Water Contaminated Fraction</b>	Fraction of water consumed by poultry that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xw(3):Milk Cow Water Contaminated Fraction</b>	Fraction of water consumed by milk cows that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xw(4):Layer Hen Water Contaminated Fraction</b>	Fraction of water consumed by layer hens that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>DIET:Garden Diet</b>	Fraction of human diet grown onsite	CONSTANT(none)	
Default value used		Value	1.00E+00

<b>Uv(1):Diet - Leafy</b>	Yearly human consumption of leafy vegetables	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 2.14E+01
<b>Uv(2):Diet - Roots</b>	Yearly human consumption of other vegetables	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 4.46E+01
<b>Uv(3):Diet - Fruit</b>	Yearly human consumption of fruits	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 5.28E+01
<b>Uv(4):Diet - Grain</b>	Yearly human consumption of grains	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 1.44E+01
<b>Ua(1):Diet - Beef</b>	Yearly human consumption of beef	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 3.98E+01
<b>Ua(2):Diet - Poultry</b>	Yearly human consumption of poultry	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 2.53E+01
<b>Ua(3):Diet - Milk</b>	Yearly human consumption of milk	CONSTANT(L/y)
<u>Default value used</u>		<u>Value</u> 2.33E+02
<b>Ua(4):Diet - Egg</b>	Yearly human consumption of eggs	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 1.91E+01
<b>Uf:Diet - Fish</b>	Yearly human consumption of fish produced from an onsite pond	CONSTANT(kg/y)
<u>Default value used</u>		<u>Value</u> 2.06E+01
<b>tf:Consumption Period</b>	Consumption period for fish	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tcv(1):Consumption Period - Leafy</b>	Food consumption period for leafy vegetables	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tcv(2):Consumption Period - Roots</b>	Food consumption period for other vegetables	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tcv(3):Consumption Period - Fruit</b>	Food consumption period for fruits	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tcv(4):Consumption Period - Grain</b>	Food consumption period for grains	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tca(1):Consumption Period - Beef</b>	Food consumption period for beef	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tca(2):Consumption Period - Poultry</b>	Food consumption period for poultry	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tca(3):Consumption Period - Milk</b>	Food consumption period for milk	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>tca(4):Consumption Period - Egg</b>	Food consumption period for eggs	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02



<b>Nunsat: Number of Unsaturated Layers</b>	Number of model layers used to represent the unsaturated zone	CONSTANT(none)
Default value used		Value 1.00E+01
<b>TstartR: Start Time</b>	The start time of the scenario in days	CONSTANT(days)
Default value used		Value 0.00E+00
<b>TendR: End Time</b>	The ending time of the scenario in days	CONSTANT(days)
Default value used		Value 3.65E+05
<b>dtR: Time Step Size</b>	The time step size	CONSTANT(days)
Default value used		Value 3.65E+02
<b>PstepR: Print Step Size</b>	The time steps for the history file. Doses will be written to the history file every n time steps	CONSTANT(none)
Default value used		Value 1.00E+00
<b>TI: Indoor Exposure Period</b>	The time the resident spends indoors	CONSTANT(days/year)
Default value used		Value 2.40E+02
<b>TX: Outdoor Exposure Period</b>	The time the resident spends outdoors	CONSTANT(days/year)
Default value used		Value 4.02E+01
<b>TG: Gardening Period</b>	The time the resident spends gardening	CONSTANT(days/year)
Default value used		Value 2.92E+00
<b>TTR: Total time in period</b>	Total time in the one year exposure period	CONSTANT(days/year)
Default value used		Value 3.65E+02
<b>SFI: Indoor Shielding Factor</b>	Shielding factor for the residence	CONSTANT(none)
Default value used		Value 5.52E-01
<b>SFO: Outdoor Shielding Factor</b>	Shielding factor for the cover soil	CONSTANT(none)
Default value used		Value 1.00E+00
<b>PD: Floor dust loading</b>	Floor dust loading	UNIFORM(g/m**2)
Default value used		Lower Limit 2.00E-02 Upper Limit 3.00E-01
<b>RFR: Indoor Resuspension Factor</b>	Resuspension factor for indoor dust	LOGUNIFORM(1/m)
Default value used		Lower Limit 1.00E-07 Upper Limit 8.00E-05
<b>CDO: Outdoor Dust Loading</b>	Average dust loading outdoors	LOGUNIFORM(g/m**3)
Default value used		Lower Limit 1.00E-07 Upper Limit 1.00E-04
<b>CDI: Indoor Dust Loading</b>	Average dust loading indoors	DERIVED(g/m**3)
Default value used		
<b>PF: Indoor/Outdoor Penetration Factor</b>	Fraction of outdoor dust in indoor air	UNIFORM(none)
Default value used		Lower Limit 2.00E-01 Upper Limit 7.00E-01
<b>CDG: Gardening Dust Loading</b>	Average dust loading while gardening	UNIFORM(g/m**3)
Default value used		Lower Limit 1.00E-04

		Upper Limit	7.00E-04
<b>VR:Indoor Breathing Rate</b>	Breathing rate while indoors	CONSTANT(m**3/hr)	
Default value used		Value	9.00E-01
<b>VX:Outdoor Breathing Rate</b>	Breathing rate while outdoors	CONSTANT(m**3/hr)	
Default value used		Value	1.40E+00
<b>VG:Gardening Breathing Rate</b>	Breathing rate while gardening	CONSTANT(m**3/hr)	
Default value used		Value	1.70E+00
<b>GR:Soil Ingestion Transfer Rate</b>	Average rate of soil ingestion	CONSTANT(g/d)	
Default value used		Value	5.00E-02
<b>UW:Diet - Water</b>	Drinking water ingestion rate	CONSTANT(L/d)	
Default value used		Value	1.26E+00
<b>H1:Surface Soil Thickness</b>	Thickness of the surface soil layer	CONSTANT(m)	
Default value used		Value	1.50E-01
<b>H2:Unsaturated Zone Thickness</b>	Thickness of the unsaturated zone	CONTINUOUS LINEAR(m)	
Default value used		Value	Probability
		3.05E-01	0.00E+00
		6.68E-01	4.76E-03
		8.11E-01	9.52E-03
		9.21E-01	1.43E-02
		9.94E-01	1.91E-02
		1.03E+00	2.38E-02
		1.07E+00	2.86E-02
		1.14E+00	3.33E-02
		1.21E+00	3.81E-02
		1.30E+00	4.29E-02
		1.31E+00	4.76E-02
		1.32E+00	5.24E-02
		1.56E+00	5.71E-02
		1.58E+00	6.19E-02
		1.61E+00	6.67E-02
		1.69E+00	7.62E-02
		1.78E+00	8.57E-02
		1.80E+00	9.05E-02
		1.81E+00	9.52E-02
		1.84E+00	1.00E-01
		1.87E+00	1.05E-01
		1.92E+00	1.10E-01
		2.04E+00	1.14E-01
		2.10E+00	1.19E-01
		2.11E+00	1.24E-01
		2.32E+00	1.29E-01
		2.36E+00	1.33E-01
		2.37E+00	1.38E-01
		2.39E+00	1.43E-01
		2.44E+00	1.48E-01
		2.44E+00	1.52E-01
		2.45E+00	1.57E-01
		2.59E+00	1.62E-01
		2.63E+00	1.67E-01
		2.69E+00	1.71E-01
		2.79E+00	1.76E-01
		2.81E+00	1.81E-01

2.90E+00	1.86E-01
2.95E+00	1.91E-01
3.07E+00	1.95E-01
3.18E+00	2.00E-01
3.22E+00	2.05E-01
3.30E+00	2.10E-01
3.34E+00	2.14E-01
3.37E+00	2.19E-01
3.44E+00	2.24E-01
3.58E+00	2.29E-01
3.62E+00	2.33E-01
3.66E+00	2.38E-01
3.74E+00	2.43E-01
3.86E+00	2.48E-01
3.88E+00	2.52E-01
4.17E+00	2.57E-01
4.26E+00	2.62E-01
4.44E+00	2.71E-01
4.63E+00	2.76E-01
4.87E+00	2.81E-01
5.13E+00	2.86E-01
5.18E+00	2.91E-01
5.54E+00	2.95E-01
5.83E+00	3.00E-01
5.86E+00	3.05E-01
5.86E+00	3.10E-01
5.90E+00	3.14E-01
6.06E+00	3.19E-01
6.13E+00	3.24E-01
6.17E+00	3.29E-01
6.22E+00	3.33E-01
6.31E+00	3.38E-01
6.36E+00	3.43E-01
6.40E+00	3.48E-01
6.46E+00	3.52E-01
6.51E+00	3.57E-01
6.55E+00	3.62E-01
6.60E+00	3.67E-01
6.86E+00	3.71E-01
6.93E+00	3.76E-01
6.95E+00	3.86E-01
6.97E+00	3.91E-01
7.09E+00	3.95E-01
7.18E+00	4.00E-01
7.35E+00	4.05E-01
7.36E+00	4.10E-01
7.40E+00	4.14E-01
7.43E+00	4.19E-01
7.46E+00	4.24E-01
7.59E+00	4.29E-01
7.60E+00	4.33E-01
7.64E+00	4.38E-01
7.87E+00	4.43E-01
8.10E+00	4.48E-01
8.28E+00	4.52E-01
8.35E+00	4.57E-01
8.71E+00	4.62E-01
8.71E+00	4.67E-01
8.73E+00	4.71E-01
8.79E+00	4.76E-01
8.80E+00	4.81E-01
8.82E+00	4.86E-01

8.85E+00	4.91E-01
8.89E+00	4.95E-01
8.90E+00	5.00E-01
8.99E+00	5.05E-01
9.00E+00	5.10E-01
9.13E+00	5.14E-01
9.14E+00	5.19E-01
9.21E+00	5.24E-01
9.31E+00	5.29E-01
9.55E+00	5.33E-01
9.60E+00	5.38E-01
9.63E+00	5.43E-01
9.86E+00	5.48E-01
1.05E+01	5.52E-01
1.07E+01	5.57E-01
1.13E+01	5.62E-01
1.15E+01	5.67E-01
1.17E+01	5.71E-01
1.20E+01	5.76E-01
1.26E+01	5.81E-01
1.26E+01	5.86E-01
1.28E+01	5.91E-01
1.32E+01	5.95E-01
1.32E+01	6.00E-01
1.34E+01	6.05E-01
1.34E+01	6.10E-01
1.36E+01	6.14E-01
1.37E+01	6.19E-01
1.38E+01	6.24E-01
1.41E+01	6.29E-01
1.45E+01	6.33E-01
1.51E+01	6.38E-01
1.52E+01	6.43E-01
1.61E+01	6.48E-01
1.62E+01	6.52E-01
1.65E+01	6.57E-01
1.66E+01	6.62E-01
1.69E+01	6.67E-01
1.74E+01	6.71E-01
1.82E+01	6.76E-01
1.84E+01	6.81E-01
1.84E+01	6.86E-01
1.87E+01	6.91E-01
1.95E+01	6.95E-01
2.01E+01	7.00E-01
2.07E+01	7.05E-01
2.08E+01	7.10E-01
2.17E+01	7.14E-01
2.24E+01	7.19E-01
2.27E+01	7.24E-01
2.29E+01	7.29E-01
2.29E+01	7.33E-01
2.40E+01	7.38E-01
2.47E+01	7.43E-01
2.60E+01	7.48E-01
2.65E+01	7.52E-01
2.72E+01	7.57E-01
2.73E+01	7.62E-01
2.76E+01	7.67E-01
2.77E+01	7.71E-01
2.78E+01	7.76E-01
2.80E+01	7.81E-01

			2.86E+01	7.86E-01
			2.94E+01	7.91E-01
			3.01E+01	7.95E-01
			3.03E+01	8.00E-01
			3.06E+01	8.10E-01
			3.08E+01	8.14E-01
			3.11E+01	8.19E-01
			3.17E+01	8.24E-01
			3.17E+01	8.29E-01
			3.17E+01	8.33E-01
			3.22E+01	8.38E-01
			3.39E+01	8.43E-01
			3.48E+01	8.48E-01
			3.54E+01	8.52E-01
			3.60E+01	8.57E-01
			3.68E+01	8.62E-01
			4.03E+01	8.67E-01
			4.07E+01	8.71E-01
			4.24E+01	8.76E-01
			4.29E+01	8.81E-01
			4.42E+01	8.86E-01
			4.72E+01	8.91E-01
			4.97E+01	8.95E-01
			5.12E+01	9.00E-01
			6.13E+01	9.05E-01
			6.19E+01	9.10E-01
			6.23E+01	9.14E-01
			6.32E+01	9.19E-01
			6.59E+01	9.24E-01
			6.73E+01	9.29E-01
			7.47E+01	9.33E-01
			7.92E+01	9.38E-01
			8.12E+01	9.43E-01
			8.28E+01	9.48E-01
			8.47E+01	9.52E-01
			8.96E+01	9.57E-01
			9.47E+01	9.62E-01
			1.08E+02	9.67E-01
			1.13E+02	9.71E-01
			1.15E+02	9.76E-01
			1.42E+02	9.81E-01
			1.77E+02	9.86E-01
			1.78E+02	9.91E-01
			1.80E+02	9.95E-01
			3.16E+02	1.00E+00
<b>N1:Surface Soil Porosity</b>		Porosity of the surface soil layer	DERIVED(none)	
Default value used				
<b>N2:Unsaturated Zone Porosity</b>		Porosity of the unsaturated zone	DERIVED(none)	
Default value used				
<b>F1:Surface Soil Saturation</b>		Saturation ratio of the surface soil layer	DERIVED(none)	
Default value used				
<b>F2:Unsaturated Zone Saturation</b>		Saturation ratio of the unsaturated zone	DERIVED(none)	
Default value used				
<b>INFIL:Infiltration Rate</b>		Net rate of infiltration to aquifer	DERIVED(m/y)	
Default value used				
		SCS soil classification ID	DISCRETE CUMULATIVE(none)	

SCSST:Soil Classification																												
Default value used		<table><tr><td>Value</td><td>Probability</td></tr><tr><td>1.00E+00</td><td>1.00E-04</td></tr><tr><td>2.00E+00</td><td>1.34E-03</td></tr><tr><td>3.00E+00</td><td>1.06E-02</td></tr><tr><td>4.00E+00</td><td>2.51E-02</td></tr><tr><td>5.00E+00</td><td>6.17E-02</td></tr><tr><td>6.00E+00</td><td>1.09E-01</td></tr><tr><td>7.00E+00</td><td>1.62E-01</td></tr><tr><td>8.00E+00</td><td>2.12E-01</td></tr><tr><td>9.00E+00</td><td>2.85E-01</td></tr><tr><td>1.00E+01</td><td>5.10E-01</td></tr><tr><td>1.10E+01</td><td>7.58E-01</td></tr><tr><td>1.20E+01</td><td>1.00E+00</td></tr></table>	Value	Probability	1.00E+00	1.00E-04	2.00E+00	1.34E-03	3.00E+00	1.06E-02	4.00E+00	2.51E-02	5.00E+00	6.17E-02	6.00E+00	1.09E-01	7.00E+00	1.62E-01	8.00E+00	2.12E-01	9.00E+00	2.85E-01	1.00E+01	5.10E-01	1.10E+01	7.58E-01	1.20E+01	1.00E+00
Value	Probability																											
1.00E+00	1.00E-04																											
2.00E+00	1.34E-03																											
3.00E+00	1.06E-02																											
4.00E+00	2.51E-02																											
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8.00E+00	2.12E-01																											
9.00E+00	2.85E-01																											
1.00E+01	5.10E-01																											
1.10E+01	7.58E-01																											
1.20E+01	1.00E+00																											
NDEV:Porosity Probability	Relative porosity value within the distribution for this soil type	UNIFORM(none)																										
Default value used		<table><tr><td>Lower Limit</td><td>0.00E+00</td></tr><tr><td>Upper Limit</td><td>1.00E+00</td></tr></table>	Lower Limit	0.00E+00	Upper Limit	1.00E+00																						
Lower Limit	0.00E+00																											
Upper Limit	1.00E+00																											
KSDEV:Permeability Probability	Relative permeability value within the distribution for this soil type	UNIFORM(none)																										
Default value used		<table><tr><td>Lower Limit</td><td>0.00E+00</td></tr><tr><td>Upper Limit</td><td>1.00E+00</td></tr></table>	Lower Limit	0.00E+00	Upper Limit	1.00E+00																						
Lower Limit	0.00E+00																											
Upper Limit	1.00E+00																											
BDEV:Parameter "b" Probability	Relative value of "b" parameter within the distribution for this soil type	UNIFORM(none)																										
Default value used		<table><tr><td>Lower Limit</td><td>0.00E+00</td></tr><tr><td>Upper Limit</td><td>1.00E+00</td></tr></table>	Lower Limit	0.00E+00	Upper Limit	1.00E+00																						
Lower Limit	0.00E+00																											
Upper Limit	1.00E+00																											
AP:Water Application Rate	Total water application rate on cultivated area	CONTINUOUS LINEAR(m/y)																										
Default value used		<table><tr><td>Value</td><td>Probability</td></tr><tr><td>6.07E-01</td><td>0.00E+00</td></tr><tr><td>6.10E-01</td><td>4.62E-01</td></tr><tr><td>6.35E-01</td><td>4.76E-01</td></tr><tr><td>7.62E-01</td><td>5.40E-01</td></tr><tr><td>8.89E-01</td><td>6.29E-01</td></tr><tr><td>1.02E+00</td><td>7.05E-01</td></tr><tr><td>1.14E+00</td><td>8.04E-01</td></tr><tr><td>1.27E+00</td><td>8.79E-01</td></tr><tr><td>1.40E+00</td><td>9.41E-01</td></tr><tr><td>1.52E+00</td><td>9.82E-01</td></tr><tr><td>1.65E+00</td><td>9.98E-01</td></tr><tr><td>1.78E+00</td><td>1.00E+00</td></tr></table>	Value	Probability	6.07E-01	0.00E+00	6.10E-01	4.62E-01	6.35E-01	4.76E-01	7.62E-01	5.40E-01	8.89E-01	6.29E-01	1.02E+00	7.05E-01	1.14E+00	8.04E-01	1.27E+00	8.79E-01	1.40E+00	9.41E-01	1.52E+00	9.82E-01	1.65E+00	9.98E-01	1.78E+00	1.00E+00
Value	Probability																											
6.07E-01	0.00E+00																											
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1.40E+00	9.41E-01																											
1.52E+00	9.82E-01																											
1.65E+00	9.98E-01																											
1.78E+00	1.00E+00																											
IR:Irrigation Rate	Annual average irrigation rate	CONSTANT(L/m**2-d)																										
Default value used		<table><tr><td>Value</td><td>1.29E+00</td></tr></table>	Value	1.29E+00																								
Value	1.29E+00																											
RHO1:Surface Soil Density	Bulk density of soil in the surface soil layer	DERIVED(g/mL)																										
Default value used																												
RHO2:Unsaturated Zone Density	Bulk density of soil in the unsaturated zone	DERIVED(g/mL)																										
Default value used																												
Ksat1:Surface Soil Permeabiliy	Saturated permeability of the surface soil layer	DERIVED(cm/sec)																										
Default value used																												
VDR:Volume of Water Consumed	Volume of water withdrawn for consumptive use	CONSTANT(L)																										
Default value used		<table><tr><td>Value</td><td>1.18E+05</td></tr></table>	Value	1.18E+05																								
Value	1.18E+05																											

<b>VSW:Volume of Water in Pond</b>	Volume of water in the pond	CONSTANT(L)
Default value used		Value 1.30E+06
<b>AR:Cultivated Area</b>	Area of land cultivated	DERIVED(m**2)
Default value used		
<b>sh:Soil Moisture Content</b>	Moisture content of soil	DERIVED(none)
Default value used		
<b>TTG:Gardening Period</b>	Total time in gardening period	CONSTANT(days)
Default value used		Value 9.00E+01
<b>TD:Drinking-water consumption period</b>	Drinking-water consumption period	CONSTANT(days)
Default value used		Value 3.65E+02
<b>THV(1):Holdup Period : Leafy</b>	Holdup period for leafy vegetables	CONSTANT(days)
Default value used		Value 1.00E+00
<b>THV(2):Holdup Period : Other vegetables</b>	Holdup period for other vegetables	CONSTANT(days)
Default value used		Value 1.40E+01
<b>THV(3):Holdup Period : Fruits</b>	Holdup period for fruits	CONSTANT(days)
Default value used		Value 1.40E+01
<b>THV(4):Holdup Period : Grains</b>	Holdup period for grains	CONSTANT(days)
Default value used		Value 1.40E+01
<b>THA(1):Holdup Period : Beef</b>	Holdup period for beef	CONSTANT(days)
Default value used		Value 2.00E+01
<b>THA(2):Holdup Period : Poultry</b>	Holdup period for poultry	CONSTANT(days)
Default value used		Value 1.00E+00
<b>THA(3):Holdup Period : Milk</b>	Holdup period for milk	CONSTANT(days)
Default value used		Value 1.00E+00
<b>THA(4):Holdup Period : Eggs</b>	Holdup period for eggs	CONSTANT(days)
Default value used		Value 1.00E+00
<b>TGV(1):Growing Period : Leafy</b>	Minimum growing period for leafy vegetables	CONSTANT(days)
Default value used		Value 4.50E+01
<b>TGV(2):Growing Period : Other vegetables</b>	Minimum growing period for other vegetables	CONSTANT(days)
Default value used		Value 9.00E+01
<b>TGV(3):Growing Period : Fruits</b>	Minimum growing period for fruits	CONSTANT(days)
Default value used		Value 9.00E+01
<b>TGV(4):Growing Period : Grains</b>	Minimum growing period for grains	CONSTANT(days)

Default value used		Value	9.00E+01
<b>TGF(1):Growing Period : Beef Forage</b>	Minimum growing period for forage consumed by beef cattle	CONSTANT(days)	
Default value used		Value	3.00E+01
<b>TGF(2):Growing Period : Poultry Forage</b>	Minimum growing period for forage consumed by poultry	DERIVED(days)	
Default value used			
<b>TGF(3):Growing Period : Milk Cow Forage</b>	Minimum growing period for forage consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGF(4):Growing Period : Layer Hen Forage</b>	Minimum growing period for forage consumed by layer hens	DERIVED(days)	
Default value used			
<b>TGG(1):Growing Period : Beef Cow Grain</b>	Minimum growing period for stored grain consumed by beef cattle	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGG(2):Growing Period : Poultry Grain</b>	Minimum growing period for stored grain consumed by poultry	DERIVED(days)	
Default value used			
<b>TGG(3):Growing Period : Milk Cow Grain</b>	Minimum growing period for stored grain consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGG(4):Growing Period : Layer Hen Grain</b>	Minimum growing period for stored grain consumed by layer hens	DERIVED(days)	
Default value used			
<b>TGH(1):Growing Period : Beef Cow Hay</b>	Minimum growing period for stored hay consumed by beef cattle	CONSTANT(days)	
Default value used		Value	4.50E+01
<b>TGH(2):Growing Period : Poultry Hay</b>	Minimum growing period for stored hay consumed by poultry	DERIVED(days)	
Default value used			
<b>TGH(3):Growing Period : Milk Cow Hay</b>	Minimum growing period for stored hay consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGH(4):Growing Period : Layer Hen Hay</b>	Minimum growing period for stored hay consumed by layer hens	DERIVED(days)	
Default value used			
<b>RV(1):Interception Fraction : Leafy</b>	Interception fraction for leafy vegetables	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RV(2):Interception Fraction : Other vegetables</b>	Interception fraction for other vegetables	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RV(3):Interception Fraction : Fruits</b>	Interception fraction for fruits	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01



<b>RV(4):Interception Fraction : Grains</b>	Interception fraction for grains	UNIFORM(none)
Default value used		Lower Limit 1.00E-01
		Upper Limit 6.00E-01
<b>RF(1):Interception Fraction : Beef Forage</b>	Interception fraction for beef cattle forage	UNIFORM(none)
Default value used		Lower Limit 1.00E-01
		Upper Limit 6.00E-01
<b>RF(2):Interception Fraction : Poultry forage</b>	Interception fraction for poultry forage	DERIVED(none)
Default value used		
<b>RF(3):Interception Fraction : Milk Cow Forage</b>	Interception fraction for milk cow forage	DERIVED(none)
Default value used		
<b>RF(4):Interception Fraction : Layer Hen Forage</b>	Interception fraction for layer hen forage	DERIVED(none)
Default value used		
<b>RG(1):Interception Fraction : Beef Cow Grain</b>	Interception fraction for beef cattle grain	UNIFORM(none)
Default value used		Lower Limit 1.00E-01
		Upper Limit 6.00E-01
<b>RG(2):Interception Fraction : Poultry Grain</b>	Interception fraction for poultry grain	DERIVED(none)
Default value used		
<b>RG(3):Interception Fraction : Milk Cow Grain</b>	Interception fraction for milk cow grain	DERIVED(none)
Default value used		
<b>RG(4):Interception Fraction : Layer Hen Grain</b>	Interception fraction for layer hen grain	DERIVED(none)
Default value used		
<b>RH(1):Interception Fraction : Beef Cow Hay</b>	Interception fraction for beef cattle hay	DERIVED(none)
Default value used		
<b>RH(2):Interception Fraction : Poultry Hay</b>	Interception fraction for poultry hay	DERIVED(none)
Default value used		
<b>RH(3):Interception Fraction : Milk Cow Hay</b>	Interception fraction for milk cow hay	DERIVED(none)
Default value used		
<b>RH(4):Interception Fraction : Layer Hen Hay</b>	Interception fraction for layer hen hay	DERIVED(none)
Default value used		
<b>YV(1):Crop Yield : Leafy</b>	Crop yield for leafy vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)
Default value used		Value Probability
		2.70E+00 0.00E+00
		2.71E+00 1.60E-03
		2.74E+00 6.00E-03
		2.76E+00 1.76E-02
		2.78E+00 4.36E-02
		2.80E+00 8.48E-02
		2.82E+00 1.56E-01

		2.85E+00	2.57E-01
		2.87E+00	3.64E-01
		2.89E+00	5.00E-01
		2.91E+00	6.39E-01
		2.93E+00	7.46E-01
		2.96E+00	8.42E-01
		2.98E+00	9.09E-01
		3.00E+00	9.60E-01
		3.02E+00	9.84E-01
		3.04E+00	9.94E-01
		3.07E+00	9.97E-01
		3.09E+00	9.99E-01
		3.11E+00	1.00E+00
		3.13E+00	1.00E+00
		3.15E+00	1.00E+00
<b>YV(2):Crop Yield : Other</b>	Crop yield for other vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<u>Value</u>	<u>Probability</u>
		2.26E+00	0.00E+00
		2.29E+00	8.00E-04
		2.30E+00	1.20E-03
		2.31E+00	6.40E-03
		2.33E+00	1.52E-02
		2.34E+00	3.28E-02
		2.35E+00	7.44E-02
		2.36E+00	1.40E-01
		2.38E+00	2.49E-01
		2.39E+00	3.80E-01
		2.40E+00	5.30E-01
		2.42E+00	6.61E-01
		2.43E+00	7.88E-01
		2.44E+00	8.86E-01
		2.45E+00	9.42E-01
		2.47E+00	9.75E-01
		2.48E+00	9.88E-01
		2.49E+00	9.96E-01
		2.51E+00	9.97E-01
		2.52E+00	9.99E-01
		2.53E+00	1.00E+00
		2.54E+00	1.00E+00
<b>YV(3):Crop Yield : Fruits</b>	Crop yield for fruits	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<u>Value</u>	<u>Probability</u>
		2.17E+00	0.00E+00
		2.20E+00	1.20E-03
		2.21E+00	2.40E-03
		2.23E+00	6.80E-03
		2.25E+00	1.80E-02
		2.27E+00	4.36E-02
		2.29E+00	7.64E-02
		2.31E+00	1.38E-01
		2.32E+00	2.14E-01
		2.34E+00	3.27E-01
		2.36E+00	4.50E-01
		2.38E+00	5.76E-01
		2.40E+00	6.87E-01
		2.42E+00	7.88E-01
		2.43E+00	8.68E-01
		2.45E+00	9.25E-01
		2.47E+00	9.60E-01
		2.49E+00	9.81E-01
		2.51E+00	9.92E-01

		2.53E+00	9.98E-01
		2.54E+00	1.00E+00
		2.56E+00	1.00E+00
<b>YV(4):Crop Yield : Grains</b>	Crop yield for grains	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<u>Value</u>	<u>Probability</u>
		2.85E-01	0.00E+00
		2.90E-01	6.00E-04
		3.02E-01	2.80E-03
		3.14E-01	9.40E-03
		3.26E-01	2.14E-02
		3.38E-01	5.42E-02
		3.50E-01	1.08E-01
		3.62E-01	2.02E-01
		3.74E-01	3.15E-01
		3.86E-01	4.50E-01
		3.98E-01	5.92E-01
		4.10E-01	7.20E-01
		4.23E-01	8.26E-01
		4.35E-01	9.03E-01
		4.47E-01	9.51E-01
		4.59E-01	9.77E-01
		4.71E-01	9.91E-01
		4.83E-01	9.96E-01
		4.95E-01	9.99E-01
		5.07E-01	1.00E+00
		5.19E-01	1.00E+00
		5.31E-01	1.00E+00
<b>YF(1):Crop Yield : Beef Forage</b>	Crop yield for beef cattle forage	BETA(kg dry wt forage/m**2)	
Default value used		<u>Lower Limit</u>	3.70E-01
		<u>Upper Limit</u>	5.24E-01
		<u>p</u>	2.36E+00
		<u>q</u>	1.40E+00
<b>YF(2):Crop Yield : Poultry Forage</b>	Crop yield for poultry forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YF(3):Crop Yield : Milk Cow Forage</b>	Crop yield for milk cow forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YF(4):Crop Yield : Layer Hen Forage</b>	Crop yield for layer hen forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YG(1):Crop Yield : Beef Cow Grain</b>	Crop yield for beef cattle grain	NORMAL(kg dry wt grain /m**2)	
Default value used		<u>Mean</u>	5.78E-01
		<u>Standard Deviation</u>	7.77E-02
<b>YG(2):Crop Yield : Poultry Grain</b>	Crop yield for poultry grain	DERIVED(kg wet wt grain /m**2)	
Default value used			
<b>YG(3):Crop Yield : Milk Cow Grain</b>	Crop yield for milk cow grain	DERIVED(kg wet wt grain /m**2)	
Default value used			
<b>YG(4):Crop Yield : Layer Hen Grain</b>	Crop yield for layer hen grain	DERIVED(kg wet wt grain /m**2)	

Default value used		
<b>YH(1):Crop Yield : Beef Cow Hay</b>	Crop yield for beef cattle hay	DERIVED(kg wet wt/m**2)
Default value used		
<b>YH(2):Crop Yield : Poultry Hay</b>	Crop yield for poultry hay	DERIVED(kg wet wt/m**2)
Default value used		
<b>YH(3):Crop Yield : Milk Cow Hay</b>	Crop yield for milk cow hay	DERIVED(kg wet wt/m**2)
Default value used		
<b>YH(4):Crop Yield : Layer Hen Hay</b>	Crop yield for layer hen hay	DERIVED(kg wet wt/m**2)
Default value used		
<b>WV(1):Wet/dry : Leafy Vegetables</b>	Wet/dry conversion factor for leafy vegetables	CONTINUOUS LINEAR(none)
Default value used		<u>Value</u> <u>Probability</u>
		3.32E-02 0.00E+00
		4.89E-02 3.45E-02
		5.47E-02 6.91E-02
		5.96E-02 1.04E-01
		6.36E-02 1.38E-01
		6.70E-02 1.73E-01
		7.05E-02 2.07E-01
		7.38E-02 2.42E-01
		7.48E-02 2.50E-01
		7.72E-02 2.76E-01
		8.03E-02 3.11E-01
		8.34E-02 3.45E-01
		8.66E-02 3.80E-01
		9.00E-02 4.15E-01
		9.36E-02 4.49E-01
		9.73E-02 4.84E-01
		9.91E-02 4.99E-01
		1.01E-01 5.18E-01
		1.05E-01 5.53E-01
		1.09E-01 5.87E-01
		1.13E-01 6.22E-01
		1.18E-01 6.56E-01
		1.23E-01 6.91E-01
		1.29E-01 7.25E-01
		1.33E-01 7.50E-01
		1.35E-01 7.60E-01
		1.42E-01 7.94E-01
		1.50E-01 8.29E-01
		1.59E-01 8.64E-01
		1.70E-01 8.98E-01
		1.85E-01 9.33E-01
		2.10E-01 9.67E-01
		2.56E-01 9.91E-01
		3.24E-01 1.00E+00
<b>WV(2):Wet/dry : Other Vegetables</b>	Wet/dry conversion factor for other vegetables	CONTINUOUS LINEAR(none)
Default value used		<u>Value</u> <u>Probability</u>
		3.58E-02 0.00E+00
		4.87E-02 3.45E-02
		5.46E-02 6.91E-02
		5.90E-02 1.04E-01

6.29E-02	1.38E-01
6.69E-02	1.73E-01
7.02E-02	2.07E-01
7.34E-02	2.42E-01
7.41E-02	2.50E-01
7.65E-02	2.76E-01
7.99E-02	3.11E-01
8.32E-02	3.45E-01
8.66E-02	3.80E-01
9.05E-02	4.15E-01
9.41E-02	4.49E-01
9.82E-02	4.84E-01
9.98E-02	4.99E-01
1.02E-01	5.18E-01
1.06E-01	5.53E-01
1.09E-01	5.87E-01
1.14E-01	6.22E-01
1.19E-01	6.56E-01
1.24E-01	6.91E-01
1.29E-01	7.25E-01
1.33E-01	7.50E-01
1.35E-01	7.60E-01
1.42E-01	7.94E-01
1.50E-01	8.29E-01
1.59E-01	8.64E-01
1.70E-01	8.98E-01
1.87E-01	9.33E-01
2.12E-01	9.67E-01
2.62E-01	9.91E-01
3.13E-01	1.00E+00

<b>WV(3):Wet/dry : Fruit</b>	Wet/dry conversion factor for fruits	CONTINUOUS LINEAR(none)
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<u>Default value used</u>	Value	Probability
	3.66E-02	0.00E+00
	4.87E-02	3.45E-02
	5.45E-02	6.91E-02
	5.93E-02	1.04E-01
	6.31E-02	1.38E-01
	6.72E-02	1.73E-01
	7.10E-02	2.07E-01
	7.44E-02	2.42E-01
	7.52E-02	2.50E-01
	7.78E-02	2.76E-01
	8.13E-02	3.11E-01
	8.45E-02	3.45E-01
	8.78E-02	3.80E-01
	9.11E-02	4.15E-01
	9.46E-02	4.49E-01
	9.82E-02	4.84E-01
	9.97E-02	4.99E-01
	1.02E-01	5.18E-01
	1.06E-01	5.53E-01
	1.10E-01	5.87E-01
	1.14E-01	6.22E-01
	1.19E-01	6.56E-01
	1.24E-01	6.91E-01
	1.29E-01	7.25E-01
	1.34E-01	7.50E-01
	1.35E-01	7.60E-01
	1.42E-01	7.94E-01
	1.49E-01	8.29E-01
	1.58E-01	8.64E-01

		1.70E-01	8.98E-01
		1.87E-01	9.33E-01
		2.14E-01	9.67E-01
		2.58E-01	9.91E-01
		3.25E-01	1.00E+00
<b>WV(4):Wet/dry : Grain</b>	Wet/dry conversion factor for grains	CONSTANT(none)	
Default value used		<u>Value</u>	8.80E-01
<b>WF(1):Wet/dry : Beef Cow Forage</b>	Wet/dry conversion factor for beef cattle forage	BETA(none)	
Default value used		<u>Lower Limit</u>	1.83E-01
		<u>Upper Limit</u>	3.23E-01
		<u>p</u>	1.15E+00
		<u>q</u>	1.18E+00
<b>WF(2):Wet/dry : Poultry Forage</b>	Wet/dry conversion factor for poultry forage	DERIVED(none)	
Default value used			
<b>WF(3):Wet/dry : Milk Cow Forage</b>	Wet/dry conversion factor for milk cow forage	DERIVED(none)	
Default value used			
<b>WF(4):Wet/dry : Layer Hen Forage</b>	Wet/dry conversion factor for layer hen forage	DERIVED(none)	
Default value used			
<b>WG(1):Wet/dry : Beef Cow Grain</b>	Wet/dry conversion factor for beef cattle grain	CONSTANT(none)	
Default value used		<u>Value</u>	8.80E-01
<b>WG(2):Wet/dry : Poultry Grain</b>	Wet/dry conversion factor for poultry grain	DERIVED(none)	
Default value used			
<b>WG(3):Wet/dry : Milk Cow Grain</b>	Wet/dry conversion factor for milk cow grain	DERIVED(none)	
Default value used			
<b>WG(4):Wet/dry : Layer Hen Grain</b>	Wet/dry conversion factor for layer hen grain	DERIVED(none)	
Default value used			
<b>WH(1):Wet/dry : Beef Cow Hay</b>	Wet/dry conversion factor for beef cattle hay	DERIVED(none)	
Default value used			
<b>WH(2):Wet/dry : Poultry Hay</b>	Wet/dry conversion factor for poultry hay	DERIVED(none)	
Default value used			
<b>WH(3):Wet/dry : Milk Cow Hay</b>	Wet/dry conversion factor for milk cow hay	DERIVED(none)	
Default value used			
<b>WH(4):Wet/dry : Layer Hen Hay</b>	Wet/dry conversion factor for layer hen hay	DERIVED(none)	
Default value used			
<b>QF(1):Ingestion Rate : Beef Cow Forage</b>	Ingestion rate for beef cattle forage	BETA(kg dry wt forage/d)	
Default value used		<u>Lower Limit</u>	1.69E+00
		<u>Upper Limit</u>	2.29E+00
		<u>p</u>	1.99E+00

		q	9.11E-01
<b>QF(2):Ingestion Rate : Poultry Forage</b>	Ingestion rate for poultry forage	BETA(kg dry wt forage/d)	
Default value used		Lower Limit	3.48E-03
		Upper Limit	2.82E-02
		p	1.51E+00
		q	1.41E+00
<b>QF(3):Ingestion Rate : Milk Cow Forage</b>	Ingestion rate for milk cow forage	CONTINUOUS LINEAR(kg dry wt forage/d)	
Default value used		Value	Probability
		6.35E+00	0.00E+00
		6.77E+00	3.45E-02
		6.96E+00	6.91E-02
		7.10E+00	1.04E-01
		7.24E+00	1.38E-01
		7.35E+00	1.73E-01
		7.47E+00	2.07E-01
		7.57E+00	2.42E-01
		7.60E+00	2.50E-01
		7.67E+00	2.76E-01
		7.77E+00	3.11E-01
		7.87E+00	3.45E-01
		7.98E+00	3.80E-01
		8.08E+00	4.15E-01
		8.18E+00	4.49E-01
		8.31E+00	4.84E-01
		8.37E+00	4.99E-01
		8.42E+00	5.18E-01
		8.54E+00	5.53E-01
		8.67E+00	5.87E-01
		8.81E+00	6.22E-01
		8.95E+00	6.56E-01
		9.10E+00	6.91E-01
		9.26E+00	7.25E-01
		9.38E+00	7.50E-01
		9.45E+00	7.60E-01
		9.68E+00	7.94E-01
		9.93E+00	8.29E-01
		1.02E+01	8.64E-01
		1.06E+01	8.98E-01
1.11E+01	9.33E-01		
1.20E+01	9.67E-01		
1.33E+01	9.91E-01		
1.53E+01	1.00E+00		
<b>QF(4):Ingestion Rate : Layer Hen Forage</b>	Ingestion rate for layer hen forage	BETA(kg dry wt forage/d)	
Default value used		Lower Limit	1.19E-02
		Upper Limit	2.22E-02
		p	1.45E+00
		q	7.92E-01
<b>QG(1):Ingestion Rate : Beef Cattle Grain</b>	Ingestion rate for beef cattle grain	BETA(kg dry wt grain/d)	
Default value used		Lower Limit	1.69E+00
		Upper Limit	2.29E+00
		p	1.99E+00
		q	9.11E-01
<b>QG(2):Ingestion Rate :</b>	Ingestion rate for poultry grain	BETA(kg dry wt grain/d)	

<b>Poultry Grain</b>		
<u>Default value used</u>		<u>Lower Limit</u> 1.04E-02
		<u>Upper Limit</u> 8.45E-02
		<u>p</u> 1.51E+00
		<u>q</u> 1.41E+00
<b>QG(3):Ingestion Rate : Milk Cow Grain</b>	Ingestion rate for milk cow grain	NORMAL(kg dry wt grain/d)
<u>Default value used</u>		<u>Mean</u> 1.71E+00
		<u>Standard Deviation</u> 2.62E-01
<b>QG(4):Ingestion Rate : Layer Hen Grain</b>	Ingestion rate for layer hen grain	BETA(kg dry wt grain/d)
<u>Default value used</u>		<u>Lower Limit</u> 3.58E-02
		<u>Upper Limit</u> 6.67E-02
		<u>p</u> 1.43E+00
		<u>q</u> 7.92E-01
<b>QH(1):Ingestion Rate : Beef Cattle Hay</b>	Ingestion rate for beef cattle hay	BETA(kg dry wt hay/d)
<u>Default value used</u>		<u>Lower Limit</u> 3.38E+00
		<u>Upper Limit</u> 4.58E+00
		<u>p</u> 1.99E+00
		<u>q</u> 9.11E-01
<b>QH(2):Ingestion Rate : Poultry Hay</b>	Ingestion rate for poultry hay	CONSTANT(kg dry wt hay/d)
<u>Default value used</u>		<u>Value</u> 0.00E+00
<b>QH(3):Ingestion Rate : Milk Cow Hay</b>	Ingestion rate for milk cow hay	CONTINUOUS LINEAR(kg dry wt hay/d)
<u>Default value used</u>		<u>Value</u> <u>Probability</u>
		5.12E+00 0.00E+00
		5.43E+00 3.45E-02
		5.57E+00 6.91E-02
		5.68E+00 1.04E-01
		5.79E+00 1.38E-01
		5.89E+00 1.73E-01
		5.98E+00 2.07E-01
		6.06E+00 2.42E-01
		6.08E+00 2.50E-01
		6.14E+00 2.76E-01
		6.22E+00 3.11E-01
		6.30E+00 3.45E-01
		6.38E+00 3.80E-01
		6.46E+00 4.15E-01
		6.54E+00 4.49E-01
		6.63E+00 4.84E-01
		6.67E+00 4.99E-01
		6.72E+00 5.18E-01
		6.81E+00 5.53E-01
		6.92E+00 5.87E-01
		7.03E+00 6.22E-01
		7.13E+00 6.56E-01
		7.26E+00 6.91E-01
		7.39E+00 7.25E-01
		7.49E+00 7.50E-01
		7.56E+00 7.60E-01
		7.70E+00 7.94E-01
		7.89E+00 8.29E-01
		8.11E+00 8.64E-01
		8.39E+00 8.98E-01



		8.75E+00	9.33E-01
		9.44E+00	9.67E-01
		1.05E+01	9.91E-01
		1.27E+01	1.00E+00
<b>QH(4):Ingestion Rate : Layer Hen Hay</b>	Ingestion rate for layer hen hay	CONSTANT(kg dry wt hay/d)	
Default value used		Value	0.00E+00
<b>QW(1):Water Rate : Beef Cattle</b>	Water ingestion rate for beef cattle	CONSTANT(L/d)	
Default value used		Value	5.00E+01
<b>QW(2):Water Rate : Poultry</b>	Water ingestion rate for poultry	CONSTANT(L/d)	
Default value used		Value	3.00E-01
<b>QW(3):Water Rate : Milk Cows</b>	Water ingestion rate for milk cows	CONSTANT(L/d)	
Default value used		Value	6.00E+01
<b>QW(4):Water Rate : Layer Hens</b>	Water ingestion rate for layer hens	CONSTANT(L/d)	
Default value used		Value	3.00E-01
<b>QD(1):Soil Fraction : Beef Cattle</b>	Soil intake fraction for beef cattle	CONSTANT(none)	
Default value used		Value	2.00E-02
<b>QD(2):Soil Fraction : Poultry</b>	Soil intake fraction for poultry	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>QD(3):Soil Fraction : Milk Cows</b>	Soil intake fraction for milk cows	CONSTANT(none)	
Default value used		Value	2.00E-02
<b>QD(4):Soil Fraction : Layer Hens</b>	Soil intake fraction for layer hens	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(1):Mass-Loading : Leafy Vegetables</b>	Mass-loading factor for leafy vegetables	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(2):Mass-Loading : Other Vegetables</b>	Mass-loading factor for other vegetables	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(3):Mass-Loading : Fruits</b>	Mass-loading factor for fruits	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(4):Mass-Loading : Grains</b>	Mass-loading factor for grains	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>LAMBDW:Weathering Rate</b>	Weathering rate for activity removal from plants	CONSTANT(1/d)	
Default value used		Value	4.95E-02
<b>MLF(1):Mass-Loading : Beef Cow Forage</b>	Mass-loading factor for beef cattle forage	CONSTANT(none)	

Default value used		Value	1.00E-01
<b>MLF(2):Mass-Loading : Poultry Forage</b>	Mass-loading factor for poultry forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLF(3):Mass-Loading : Milk Cow Forage</b>	Mass-loading factor for milk cow forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLF(4):Mass-Loading : Layer Hen Forage</b>	Mass-loading factor for layer hen forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLG(1):Mass-Loading : Beef Cattle Grain</b>	Mass-loading factor for beef cattle grain	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLG(2):Mass-Loading : Poultry Grain</b>	Mass-loading factor for poultry grain	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLG(3):Mass-Loading : Milk Cow Grain</b>	Mass-loading factor for milk cow grain	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLG(4):Mass-Loading : Layer Hen Grain</b>	Mass-loading factor for layer hen grain	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLH(1):Mass-Loading : Beef Cattle Hay</b>	Mass-loading factor for beef cattle hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLH(2):Mass-Loading : Poultry Hay</b>	Mass-loading factor for poultry hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLH(3):Mass-Loading : Milk Cow Hay</b>	Mass-loading factor for milk cow hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLH(4):Mass-Loading : Layer Hen Hay</b>	Mass-loading factor for layer hen hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>TFF(1):Feeding Period : Beef Cow Forage</b>	Feeding period for beef cattle forage	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFF(2):Feeding Period : Poultry Forage</b>	Feeding period for poultry forage	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFF(3):Feeding Period : Milk Cow Forage</b>	Feeding period for milk cow forage	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFF(4):Feeding Period : Layer Hen Forage</b>	Feeding period for layer hen forage	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFG(1):Feeding Period : Beef Cattle Grain</b>	Feeding period for beef cattle grain	CONSTANT(days)	

Default value used		Value	3.65E+02
<b>TFG(2):Feeding Period : Poultry Grain</b>	Feeding period for poultry grain	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFG(3):Feeding Period : Milk Cow Grain</b>	Feeding period for milk cow grain	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFG(4):Feeding Period : Layer Hen Grain</b>	Feeding period for layer hen grain	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFH(1):Feeding Period : Beef Cattle Hay</b>	Feeding period for beef cattle hay	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFH(2):Feeding Period : Poultry Hay</b>	Feeding period for poultry hay	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFH(3):Feeding Period : Milk Cow Hay</b>	Feeding period for milk cow hay	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFH(4):Feeding Period : Layer Hen Hay</b>	Feeding period for layer hen hay	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFW(1):Water Period : Beef Cattle</b>	Water ingestion period for beef cattle	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFW(2):Water Period : Poultry</b>	Water ingestion period for poultry	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFW(3):Water Period : Milk Cows</b>	Water ingestion period for milk cows	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>TFW(4):Water Period : Layer Hens</b>	Water ingestion period for layer hens	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>fha(1):Hydrogen Fraction : Beef Cattle</b>	Hydrogen fraction for beef cattle	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fha(2):Hydrogen Fraction : Poultry</b>	Hydrogen fraction for poultry	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fha(3):Hydrogen Fraction : Milk Cows</b>	Hydrogen fraction for milk cows	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fha(4):Hydrogen Fraction : Eggs</b>	Hydrogen fraction for eggs	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fhv(1):Hydrogen Fraction : Leafy Vegetables</b>	Hydrogen fraction for leafy vegetables	CONSTANT(none)	

Default value used		Value	1.00E-01
<b>fhv(2):Hydrogen Fraction : Other Vegetables</b>	Hydrogen fraction for other vegetables	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhv(3):Hydrogen Fraction : Fruits</b>	Hydrogen fraction for fruits	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhv(4):Hydrogen Fraction : Grains</b>	Hydrogen fraction for grains	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhf(1):Hydrogen Fraction : Beef Cow Forage</b>	Hydrogen fraction for beef cattle forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhf(2):Hydrogen Fraction : Poultry Forage</b>	Hydrogen fraction for poultry forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhf(3):Hydrogen Fraction : Milk Cow Forage</b>	Hydrogen fraction for milk cow forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhf(4):Hydrogen Fraction : Layer Hen Forage</b>	Hydrogen fraction for layer hen forage	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhh(1):Hydrogen Fraction : Beef Cattle Hay</b>	Hydrogen fraction for beef cattle hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhh(2):Hydrogen Fraction : Poultry Hay</b>	Hydrogen fraction for poultry hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhh(3):Hydrogen Fraction : Milk Cow Hay</b>	Hydrogen fraction for milk cow hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhh(4):Hydrogen Fraction : Layer Hen Hay</b>	Hydrogen fraction for layer hen hay	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>fhg(1):Hydrogen Fraction : Beef Cattle Grain</b>	Hydrogen fraction for beef cattle grain	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhg(2):Hydrogen Fraction : Poultry Grain</b>	Hydrogen fraction for poultry grain	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhg(3):Hydrogen Fraction : Milk Cow Grain</b>	Hydrogen fraction for milk cow grain	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhg(4):Hydrogen Fraction : Layer Hen Grain</b>	Hydrogen fraction for layer hen grain	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhd016:Hydrogen Fraction : Soil</b>	Fraction of hydrogen in soil	DERIVED(none)	

Default value used		
<b>sasvh:Tritium Equivalence: Plant/Soil</b>	Tritium equivalence: plant/soil	CONSTANT(none)
Default value used		Value 1.00E+00
<b>sawvh:Tritium Equivalence: Plant/Water</b>	Tritium equivalence: plant/water	CONSTANT(none)
Default value used		Value 1.00E+00
<b>satah:Tritium Equivalence: Animal Products</b>	Tritium equivalence: animal product intake	CONSTANT(none)
Default value used		Value 1.00E+00
<b>YA(1):Animal Product Yield : Beef Cattle</b>	Annual yield of beef per individual animal	CONSTANT(kg/y)
Default value used		Value 2.09E+02
<b>YA(2):Animal Product Yield : Poultry</b>	Annual yield of chicken per individual animal	CONSTANT(kg/y)
Default value used		Value 1.53E+00
<b>YA(3):Animal Product Yield : Milk Cows</b>	Annual yield of milk per individual animal	CONSTANT(L/y)
Default value used		Value 7.41E+03
<b>YA(4):Animal Product Yield : Layer Hens</b>	Annual yield of eggs per individual animal	CONSTANT(kg/y)
Default value used		Value 1.26E+01
<b>ARExt:External Exposure Area</b>	Minimum surface area to which resident is exposed via external radiation during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARInh:Inhalation Exposure Area</b>	Minimum surface area to which resident is exposed via inhalation during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARIng:Secondary Ingestion Exposure Area</b>	Minimum surface area to which resident is exposed via secondary ingestion during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARAgr:Agricultural Exposure Area</b>	Minimum surface area to which resident is exposed via any agricultural product during residential period	DERIVED(m**2)
Default value used		
<b>ARH2O:Groundwater Exposure Area</b>	Minimum surface area to which resident is exposed via groundwater during residential period	DERIVED(m**2)
Default value used		
<b>ARAll:Exposure Area</b>	Minimum surface area to which resident is exposed via any pathway during the residential period	DERIVED(m**2)
Default value used		

## Element Dependant Parameters

Parameter Name	Description	Distribution
Cl:Coefficient	Partition coefficient for Cl	NORMAL(Log10(mL/g))
Default value used		Mean7.00E-01
		Standard Deviation1.40E+00
Ca:Coefficient	Partition coefficient for Ca	NORMAL(Log10(mL/g))
Default value used		Mean3.17E+00
		Standard Deviation1.40E+00
Mn:Coefficient	Partition coefficient for Mn	CONTINUOUS LINEAR(Log10(mL/g))
Default value used		ValueProbability
		8.81E-010.00E+00
		1.00E+001.03E-02
		1.10E+003.44E-02
		1.18E+006.71E-02
		1.24E+009.98E-02
		1.30E+001.33E-01
		1.36E+001.65E-01
		1.41E+001.98E-01
		1.46E+002.31E-01
		1.51E+002.63E-01
		1.57E+002.96E-01
		1.62E+003.29E-01
		1.67E+003.61E-01
		1.73E+003.94E-01
		1.79E+004.27E-01
		1.85E+004.60E-01
		1.91E+004.92E-01
		1.93E+005.01E-01
		1.98E+005.25E-01
		2.05E+005.58E-01
		2.13E+005.90E-01
		2.21E+006.23E-01
		2.30E+006.56E-01
		2.40E+006.88E-01
		2.51E+007.21E-01
		2.64E+007.54E-01
		2.79E+007.87E-01
		2.96E+008.19E-01
		3.17E+008.52E-01
		3.43E+008.85E-01
		3.83E+009.17E-01
		4.43E+009.50E-01
		5.03E+009.69E-01
		5.87E+009.83E-01
		6.91E+009.91E-01
		1.04E+011.00E+00
Zn:Coefficient	Partition coefficient for Zn	NORMAL(Log10(mL/g))
Default value used		Mean3.03E+00
		Standard Deviation1.93E+00
Se:Coefficient	Partition coefficient for Se	NORMAL(Log10(mL/g))
Default value used		Mean2.06E+00
		Standard Deviation2.50E-01
Zr:Coefficient	Partition coefficient for Zr	NORMAL(Log10(mL/g))
Default value used		Mean3.38E+00
		Standard Deviation1.40E+00
Nb:Coefficient	Partition coefficient for Nb	NORMAL(Log10(mL/g))

Default value used		Mean	2.80E+00
		Standard Deviation	1.40E+00
<b>Mo:Coefficient</b>	Partition coefficient for Mo	NORMAL(Log10(mL/g))	
Default value used		Mean	1.42E+00
		Standard Deviation	7.50E-01
<b>Sn:Coefficient</b>	Partition coefficient for Sn	NORMAL(Log10(mL/g))	
Default value used		Mean	2.70E+00
		Standard Deviation	1.40E+00
<b>Cs:Coefficient</b>	Partition coefficient for Cs	NORMAL(Log10(mL/g))	
Default value used		Mean	2.65E+00
		Standard Deviation	1.01E+00
<b>Sm:Coefficient</b>	Partition coefficient for Sm	NORMAL(Log10(mL/g))	
Default value used		Mean	2.97E+00
		Standard Deviation	1.40E+00
<b>Eu:Coefficient</b>	Partition coefficient for Eu	NORMAL(Log10(mL/g))	
Default value used		Mean	2.98E+00
		Standard Deviation	1.74E+00
<b>Ho:Coefficient</b>	Partition coefficient for Ho	NORMAL(Log10(mL/g))	
Default value used		Mean	2.97E+00
		Standard Deviation	1.40E+00
<b>Tl:Coefficient</b>	Partition coefficient for Tl	NORMAL(Log10(mL/g))	
Default value used		Mean	2.20E+00
		Standard Deviation	1.40E+00
<b>Pb:Coefficient</b>	Partition coefficient for Pb	NORMAL(Log10(mL/g))	
Default value used		Mean	3.38E+00
		Standard Deviation	1.20E+00
<b>Bi:Coefficient</b>	Partition coefficient for Bi	NORMAL(Log10(mL/g))	
Default value used		Mean	2.65E+00
		Standard Deviation	1.40E+00
<b>Po:Coefficient</b>	Partition coefficient for Po	NORMAL(Log10(mL/g))	
Default value used		Mean	2.26E+00
		Standard Deviation	7.30E-01
<b>Ra:Coefficient</b>	Partition coefficient for Ra	NORMAL(Log10(mL/g))	
Default value used		Mean	3.55E+00
		Standard Deviation	7.40E-01
<b>Ac:Coefficient</b>	Partition coefficient for Ac	NORMAL(Log10(mL/g))	
Default value used		Mean	3.24E+00
		Standard Deviation	1.40E+00
<b>Th:Coefficient</b>	Partition coefficient for Th	NORMAL(Log10(mL/g))	
Default value used		Mean	3.77E+00
		Standard Deviation	1.57E+00
<b>U:Coefficient</b>	Partition coefficient for U	NORMAL(Log10(mL/g))	
Default value used		Mean	2.10E+00
		Standard Deviation	1.36E+00
<b>Cl:Leafy</b>	Leafy plant concentration factor for Cl	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	4.25E+00
		Standard Deviation of Ln	9.04E-01
<b>Ca:Leafy</b>	Leafy plant concentration factor for Ca	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg	

		soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 1.25E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Mn:Leafy</b>	Leafy plant concentration factor for Mn	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -1.11E+00
		<u>Standard Deviation of Ln</u> 2.03E+00
<b>Zn:Leafy</b>	Leafy plant concentration factor for Zn	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.45E-01
		<u>Standard Deviation of Ln</u> 9.56E-01
<b>Se:Leafy</b>	Leafy plant concentration factor for Se	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.69E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Zr:Leafy</b>	Leafy plant concentration factor for Zr	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.63E+00
		<u>Standard Deviation of Ln</u> 6.93E-01
<b>Nb:Leafy</b>	Leafy plant concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.91E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Mo:Leafy</b>	Leafy plant concentration factor for Mo	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 7.88E-01
		<u>Standard Deviation of Ln</u> 1.19E+00
<b>Sn:Leafy</b>	Leafy plant concentration factor for Sn	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.51E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Cs:Leafy</b>	Leafy plant concentration factor for Cs	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.19E+00
		<u>Standard Deviation of Ln</u> 1.25E+00
<b>Sm:Leafy</b>	Leafy plant concentration factor for Sm	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.61E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Eu:Leafy</b>	Leafy plant concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.61E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ho:Leafy</b>	Leafy plant concentration factor for Ho	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.61E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Tl:Leafy</b>	Leafy plant concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pb:Leafy</b>	Leafy plant concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)



Default value used		Mean of Ln(X)	-3.10E+00
		Standard Deviation of Ln	9.04E-01
<b>Bi:Leafy</b>	Leafy plant concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.35E+00
		Standard Deviation of Ln	9.04E-01
<b>Po:Leafy</b>	Leafy plant concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.99E+00
		Standard Deviation of Ln	9.04E-01
<b>Ra:Leafy</b>	Leafy plant concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.20E+00
		Standard Deviation of Ln	9.04E-01
<b>Ac:Leafy</b>	Leafy plant concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.65E+00
		Standard Deviation of Ln	9.04E-01
<b>Th:Leafy</b>	Leafy plant concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.07E+00
		Standard Deviation of Ln	9.04E-01
<b>U:Leafy</b>	Leafy plant concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.77E+00
		Standard Deviation of Ln	9.04E-01
<b>Cl:Root</b>	Root plant concentration factor for Cl	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	4.25E+00
		Standard Deviation of Ln	9.04E-01
<b>Ca:Root</b>	Root plant concentration factor for Ca	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-1.05E+00
		Standard Deviation of Ln	9.04E-01
<b>Mn:Root</b>	Root plant concentration factor for Mn	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.12E+00
		Standard Deviation of Ln	1.59E+00
<b>Zn:Root</b>	Root plant concentration factor for Zn	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.21E+00
		Standard Deviation of Ln	1.36E+00
<b>Se:Root</b>	Root plant concentration factor for Se	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.69E+00
		Standard Deviation of Ln	9.04E-01
<b>Zr:Root</b>	Root plant concentration factor for Zr	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.17E+00
		Standard Deviation of Ln	2.25E+00
<b>Nb:Root</b>	Root plant concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00

		Standard Deviation of Ln	9.04E-01
<b>Mo:Root</b>	Root plant concentration factor for Mo	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-2.81E+00
		Standard Deviation of Ln	9.04E-01
<b>Sn:Root</b>	Root plant concentration factor for Sn	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.12E+00
		Standard Deviation of Ln	9.04E-01
<b>Cs:Root</b>	Root plant concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	1.41E+00
<b>Sm:Root</b>	Root plant concentration factor for Sm	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Eu:Root</b>	Root plant concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Ho:Root</b>	Root plant concentration factor for Ho	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Tl:Root</b>	Root plant concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Pb:Root</b>	Root plant concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-4.71E+00
		Standard Deviation of Ln	9.04E-01
<b>Bi:Root</b>	Root plant concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01
<b>Po:Root</b>	Root plant concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Ra:Root</b>	Root plant concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-6.50E+00
		Standard Deviation of Ln	9.04E-01
<b>Ac:Root</b>	Root plant concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-7.96E+00
		Standard Deviation of Ln	9.04E-01
<b>Th:Root</b>	Root plant concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
<u>Default value used</u>		Mean of Ln(X)	-9.37E+00
		Standard Deviation of Ln	9.04E-01

<b>U:Root</b>	Root plant concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Cl:Fruit</b>	Fruit concentration factor for Cl	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 4.25E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ca:Fruit</b>	Fruit concentration factor for Ca	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -1.05E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Mn:Fruit</b>	Fruit concentration factor for Mn	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.12E+00
		<u>Standard Deviation of Ln</u> 1.59E+00
<b>Zn:Fruit</b>	Fruit concentration factor for Zn	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.21E+00
		<u>Standard Deviation of Ln</u> 1.36E+00
<b>Se:Fruit</b>	Fruit concentration factor for Se	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.69E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Zr:Fruit</b>	Fruit concentration factor for Zr	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.17E+00
		<u>Standard Deviation of Ln</u> 2.25E+00
<b>Nb:Fruit</b>	Fruit concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Mo:Fruit</b>	Fruit concentration factor for Mo	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.81E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Sn:Fruit</b>	Fruit concentration factor for Sn	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.12E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Cs:Fruit</b>	Fruit concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 1.41E+00
<b>Sm:Fruit</b>	Fruit concentration factor for Sm	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Eu:Fruit</b>	Fruit concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ho:Fruit</b>	Fruit concentration factor for Ho	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)

		soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Tl:Fruit</b>	Fruit concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pb:Fruit</b>	Fruit concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.71E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Bi:Fruit</b>	Fruit concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Po:Fruit</b>	Fruit concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ra:Fruit</b>	Fruit concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -6.50E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ac:Fruit</b>	Fruit concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.96E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Th:Fruit</b>	Fruit concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -9.37E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>U:Fruit</b>	Fruit concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Cl:Grain</b>	Grain concentration factor for Cl	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 4.25E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ca:Grain</b>	Grain concentration factor for Ca	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -1.05E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Mn:Grain</b>	Grain concentration factor for Mn	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.12E+00
		<u>Standard Deviation of Ln</u> 1.59E+00
<b>Zn:Grain</b>	Grain concentration factor for Zn	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.21E+00
		<u>Standard Deviation of Ln</u> 1.36E+00
<b>Se:Grain</b>	Grain concentration factor for Se	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)

Default value used		Mean of Ln(X)	-3.69E+00
		Standard Deviation of Ln	9.04E-01
<b>Zr:Grain</b>	Grain concentration factor for Zr	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.17E+00
		Standard Deviation of Ln	2.25E+00
<b>Nb:Grain</b>	Grain concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01
<b>Mo:Grain</b>	Grain concentration factor for Mo	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.81E+00
		Standard Deviation of Ln	9.04E-01
<b>Sn:Grain</b>	Grain concentration factor for Sn	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.12E+00
		Standard Deviation of Ln	9.04E-01
<b>Cs:Grain</b>	Grain concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	1.41E+00
<b>Sm:Grain</b>	Grain concentration factor for Sm	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Eu:Grain</b>	Grain concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Ho:Grain</b>	Grain concentration factor for Ho	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Tl:Grain</b>	Grain concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Pb:Grain</b>	Grain concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.71E+00
		Standard Deviation of Ln	9.04E-01
<b>Bi:Grain</b>	Grain concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01
<b>Po:Grain</b>	Grain concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Ra:Grain</b>	Grain concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-6.50E+00

		Standard Deviation of Ln	9.04E-01
<b>Ac:Grain</b>	Grain concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.96E+00
		Standard Deviation of Ln	9.04E-01
<b>Th:Grain</b>	Grain concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-9.37E+00
		Standard Deviation of Ln	9.04E-01
<b>U:Grain</b>	Grain concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Cl:Beef</b>	Beef transfer factor for Cl	CONSTANT(d/kg)	
Default value used		Value	8.00E-02
<b>Ca:Beef</b>	Beef transfer factor for Ca	CONSTANT(d/kg)	
Default value used		Value	7.00E-04
<b>Mn:Beef</b>	Beef transfer factor for Mn	CONSTANT(d/kg)	
Default value used		Value	4.00E-04
<b>Zn:Beef</b>	Beef transfer factor for Zn	CONSTANT(d/kg)	
Default value used		Value	1.00E-01
<b>Se:Beef</b>	Beef transfer factor for Se	CONSTANT(d/kg)	
Default value used		Value	1.50E-02
<b>Zr:Beef</b>	Beef transfer factor for Zr	CONSTANT(d/kg)	
Default value used		Value	5.50E-03
<b>Nb:Beef</b>	Beef transfer factor for Nb	CONSTANT(d/kg)	
Default value used		Value	2.50E-01
<b>Mo:Beef</b>	Beef transfer factor for Mo	CONSTANT(d/kg)	
Default value used		Value	6.00E-03
<b>Sn:Beef</b>	Beef transfer factor for Sn	CONSTANT(d/kg)	
Default value used		Value	8.00E-02
<b>Cs:Beef</b>	Beef transfer factor for Cs	CONSTANT(d/kg)	
Default value used		Value	2.00E-02
<b>Sm:Beef</b>	Beef transfer factor for Sm	CONSTANT(d/kg)	
Default value used		Value	5.00E-03
<b>Eu:Beef</b>	Beef transfer factor for Eu	CONSTANT(d/kg)	
Default value used		Value	5.00E-03
<b>Ho:Beef</b>	Beef transfer factor for Ho	CONSTANT(d/kg)	
Default value used		Value	4.50E-03
<b>Tl:Beef</b>	Beef transfer factor for Tl	CONSTANT(d/kg)	
Default value used		Value	4.00E-02
<b>Pb:Beef</b>	Beef transfer factor for Pb	CONSTANT(d/kg)	
Default value used		Value	3.00E-04
<b>Bi:Beef</b>	Beef transfer factor for Bi	CONSTANT(d/kg)	
Default value used		Value	4.00E-04
<b>Po:Beef</b>	Beef transfer factor for Po	CONSTANT(d/kg)	

Default value used		Value	3.00E-04
<b>Ra:Beef</b>	Beef transfer factor for Ra	CONSTANT(d/kg)	
Default value used		Value	2.50E-04
<b>Ac:Beef</b>	Beef transfer factor for Ac	CONSTANT(d/kg)	
Default value used		Value	2.50E-05
<b>Th:Beef</b>	Beef transfer factor for Th	CONSTANT(d/kg)	
Default value used		Value	6.00E-06
<b>U:Beef</b>	Beef transfer factor for U	CONSTANT(d/kg)	
Default value used		Value	2.00E-04
<b>Cl:Poultry</b>	Poultry transfer factor for Cl	CONSTANT(d/kg)	
Default value used		Value	3.00E-02
<b>Ca:Poultry</b>	Poultry transfer factor for Ca	CONSTANT(d/kg)	
Default value used		Value	4.40E-02
<b>Mn:Poultry</b>	Poultry transfer factor for Mn	CONSTANT(d/kg)	
Default value used		Value	5.00E-02
<b>Zn:Poultry</b>	Poultry transfer factor for Zn	CONSTANT(d/kg)	
Default value used		Value	6.50E+00
<b>Se:Poultry</b>	Poultry transfer factor for Se	CONSTANT(d/kg)	
Default value used		Value	8.50E+00
<b>Zr:Poultry</b>	Poultry transfer factor for Zr	CONSTANT(d/kg)	
Default value used		Value	6.40E-05
<b>Nb:Poultry</b>	Poultry transfer factor for Nb	CONSTANT(d/kg)	
Default value used		Value	3.10E-04
<b>Mo:Poultry</b>	Poultry transfer factor for Mo	CONSTANT(d/kg)	
Default value used		Value	1.90E-01
<b>Sn:Poultry</b>	Poultry transfer factor for Sn	CONSTANT(d/kg)	
Default value used		Value	2.00E-01
<b>Cs:Poultry</b>	Poultry transfer factor for Cs	CONSTANT(d/kg)	
Default value used		Value	4.40E+00
<b>Sm:Poultry</b>	Poultry transfer factor for Sm	CONSTANT(d/kg)	
Default value used		Value	4.00E-03
<b>Eu:Poultry</b>	Poultry transfer factor for Eu	CONSTANT(d/kg)	
Default value used		Value	4.00E-03
<b>Ho:Poultry</b>	Poultry transfer factor for Ho	CONSTANT(d/kg)	
Default value used		Value	4.00E-03
<b>Tl:Poultry</b>	Poultry transfer factor for Tl	CONSTANT(d/kg)	
Default value used		Value	3.00E-01
<b>Pb:Poultry</b>	Poultry transfer factor for Pb	CONSTANT(d/kg)	
Default value used		Value	2.00E-01
<b>Bi:Poultry</b>	Poultry transfer factor for Bi	CONSTANT(d/kg)	
Default value used		Value	1.00E-01
<b>Po:Poultry</b>	Poultry transfer factor for Po	CONSTANT(d/kg)	
Default value used		Value	9.00E-01
<b>Ra:Poultry</b>	Poultry transfer factor for Ra	CONSTANT(d/kg)	

Default value used		Value	3.00E-02
<b>Ac:Poultry</b>	Poultry transfer factor for Ac	CONSTANT(d/kg)	
Default value used		Value	4.00E-03
<b>Th:Poultry</b>	Poultry transfer factor for Th	CONSTANT(d/kg)	
Default value used		Value	4.00E-03
<b>U:Poultry</b>	Poultry transfer factor for U	CONSTANT(d/kg)	
Default value used		Value	1.20E+00
<b>Cl:Milk</b>	Milk transfer factor for Cl	CONSTANT(d/L)	
Default value used		Value	1.50E-02
<b>Ca:Milk</b>	Milk transfer factor for Ca	CONSTANT(d/L)	
Default value used		Value	1.00E-02
<b>Mn:Milk</b>	Milk transfer factor for Mn	CONSTANT(d/L)	
Default value used		Value	3.50E-04
<b>Zn:Milk</b>	Milk transfer factor for Zn	CONSTANT(d/L)	
Default value used		Value	1.00E-02
<b>Se:Milk</b>	Milk transfer factor for Se	CONSTANT(d/L)	
Default value used		Value	4.00E-03
<b>Zr:Milk</b>	Milk transfer factor for Zr	CONSTANT(d/L)	
Default value used		Value	3.00E-05
<b>Nb:Milk</b>	Milk transfer factor for Nb	CONSTANT(d/L)	
Default value used		Value	2.00E-02
<b>Mo:Milk</b>	Milk transfer factor for Mo	CONSTANT(d/L)	
Default value used		Value	1.50E-03
<b>Sn:Milk</b>	Milk transfer factor for Sn	CONSTANT(d/L)	
Default value used		Value	1.00E-03
<b>Cs:Milk</b>	Milk transfer factor for Cs	CONSTANT(d/L)	
Default value used		Value	7.00E-03
<b>Sm:Milk</b>	Milk transfer factor for Sm	CONSTANT(d/L)	
Default value used		Value	2.00E-05
<b>Eu:Milk</b>	Milk transfer factor for Eu	CONSTANT(d/L)	
Default value used		Value	2.00E-05
<b>Ho:Milk</b>	Milk transfer factor for Ho	CONSTANT(d/L)	
Default value used		Value	2.00E-05
<b>Tl:Milk</b>	Milk transfer factor for Tl	CONSTANT(d/L)	
Default value used		Value	2.00E-03
<b>Pb:Milk</b>	Milk transfer factor for Pb	CONSTANT(d/L)	
Default value used		Value	2.50E-04
<b>Bi:Milk</b>	Milk transfer factor for Bi	CONSTANT(d/L)	
Default value used		Value	5.00E-04
<b>Po:Milk</b>	Milk transfer factor for Po	CONSTANT(d/L)	
Default value used		Value	3.50E-04
<b>Ra:Milk</b>	Milk transfer factor for Ra	CONSTANT(d/L)	
Default value used		Value	4.50E-04
<b>Ac:Milk</b>	Milk transfer factor for Ac	CONSTANT(d/L)	



Default value used		Value	2.00E-05
<b>Th:Milk</b>	Milk transfer factor for Th	CONSTANT(d/L)	
Default value used		Value	5.00E-06
<b>U:Milk</b>	Milk transfer factor for U	CONSTANT(d/L)	
Default value used		Value	6.00E-04
<b>Cl:Eggs</b>	Egg transfer factor for Cl	CONSTANT(d/kg)	
Default value used		Value	2.00E+00
<b>Ca:Eggs</b>	Egg transfer factor for Ca	CONSTANT(d/kg)	
Default value used		Value	4.40E-01
<b>Mn:Eggs</b>	Egg transfer factor for Mn	CONSTANT(d/kg)	
Default value used		Value	6.50E-02
<b>Zn:Eggs</b>	Egg transfer factor for Zn	CONSTANT(d/kg)	
Default value used		Value	2.60E+00
<b>Se:Eggs</b>	Egg transfer factor for Se	CONSTANT(d/kg)	
Default value used		Value	9.30E+00
<b>Zr:Eggs</b>	Egg transfer factor for Zr	CONSTANT(d/kg)	
Default value used		Value	1.90E-04
<b>Nb:Eggs</b>	Egg transfer factor for Nb	CONSTANT(d/kg)	
Default value used		Value	1.30E-03
<b>Mo:Eggs</b>	Egg transfer factor for Mo	CONSTANT(d/kg)	
Default value used		Value	7.80E-01
<b>Sn:Eggs</b>	Egg transfer factor for Sn	CONSTANT(d/kg)	
Default value used		Value	8.00E-01
<b>Cs:Eggs</b>	Egg transfer factor for Cs	CONSTANT(d/kg)	
Default value used		Value	4.90E-01
<b>Sm:Eggs</b>	Egg transfer factor for Sm	CONSTANT(d/kg)	
Default value used		Value	7.00E-03
<b>Eu:Eggs</b>	Egg transfer factor for Eu	CONSTANT(d/kg)	
Default value used		Value	7.00E-03
<b>Ho:Eggs</b>	Egg transfer factor for Ho	CONSTANT(d/kg)	
Default value used		Value	7.00E-03
<b>Tl:Eggs</b>	Egg transfer factor for Tl	CONSTANT(d/kg)	
Default value used		Value	8.00E-01
<b>Pb:Eggs</b>	Egg transfer factor for Pb	CONSTANT(d/kg)	
Default value used		Value	8.00E-01
<b>Bi:Eggs</b>	Egg transfer factor for Bi	CONSTANT(d/kg)	
Default value used		Value	8.00E-01
<b>Po:Eggs</b>	Egg transfer factor for Po	CONSTANT(d/kg)	
Default value used		Value	7.00E+00
<b>Ra:Eggs</b>	Egg transfer factor for Ra	CONSTANT(d/kg)	
Default value used		Value	2.00E-05
<b>Ac:Eggs</b>	Egg transfer factor for Ac	CONSTANT(d/kg)	
Default value used		Value	2.00E-03
<b>Th:Eggs</b>	Egg transfer factor for Th	CONSTANT(d/kg)	

Default value used		Value	2.00E-03
<b>U:Eggs</b>	Egg transfer factor for U	CONSTANT(d/kg)	
Default value used		Value	9.90E-01
<b>Cl:Factor</b>	Bioaccumulation factor for Cl in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	5.00E+01
<b>Ca:Factor</b>	Bioaccumulation factor for Ca in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	4.00E+01
<b>Mn:Factor</b>	Bioaccumulation factor for Mn in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	4.00E+02
<b>Zn:Factor</b>	Bioaccumulation factor for Zn in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.50E+03
<b>Se:Factor</b>	Bioaccumulation factor for Se in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	1.70E+02
<b>Zr:Factor</b>	Bioaccumulation factor for Zr in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.00E+02
<b>Nb:Factor</b>	Bioaccumulation factor for Nb in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.00E+02
<b>Mo:Factor</b>	Bioaccumulation factor for Mo in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	1.00E+01
<b>Sn:Factor</b>	Bioaccumulation factor for Sn in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	3.00E+03
<b>Cs:Factor</b>	Bioaccumulation factor for Cs in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.00E+03
<b>Sm:Factor</b>	Bioaccumulation factor for Sm in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.50E+01
<b>Eu:Factor</b>	Bioaccumulation factor for Eu in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.50E+01
<b>Ho:Factor</b>	Bioaccumulation factor for Ho in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.50E+01
<b>Tl:Factor</b>	Bioaccumulation factor for Tl in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	0.00E+00
<b>Pb:Factor</b>	Bioaccumulation factor for Pb in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	1.00E+02
<b>Bi:Factor</b>	Bioaccumulation factor for Bi in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	1.50E+01
<b>Po:Factor</b>	Bioaccumulation factor for Po in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	5.00E+02
<b>Ra:Factor</b>	Bioaccumulation factor for Ra in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	7.00E+01
<b>Ac:Factor</b>	Bioaccumulation factor for Ac in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	2.50E+01
<b>Th:Factor</b>	Bioaccumulation factor for Th in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	
Default value used		Value	1.00E+02
	Bioaccumulation factor for U in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)	

<b>U:Factor</b>	
Default value used	Value 5.00E+01

## Correlation Coefficients:

Parameter One	Parameter Two	Correlation Coefficient
<b>KSDEV:Permeability Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		
<b>NDEV:Porosity Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		

## Summary Results:

90.00% of the 189 calculated TEDE values are < 2.28E-01 mrem/year .

The 95 % Confidence Interval for the 0.9 quantile value of TEDE is 1.85E-01 to 2.59E-01 mrem/year

## Detailed Results:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

### Concentration at Time of Peak Dose:

Nuclide	Soil Concentration (pCi/g)	Water Concentration (pCi/g)
36Cl	3.34E-03	6.05E-09
41Ca	2.98E-05	2.21E-17
54Mn	3.58E-12	2.40E-33
65Zn	1.34E-16	5.54E-31
79Se	2.09E-06	3.13E-18
93Zr	2.10E-07	2.17E-19
93mNb	0.00E+00	2.97E-17
93Mo	1.27E-06	2.21E-18
134Cs	2.68E-07	8.77E-33
135Cs	5.67E-07	1.31E-18
151Sm	6.06E-05	6.32E-20
155Eu	4.87E-05	2.67E-25
166mHo	5.74E-04	6.57E-17
233U	3.36E-06	1.29E-17
229Th	0.00E+00	7.95E-18
225Ra	0.00E+00	7.51E-18
225Ac	0.00E+00	7.24E-18
221Fr	0.00E+00	7.24E-18
217At	0.00E+00	7.24E-18
213Bi	0.00E+00	7.24E-18
213Po	0.00E+00	7.09E-18

209Tl	0.00E+00	1.56E-19
209Pb	0.00E+00	7.24E-18
121mSn	1.07E-07	5.72E-22
121Sn	0.00E+00	4.44E-22

Pathway Dose from All Nuclides (mrem)

All Pathways Dose	Agricultural	Drinking Water	Surface Water	External	Inhalation	Secondary Ingestion	Irrigation
2.59E-01	2.57E-01	2.19E-10	2.23E-10	2.57E-03	2.88E-07	2.25E-07	3.76E-09

Radionuclide Dose through All Active Pathways (mrem)

Nuclide	All Pathways Dose
36Cl	2.57E-01
41Ca	1.41E-05
54Mn	6.37E-12
65Zn	3.19E-16
79Se	2.82E-07
93Zr	2.35E-09
93mNb	9.77E-10
93Mo	1.56E-07
134Cs	1.20E-06
135Cs	6.89E-08
151Sm	8.60E-08
155Eu	4.29E-06
166mHo	2.58E-03
233U	4.18E-06
229Th	3.19E-09
225Ra	3.23E-10
225Ac	9.04E-11
221Fr	9.22E-12
217At	1.00E-13
213Bi	4.44E-11
213Po	0.00E+00
209Tl	1.46E-11
209Pb	2.13E-13
121mSn	1.45E-09
121Sn	6.15E-10
All Nuclides	2.59E-01

Dose from Each Nuclide through Each Active Pathway (mrem)

Nuclide	Agricultural	Drinking Water	Surface Water	External	Inhalation	Secondary Ingestion	Irrigation

36Cl	2.57E-01	8.46E-12	9.07E-12	3.74E-06	2.17E-08	1.43E-07	7.28E-10
41Ca	1.41E-05	1.30E-20	1.15E-20	0.00E+00	1.19E-11	5.37E-10	1.18E-19
54Mn	9.73E-13	3.07E-36	2.60E-35	5.39E-12	5.12E-18	9.62E-17	3.88E-36
65Zn	1.91E-16	3.69E-33	2.02E-31	1.29E-16	5.39E-22	1.70E-20	3.63E-32
79Se	2.82E-07	1.26E-20	4.69E-20	1.90E-11	6.08E-12	2.57E-10	7.54E-20
93Zr	2.34E-09	1.66E-22	7.63E-22	0.00E+00	1.99E-11	4.93E-12	3.65E-22
93mNb	8.79E-10	7.17E-21	3.27E-20	1.85E-12	3.01E-13	2.74E-13	1.63E-19
93Mo	1.56E-07	1.38E-21	3.01E-22	3.66E-10	1.07E-11	2.42E-11	4.46E-21
134Cs	2.68E-07	2.97E-34	1.25E-32	9.29E-07	3.15E-12	2.36E-10	2.57E-33
135Cs	6.88E-08	4.27E-21	2.07E-19	1.06E-11	7.62E-13	5.67E-11	3.36E-20
151Sm	8.46E-08	1.13E-23	6.44E-24	2.90E-11	5.35E-10	3.32E-10	2.76E-23
155Eu	2.47E-07	1.88E-28	9.38E-29	4.04E-06	5.59E-10	9.83E-10	3.43E-28
166mHo	1.64E-05	2.45E-19	1.45E-19	2.56E-03	1.31E-07	6.55E-08	6.23E-19
233U	4.09E-06	1.72E-18	2.05E-18	2.22E-09	1.34E-07	1.37E-08	3.76E-18
229Th	3.15E-09	1.30E-17	2.56E-17	2.43E-11	9.47E-11	7.93E-12	2.47E-17
225Ra	3.22E-10	1.34E-18	1.84E-18	7.49E-13	3.03E-13	7.69E-13	2.88E-18
225Ac	8.61E-11	3.71E-19	1.83E-19	3.91E-12	3.84E-13	2.04E-13	7.93E-19
221Fr	0.00E+00	0.00E+00	0.00E+00	9.22E-12	0.00E+00	0.00E+00	0.00E+00
217At	0.00E+00	0.00E+00	0.00E+00	1.00E-13	0.00E+00	0.00E+00	0.00E+00
213Bi	5.59E-13	2.41E-21	1.19E-21	4.38E-11	6.09E-16	1.33E-15	5.15E-21
213Po	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
209Tl	0.00E+00	0.00E+00	0.00E+00	1.46E-11	0.00E+00	0.00E+00	0.00E+00
209Pb	1.65E-13	7.12E-22	3.51E-22	4.76E-14	3.37E-18	3.91E-16	1.52E-21
121mSn	1.34E-09	4.09E-25	2.84E-23	1.02E-10	3.62E-13	2.33E-12	2.28E-24
121Sn	6.06E-10	1.85E-25	1.28E-23	7.82E-12	1.24E-14	1.05E-12	1.03E-24



# DandD Residential Scenario

DandD Version: 2.1.0

Run Date/Time: 6/20/2012 10:22:26 AM

Site Name: HBPP

Description: Analysis of potential dose of nuclides not discounted for building occupancy

FileName: C:\Documents and Settings\mxco\Desktop\TBDS\HBPP nondiscounted.mcd

## Options:

Implicit progeny doses NOT included with explicit parent doses

Nuclide concentrations are distributed among all progeny

Number of simulations: 196

Seed for Random Generation: 8718721

Averages used for behavioral type parameters

External Pathway is ON

Inhalation Pathway is ON

Secondary Ingestion Pathway is ON

Agricultural Pathway is ON

Drinking Water Pathway is ON

Irrigation Pathway is ON

Surface Water Pathway is ON

## Initial Activities:

Nuclide	Area of Contamination (m <sup>2</sup> )	Distribution
239Pu	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 1.27E-06

## Chain Data:

Number of chains: 1

Chain No. 1: 239Pu

Nuclides in chain: 14

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
239Pu	1	8.79E+06					9.56E-07	1.16E-04	3.17E-14	1.31E-16
235U	2	2.57E+11	1	1	0	0	7.19E-08	3.32E-05	1.28E-11	3.24E-13
231Th	3	1.06E+00	2	1	0	0	3.65E-10	2.37E-10	1.60E-12	1.68E-14
231Pa	4	1.20E+07	3	1	0	0	2.86E-06	3.47E-04	3.52E-12	8.30E-14

227Ac	5	7.95E+03	4	1	0	0	3.80E-06	1.81E-03	1.36E-14	2.26E-16
223Fr	Implicit		5	0.0138			2.33E-09	1.68E-09	4.88E-12	8.74E-14
227Th	6	1.87E+01	5	0.9862	0	0	1.03E-08	4.37E-06	8.94E-12	2.29E-13
223Ra	7	1.14E+01	6	1	5	0.0138	1.78E-07	2.12E-06	1.11E-11	2.67E-13
219Rn	Implicit		7	1			0.00E+00	0.00E+00	4.74E-12	1.33E-13
215Po	Implicit		7	1			0.00E+00	0.00E+00	1.51E-14	4.30E-16
211Pb	Implicit		7	1			1.42E-10	2.35E-09	4.38E-12	1.26E-13
211Bi	Implicit		7	1			0.00E+00	0.00E+00	3.96E-12	1.10E-13
211Po	Implicit		7	0.0028			0.00E+00	0.00E+00	6.57E-13	1.94E-14
207Tl	Implicit		7	0.9972			0.00E+00	0.00E+00	3.25E-13	8.19E-15

Initial Concentrations:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

Nuclide	Soil Concentration (pCi/g)
239Pu	1.27E-06
235U	0.00E+00
231Th	0.00E+00
231Pa	0.00E+00
227Ac	0.00E+00
223Fr	0.00E+00
227Th	0.00E+00
223Ra	0.00E+00
219Rn	0.00E+00
215Po	0.00E+00
211Pb	0.00E+00
211Bi	0.00E+00
211Po	0.00E+00
207Tl	0.00E+00

Model Parameters:

General Parameters:

Parameter Name	Description	Distribution
Tv(1):Translocation:Leafy	Translocation factor for leafy vegetables	CONSTANT(none)
Default value used		Value1.00E+00
Tv(2):Translocation:Root	Translocation factor for other vegetables	CONSTANT(none)
Default value used		Value1.00E-01
Tv(3):Translocation:Fruit	Translocation factor for fruit	CONSTANT(none)
Default value used		Value1.00E-01
Tv(4):Translocation:Grain	Translocation factor for grain	CONSTANT(none)
Default value used		

		Value	1.00E-01
<b>Tf(1):Translocation:Beef Forage</b>	Translocation factor for forage consumed by beef cattle	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Tf(2):Translocation:Poultry Forage</b>	Translocation factor for forage consumed by poultry	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Tf(3):Translocation:Milk Cow</b>	Translocation factor for forage consumed by milk cows	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Tf(4):Translocation:Layer Hen Forage</b>	Translocation factor for forage consumed by layer hens	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Tg(1):Translocation:Beef Grain</b>	Translocation factor for stored grain consumed by beef cattle	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>Tg(2):Translocation:Poultry Grain</b>	Translocation factor for stored grain consumed by poultry	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>Tg(3):Translocation:Milk Cow Grain</b>	Translocation factor for stored grain consumed by milk cows	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>Tg(4):Translocation:Layer Hen Grain</b>	Translocation factor for stored grain consumed by layer hens	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>Th(1):Translocation:Beef Hay</b>	Translocation factor for stored hay consumed by beef cattle	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Th(2):Translocation:Poultry Hay</b>	Translocation factor for stored hay consumed by poultry	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Th(3):Translocation:Milk Cow Hay</b>	Translocation factor for stored hay consumed by milk cows	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>Th(4):Translocation:Layer Hen Hay</b>	Translocation factor for stored hay consumed by layer hens	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>fca(1):Beef Carbon Fraction</b>	Mass fraction of beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	3.60E-01
<b>fca(2):Poultry Carbon Fraction</b>	Mass fraction of poultry that is carbon	CONSTANT(none)	
Default value used		Value	1.80E-01
<b>fca(3):Milk Carbon Fraction</b>	Mass fraction of milk that is carbon	CONSTANT(none)	
Default value used		Value	6.00E-02
<b>fca(4):Eggs Carbon Fraction</b>	Mass fraction of an egg that is carbon	CONSTANT(none)	



Default value used		Value	1.60E-01
<b>fcf(1):Beef Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(2):Poultry Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(3):Milk Cow Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcf(4):Layer Hen Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	1.10E-01
<b>fcg(1):Beef Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(2):Poultry Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(3):Milk Cow Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fcg(4):Layer Hen Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	4.00E-01
<b>fch(1):Beef Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by beef cattle that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(2):Poultry Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by poultry that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(3):Milk Cow Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by milk cows that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fch(4):Layer Hen Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by layer hens that is carbon	CONSTANT(none)	
Default value used		Value	7.00E-02
<b>fCd:Soil Carbon Fraction</b>	Mass fraction of dry soil that is carbon	CONSTANT(none)	
Default value used		Value	3.00E-02
<b>SATac:Animal Product Specific Activity</b>	Specific activity equivalence of animal product and specific activity of animal feed, forage, and soil	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xf(1):Beef Forage Contaminated Fraction</b>	Fraction of forage consumed by beef cattle that is contaminated	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>xf(2):Poultry Forage Contaminated Fraction</b>	Fraction of forage consumed by poultry that is contaminated	CONSTANT(none)	

<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xf(3):Milk Cow Forage Contaminated Fraction</b>	Fraction of forage consumed by milk cows that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xf(4):Layer Hen Forage Contaminated Fraction</b>	Fraction of forage consumed by layer hens that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xg(1):Beef Grain Contaminated Fraction</b>	Fraction of stored grain consumed by beef cattle that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xg(2):Poultry Grain Contaminated Fraction</b>	Fraction of stored grain consumed by poultry that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xg(3):Milk Cow Grain Contaminated Fraction</b>	Fraction of stored grain consumed by milk cows that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xg(4):Layer Hen Grain Contaminated Fraction</b>	Fraction of stored grain that is consumed by layer hens that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xh(1):Beef Hay Contaminated Fraction</b>	Fraction of stored hay consumed by beef cattle that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xh(2):Poultry Hay Contaminated Fraction</b>	Fraction of stored hay consumed by poultry that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xh(3):Milk Cow Hay Contaminated Fraction</b>	Fraction of stored hay consumed by milk cows that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xh(4):Layer Hen Hay Contaminated Fraction</b>	Fraction of stored hay consumed by layer hens that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xw(1):Beef Water Contaminated Fraction</b>	Fraction of water that is consumed by beef cattle that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xw(2):Poultry Water Contaminated Fraction</b>	Fraction of water consumed by poultry that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xw(3):Milk Cow Water Contaminated Fraction</b>	Fraction of water consumed by milk cows that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>xw(4):Layer Hen Water Contaminated Fraction</b>	Fraction of water consumed by layer hens that is contaminated	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>DIET:Garden Diet</b>	Fraction of human diet grown onsite	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E+00
<b>Uv(1):Diet - Leafy</b>	Yearly human consumption of leafy vegetables	CONSTANT(kg/y)

Default value used		Value	2.14E+01
Uv(2):Diet - Roots	Yearly human consumption of other vegetables	CONSTANT(kg/y)	
Default value used		Value	4.46E+01
Uv(3):Diet - Fruit	Yearly human consumption of fruits	CONSTANT(kg/y)	
Default value used		Value	5.28E+01
Uv(4):Diet - Grain	Yearly human consumption of grains	CONSTANT(kg/y)	
Default value used		Value	1.44E+01
Ua(1):Diet - Beef	Yearly human consumption of beef	CONSTANT(kg/y)	
Default value used		Value	3.98E+01
Ua(2):Diet - Poultry	Yearly human consumption of poultry	CONSTANT(kg/y)	
Default value used		Value	2.53E+01
Ua(3):Diet - Milk	Yearly human consumption of milk	CONSTANT(L/y)	
Default value used		Value	2.33E+02
Ua(4):Diet - Egg	Yearly human consumption of eggs	CONSTANT(kg/y)	
Default value used		Value	1.91E+01
Uf:Diet - Fish	Yearly human consumption of fish produced from an onsite pond	CONSTANT(kg/y)	
Default value used		Value	2.06E+01
tf:Consumption Period	Consumption period for fish	CONSTANT(days)	
Default value used		Value	3.65E+02
tcv(1):Consumption Period - Leafy	Food consumption period for leafy vegetables	CONSTANT(days)	
Default value used		Value	3.65E+02
tcv(2):Consumption Period - Roots	Food consumption period for other vegetables	CONSTANT(days)	
Default value used		Value	3.65E+02
tcv(3):Consumption Period - Fruit	Food consumption period for fruits	CONSTANT(days)	
Default value used		Value	3.65E+02
tcv(4):Consumption Period - Grain	Food consumption period for grains	CONSTANT(days)	
Default value used		Value	3.65E+02
tca(1):Consumption Period - Beef	Food consumption period for beef	CONSTANT(days)	
Default value used		Value	3.65E+02
tca(2):Consumption Period - Poultry	Food consumption period for poultry	CONSTANT(days)	
Default value used		Value	3.65E+02
tca(3):Consumption Period - Milk	Food consumption period for milk	CONSTANT(days)	
Default value used		Value	3.65E+02
tca(4):Consumption Period - Egg	Food consumption period for eggs	CONSTANT(days)	
Default value used		Value	3.65E+02
Nunsat:Number of Unsaturated Layers	Number of model layers used to represent the unsaturated zone	CONSTANT(none)	

Default value used		Value	1.00E+01
<b>TstartR:Start Time</b>	The start time of the scenario in days	CONSTANT(days)	
Default value used		Value	0.00E+00
<b>TendR:End Time</b>	The ending time of the scenario in days	CONSTANT(days)	
Default value used		Value	3.65E+05
<b>dtR:Time Step Size</b>	The time step size	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>PstepR:Print Step Size</b>	The time steps for the history file. Doses will be written to the history file every n time steps	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>TI:Indoor Exposure Period</b>	The time the resident spends indoors	CONSTANT(days/year)	
Default value used		Value	2.40E+02
<b>TX:Outdoor Exposure Period</b>	The time the resident spends outdoors	CONSTANT(days/year)	
Default value used		Value	4.02E+01
<b>TG:Gardening Period</b>	The time the resident spends gardening	CONSTANT(days/year)	
Default value used		Value	2.92E+00
<b>TTR:Total time in period</b>	Total time in the one year exposure period	CONSTANT(days/year)	
Default value used		Value	3.65E+02
<b>SFI:Indoor Shielding Factor</b>	Shielding factor for the residence	CONSTANT(none)	
Default value used		Value	5.52E-01
<b>SFO:Outdoor Shielding Factor</b>	Shielding factor for the cover soil	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>PD:Floor dust loading</b>	Floor dust loading	UNIFORM(g/m**2)	
Default value used		Lower Limit	2.00E-02
		Upper Limit	3.00E-01
<b>RFR:Indoor Resuspension Factor</b>	Resuspension factor for indoor dust	LOGUNIFORM(1/m)	
Default value used		Lower Limit	1.00E-07
		Upper Limit	8.00E-05
<b>CDO:Outdoor Dust Loading</b>	Average dust loading outdoors	LOGUNIFORM(g/m**3)	
Default value used		Lower Limit	1.00E-07
		Upper Limit	1.00E-04
<b>CDI:Indoor Dust Loading</b>	Average dust loading indoors	DERIVED(g/m**3)	
Default value used			
<b>PF:Indoor/Outdoor Penetration Factor</b>	Fraction of outdoor dust in indoor air	UNIFORM(none)	
Default value used		Lower Limit	2.00E-01
		Upper Limit	7.00E-01
<b>CDG:Gardening Dust Loading</b>	Average dust loading while gardening	UNIFORM(g/m**3)	
Default value used		Lower Limit	1.00E-04
		Upper Limit	7.00E-04

<b>VR:Indoor Breathing Rate</b>	Breathing rate while indoors	CONSTANT(m**3/hr)	
Default value used		Value	9.00E-01
<b>VX:Outdoor Breathing Rate</b>	Breathing rate while outdoors	CONSTANT(m**3/hr)	
Default value used		Value	1.40E+00
<b>VG:Gardening Breathing Rate</b>	Breathing rate while gardening	CONSTANT(m**3/hr)	
Default value used		Value	1.70E+00
<b>GR:Soil Ingestion Transfer Rate</b>	Average rate of soil ingestion	CONSTANT(g/d)	
Default value used		Value	5.00E-02
<b>UW:Diet - Water</b>	Drinking water ingestion rate	CONSTANT(L/d)	
Default value used		Value	1.26E+00
<b>H1:Surface Soil Thickness</b>	Thickness of the surface soil layer	CONSTANT(m)	
Default value used		Value	1.50E-01
<b>H2:Unsaturated Zone Thickness</b>	Thickness of the unsaturated zone	CONTINUOUS LINEAR(m)	
Default value used		Value	Probability
		3.05E-01	0.00E+00
		6.68E-01	4.76E-03
		8.11E-01	9.52E-03
		9.21E-01	1.43E-02
		9.94E-01	1.91E-02
		1.03E+00	2.38E-02
		1.07E+00	2.86E-02
		1.14E+00	3.33E-02
		1.21E+00	3.81E-02
		1.30E+00	4.29E-02
		1.31E+00	4.76E-02
		1.32E+00	5.24E-02
		1.56E+00	5.71E-02
		1.58E+00	6.19E-02
		1.61E+00	6.67E-02
		1.69E+00	7.62E-02
		1.78E+00	8.57E-02
		1.80E+00	9.05E-02
		1.81E+00	9.52E-02
		1.84E+00	1.00E-01
		1.87E+00	1.05E-01
		1.92E+00	1.10E-01
		2.04E+00	1.14E-01
		2.10E+00	1.19E-01
		2.11E+00	1.24E-01
		2.32E+00	1.29E-01
		2.36E+00	1.33E-01
		2.37E+00	1.38E-01
		2.39E+00	1.43E-01
		2.44E+00	1.48E-01
		2.44E+00	1.52E-01
		2.45E+00	1.57E-01
		2.59E+00	1.62E-01
		2.63E+00	1.67E-01
		2.69E+00	1.71E-01
		2.79E+00	1.76E-01
		2.81E+00	1.81E-01
		2.90E+00	1.86E-01

2.95E+00	1.91E-01
3.07E+00	1.95E-01
3.18E+00	2.00E-01
3.22E+00	2.05E-01
3.30E+00	2.10E-01
3.34E+00	2.14E-01
3.37E+00	2.19E-01
3.44E+00	2.24E-01
3.58E+00	2.29E-01
3.62E+00	2.33E-01
3.66E+00	2.38E-01
3.74E+00	2.43E-01
3.86E+00	2.48E-01
3.88E+00	2.52E-01
4.17E+00	2.57E-01
4.26E+00	2.62E-01
4.44E+00	2.71E-01
4.63E+00	2.76E-01
4.87E+00	2.81E-01
5.13E+00	2.86E-01
5.18E+00	2.91E-01
5.54E+00	2.95E-01
5.83E+00	3.00E-01
5.86E+00	3.05E-01
5.86E+00	3.10E-01
5.90E+00	3.14E-01
6.06E+00	3.19E-01
6.13E+00	3.24E-01
6.17E+00	3.29E-01
6.22E+00	3.33E-01
6.31E+00	3.38E-01
6.36E+00	3.43E-01
6.40E+00	3.48E-01
6.46E+00	3.52E-01
6.51E+00	3.57E-01
6.55E+00	3.62E-01
6.60E+00	3.67E-01
6.86E+00	3.71E-01
6.93E+00	3.76E-01
6.95E+00	3.86E-01
6.97E+00	3.91E-01
7.09E+00	3.95E-01
7.18E+00	4.00E-01
7.35E+00	4.05E-01
7.36E+00	4.10E-01
7.40E+00	4.14E-01
7.43E+00	4.19E-01
7.46E+00	4.24E-01
7.59E+00	4.29E-01
7.60E+00	4.33E-01
7.64E+00	4.38E-01
7.87E+00	4.43E-01
8.10E+00	4.48E-01
8.28E+00	4.52E-01
8.35E+00	4.57E-01
8.71E+00	4.62E-01
8.71E+00	4.67E-01
8.73E+00	4.71E-01
8.79E+00	4.76E-01
8.80E+00	4.81E-01
8.82E+00	4.86E-01

8.85E+00	4.91E-01
8.89E+00	4.95E-01
8.90E+00	5.00E-01
8.99E+00	5.05E-01
9.00E+00	5.10E-01
9.13E+00	5.14E-01
9.14E+00	5.19E-01
9.21E+00	5.24E-01
9.31E+00	5.29E-01
9.55E+00	5.33E-01
9.60E+00	5.38E-01
9.63E+00	5.43E-01
9.86E+00	5.48E-01
1.05E+01	5.52E-01
1.07E+01	5.57E-01
1.13E+01	5.62E-01
1.15E+01	5.67E-01
1.17E+01	5.71E-01
1.20E+01	5.76E-01
1.26E+01	5.81E-01
1.26E+01	5.86E-01
1.28E+01	5.91E-01
1.32E+01	5.95E-01
1.32E+01	6.00E-01
1.34E+01	6.05E-01
1.34E+01	6.10E-01
1.36E+01	6.14E-01
1.37E+01	6.19E-01
1.38E+01	6.24E-01
1.41E+01	6.29E-01
1.45E+01	6.33E-01
1.51E+01	6.38E-01
1.52E+01	6.43E-01
1.61E+01	6.48E-01
1.62E+01	6.52E-01
1.65E+01	6.57E-01
1.66E+01	6.62E-01
1.69E+01	6.67E-01
1.74E+01	6.71E-01
1.82E+01	6.76E-01
1.84E+01	6.81E-01
1.84E+01	6.86E-01
1.87E+01	6.91E-01
1.95E+01	6.95E-01
2.01E+01	7.00E-01
2.07E+01	7.05E-01
2.08E+01	7.10E-01
2.17E+01	7.14E-01
2.24E+01	7.19E-01
2.27E+01	7.24E-01
2.29E+01	7.29E-01
2.29E+01	7.33E-01
2.40E+01	7.38E-01
2.47E+01	7.43E-01
2.60E+01	7.48E-01
2.65E+01	7.52E-01
2.72E+01	7.57E-01
2.73E+01	7.62E-01
2.76E+01	7.67E-01
2.77E+01	7.71E-01
2.78E+01	7.76E-01

		2.80E+01	7.81E-01
		2.86E+01	7.86E-01
		2.94E+01	7.91E-01
		3.01E+01	7.95E-01
		3.03E+01	8.00E-01
		3.06E+01	8.10E-01
		3.08E+01	8.14E-01
		3.11E+01	8.19E-01
		3.17E+01	8.24E-01
		3.17E+01	8.29E-01
		3.17E+01	8.33E-01
		3.22E+01	8.38E-01
		3.39E+01	8.43E-01
		3.48E+01	8.48E-01
		3.54E+01	8.52E-01
		3.60E+01	8.57E-01
		3.68E+01	8.62E-01
		4.03E+01	8.67E-01
		4.07E+01	8.71E-01
		4.24E+01	8.76E-01
		4.29E+01	8.81E-01
		4.42E+01	8.86E-01
		4.72E+01	8.91E-01
		4.97E+01	8.95E-01
		5.12E+01	9.00E-01
		6.13E+01	9.05E-01
		6.19E+01	9.10E-01
		6.23E+01	9.14E-01
		6.32E+01	9.19E-01
		6.59E+01	9.24E-01
		6.73E+01	9.29E-01
		7.47E+01	9.33E-01
		7.92E+01	9.38E-01
		8.12E+01	9.43E-01
		8.28E+01	9.48E-01
		8.47E+01	9.52E-01
		8.96E+01	9.57E-01
		9.47E+01	9.62E-01
		1.08E+02	9.67E-01
		1.13E+02	9.71E-01
		1.15E+02	9.76E-01
		1.42E+02	9.81E-01
		1.77E+02	9.86E-01
		1.78E+02	9.91E-01
		1.80E+02	9.95E-01
		3.16E+02	1.00E+00
<b>N1:Surface Soil Porosity</b>	Porosity of the surface soil layer	DERIVED(none)	
Default value used			
<b>N2:Unsaturated Zone Porosity</b>	Porosity of the unsaturated zone	DERIVED(none)	
Default value used			
<b>F1:Surface Soil Saturation</b>	Saturation ratio of the surface soil layer	DERIVED(none)	
Default value used			
<b>F2:Unsaturated Zone Saturation</b>	Saturation ratio of the unsaturated zone	DERIVED(none)	
Default value used			
<b>INFIL:Infiltration Rate</b>	Net rate of infiltration to aquifer	DERIVED(m/y)	
Default value used			



SCSST:Soil Classification		SCS soil classification ID	DISCRETE CUMULATIVE(none)	
Default value used			Value	Probability
			1.00E+00	1.00E-04
			2.00E+00	1.34E-03
			3.00E+00	1.06E-02
			4.00E+00	2.51E-02
			5.00E+00	6.17E-02
			6.00E+00	1.09E-01
			7.00E+00	1.62E-01
			8.00E+00	2.12E-01
			9.00E+00	2.85E-01
			1.00E+01	5.10E-01
			1.10E+01	7.58E-01
			1.20E+01	1.00E+00
NDEV:Porosity Probability		Relative porosity value within the distribution for this soil type	UNIFORM(none)	
Default value used			Lower Limit	0.00E+00
			Upper Limit	1.00E+00
KSDEV:Permeability Probability		Relative permeability value within the distribution for this soil type	UNIFORM(none)	
Default value used			Lower Limit	0.00E+00
			Upper Limit	1.00E+00
BDEV:Parameter "b" Probability		Relative value of "b" parameter within the distribution for this soil type	UNIFORM(none)	
Default value used			Lower Limit	0.00E+00
			Upper Limit	1.00E+00
AP:Water Application Rate		Total water application rate on cultivated area	CONTINUOUS LINEAR(m/y)	
Default value used			Value	Probability
			6.07E-01	0.00E+00
			6.10E-01	4.62E-01
			6.35E-01	4.76E-01
			7.62E-01	5.40E-01
			8.89E-01	6.29E-01
			1.02E+00	7.05E-01
			1.14E+00	8.04E-01
			1.27E+00	8.79E-01
			1.40E+00	9.41E-01
			1.52E+00	9.82E-01
			1.65E+00	9.98E-01
			1.78E+00	1.00E+00
IR:Irrigation Rate		Annual average irrigation rate	CONSTANT(L/m**2-d)	
Default value used			Value	1.29E+00
RHO1:Surface Soil Density		Bulk density of soil in the surface soil layer	DERIVED(g/mL)	
Default value used				
RHO2:Unsaturated Zone Density		Bulk density of soil in the unsaturated zone	DERIVED(g/mL)	
Default value used				
Ksat1:Surface Soil Permeability		Saturated permeability of the surface soil layer	DERIVED(cm/sec)	
Default value used				
VDR:Volume of Water Consumed		Volume of water withdrawn for consumptive use	CONSTANT(L)	

Default value used		Value	1.18E+05
<b>VSW:Volume of Water in Pond</b>	Volume of water in the pond	CONSTANT(L)	
Default value used		Value	1.30E+06
<b>AR:Cultivated Area</b>	Area of land cultivated	DERIVED(m**2)	
Default value used			
<b>sh:Soil Moisture Content</b>	Moisture content of soil	DERIVED(none)	
Default value used			
<b>TTG:Gardening Period</b>	Total time in gardening period	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TD:Drinking-water consumption period</b>	Drinking-water consumption period	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>THV(1):Holdup Period : Leafy</b>	Holdup period for leafy vegetables	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THV(2):Holdup Period : Other vegetables</b>	Holdup period for other vegetables	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THV(3):Holdup Period : Fruits</b>	Holdup period for fruits	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THV(4):Holdup Period : Grains</b>	Holdup period for grains	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THA(1):Holdup Period : Beef</b>	Holdup period for beef	CONSTANT(days)	
Default value used		Value	2.00E+01
<b>THA(2):Holdup Period : Poultry</b>	Holdup period for poultry	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THA(3):Holdup Period : Milk</b>	Holdup period for milk	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THA(4):Holdup Period : Eggs</b>	Holdup period for eggs	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>TGV(1):Growing Period : Leafy</b>	Minimum growing period for leafy vegetables	CONSTANT(days)	
Default value used		Value	4.50E+01
<b>TGV(2):Growing Period : Other vegetables</b>	Minimum growing period for other vegetables	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGV(3):Growing Period : Fruits</b>	Minimum growing period for fruits	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGV(4):Growing Period :</b>	Minimum growing period for grains	CONSTANT(days)	

<b>Grains</b>		
<u>Default value used</u>		<u>Value</u> 9.00E+01
<b>TGF(1):Growing Period : Beef Forage</b>	Minimum growing period for forage consumed by beef cattle	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.00E+01
<b>TGF(2):Growing Period : Poultry Forage</b>	Minimum growing period for forage consumed by poultry	DERIVED(days)
<u>Default value used</u>		
<b>TGF(3):Growing Period : Milk Cow Forage</b>	Minimum growing period for forage consumed by milk cows	DERIVED(days)
<u>Default value used</u>		
<b>TGF(4):Growing Period : Layer Hen Forage</b>	Minimum growing period for forage consumed by layer hens	DERIVED(days)
<u>Default value used</u>		
<b>TGG(1):Growing Period : Beef Cow Grain</b>	Minimum growing period for stored grain consumed by beef cattle	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 9.00E+01
<b>TGG(2):Growing Period : Poultry Grain</b>	Minimum growing period for stored grain consumed by poultry	DERIVED(days)
<u>Default value used</u>		
<b>TGG(3):Growing Period : Milk Cow Grain</b>	Minimum growing period for stored grain consumed by milk cows	DERIVED(days)
<u>Default value used</u>		
<b>TGG(4):Growing Period : Layer Hen Grain</b>	Minimum growing period for stored grain consumed by layer hens	DERIVED(days)
<u>Default value used</u>		
<b>TGH(1):Growing Period : Beef Cow Hay</b>	Minimum growing period for stored hay consumed by beef cattle	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 4.50E+01
<b>TGH(2):Growing Period : Poultry Hay</b>	Minimum growing period for stored hay consumed by poultry	DERIVED(days)
<u>Default value used</u>		
<b>TGH(3):Growing Period : Milk Cow Hay</b>	Minimum growing period for stored hay consumed by milk cows	DERIVED(days)
<u>Default value used</u>		
<b>TGH(4):Growing Period : Layer Hen Hay</b>	Minimum growing period for stored hay consumed by layer hens	DERIVED(days)
<u>Default value used</u>		
<b>RV(1):Interception Fraction : Leafy</b>	Interception fraction for leafy vegetables	UNIFORM(none)
<u>Default value used</u>		<u>Lower Limit</u> 1.00E-01 <u>Upper Limit</u> 6.00E-01
<b>RV(2):Interception Fraction : Other vegetables</b>	Interception fraction for other vegetables	UNIFORM(none)
<u>Default value used</u>		<u>Lower Limit</u> 1.00E-01 <u>Upper Limit</u> 6.00E-01
<b>RV(3):Interception Fraction : Fruits</b>	Interception fraction for fruits	UNIFORM(none)
<u>Default value used</u>		<u>Lower Limit</u> 1.00E-01

		Upper Limit	6.00E-01
<b>RV(4):Interception Fraction : Grains</b>	Interception fraction for grains	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RF(1):Interception Fraction : Beef Forage</b>	Interception fraction for beef cattle forage	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RF(2):Interception Fraction : Poultry forage</b>	Interception fraction for poultry forage	DERIVED(none)	
Default value used			
<b>RF(3):Interception Fraction : Milk Cow Forage</b>	Interception fraction for milk cow forage	DERIVED(none)	
Default value used			
<b>RF(4):Interception Fraction : Layer Hen Forage</b>	Interception fraction for layer hen forage	DERIVED(none)	
Default value used			
<b>RG(1):Interception Fraction : Beef Cow Grain</b>	Interception fraction for beef cattle grain	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RG(2):Interception Fraction : Poultry Grain</b>	Interception fraction for poultry grain	DERIVED(none)	
Default value used			
<b>RG(3):Interception Fraction : Milk Cow Grain</b>	Interception fraction for milk cow grain	DERIVED(none)	
Default value used			
<b>RG(4):Interception Fraction : Layer Hen Grain</b>	Interception fraction for layer hen grain	DERIVED(none)	
Default value used			
<b>RH(1):Interception Fraction : Beef Cow Hay</b>	Interception fraction for beef cattle hay	DERIVED(none)	
Default value used			
<b>RH(2):Interception Fraction : Poultry Hay</b>	Interception fraction for poultry hay	DERIVED(none)	
Default value used			
<b>RH(3):Interception Fraction : Milk Cow Hay</b>	Interception fraction for milk cow hay	DERIVED(none)	
Default value used			
<b>RH(4):Interception Fraction : Layer Hen Hay</b>	Interception fraction for layer hen hay	DERIVED(none)	
Default value used			
<b>YV(1):Crop Yield : Leafy</b>	Crop yield for leafy vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		Value	Probability
		2.70E+00	0.00E+00
		2.71E+00	1.60E-03
		2.74E+00	6.00E-03
		2.76E+00	1.76E-02
		2.78E+00	4.36E-02

		2.80E+00	8.48E-02
		2.82E+00	1.56E-01
		2.85E+00	2.57E-01
		2.87E+00	3.64E-01
		2.89E+00	5.00E-01
		2.91E+00	6.39E-01
		2.93E+00	7.46E-01
		2.96E+00	8.42E-01
		2.98E+00	9.09E-01
		3.00E+00	9.60E-01
		3.02E+00	9.84E-01
		3.04E+00	9.94E-01
		3.07E+00	9.97E-01
		3.09E+00	9.99E-01
		3.11E+00	1.00E+00
		3.13E+00	1.00E+00
		3.15E+00	1.00E+00
<b>YV(2):Crop Yield : Other</b>	Crop yield for other vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<b>Value</b>	<b>Probability</b>
		2.26E+00	0.00E+00
		2.29E+00	8.00E-04
		2.30E+00	1.20E-03
		2.31E+00	6.40E-03
		2.33E+00	1.52E-02
		2.34E+00	3.28E-02
		2.35E+00	7.44E-02
		2.36E+00	1.40E-01
		2.38E+00	2.49E-01
		2.39E+00	3.80E-01
		2.40E+00	5.30E-01
		2.42E+00	6.61E-01
		2.43E+00	7.88E-01
		2.44E+00	8.86E-01
		2.45E+00	9.42E-01
		2.47E+00	9.75E-01
		2.48E+00	9.88E-01
		2.49E+00	9.96E-01
		2.51E+00	9.97E-01
		2.52E+00	9.99E-01
		2.53E+00	1.00E+00
		2.54E+00	1.00E+00
<b>YV(3):Crop Yield : Fruits</b>	Crop yield for fruits	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<b>Value</b>	<b>Probability</b>
		2.17E+00	0.00E+00
		2.20E+00	1.20E-03
		2.21E+00	2.40E-03
		2.23E+00	6.80E-03
		2.25E+00	1.80E-02
		2.27E+00	4.36E-02
		2.29E+00	7.64E-02
		2.31E+00	1.38E-01
		2.32E+00	2.14E-01
		2.34E+00	3.27E-01
		2.36E+00	4.50E-01
		2.38E+00	5.76E-01
		2.40E+00	6.87E-01
		2.42E+00	7.88E-01
		2.43E+00	8.68E-01
		2.45E+00	9.25E-01
		2.47E+00	9.60E-01

		2.49E+00	9.81E-01
		2.51E+00	9.92E-01
		2.53E+00	9.98E-01
		2.54E+00	1.00E+00
		2.56E+00	1.00E+00
<b>YV(4):Crop Yield : Grains</b>	Crop yield for grains	CONTINUOUS LINEAR(kg wet wt/m**2)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		2.85E-01	0.00E+00
		2.90E-01	6.00E-04
		3.02E-01	2.80E-03
		3.14E-01	9.40E-03
		3.26E-01	2.14E-02
		3.38E-01	5.42E-02
		3.50E-01	1.08E-01
		3.62E-01	2.02E-01
		3.74E-01	3.15E-01
		3.86E-01	4.50E-01
		3.98E-01	5.92E-01
		4.10E-01	7.20E-01
		4.23E-01	8.26E-01
		4.35E-01	9.03E-01
		4.47E-01	9.51E-01
		4.59E-01	9.77E-01
		4.71E-01	9.91E-01
		4.83E-01	9.96E-01
		4.95E-01	9.99E-01
		5.07E-01	1.00E+00
		5.19E-01	1.00E+00
		5.31E-01	1.00E+00
<b>YF(1):Crop Yield : Beef Forage</b>	Crop yield for beef cattle forage	BETA(kg dry wt forage/m**2)	
<u>Default value used</u>		<u>Lower Limit</u>	3.70E-01
		<u>Upper Limit</u>	5.24E-01
		<u>p</u>	2.36E+00
		<u>q</u>	1.40E+00
<b>YF(2):Crop Yield : Poultry Forage</b>	Crop yield for poultry forage	DERIVED(kg wet wt forage/m**2)	
<u>Default value used</u>			
<b>YF(3):Crop Yield : Milk Cow Forage</b>	Crop yield for milk cow forage	DERIVED(kg wet wt forage/m**2)	
<u>Default value used</u>			
<b>YF(4):Crop Yield : Layer Hen Forage</b>	Crop yield for layer hen forage	DERIVED(kg wet wt forage/m**2)	
<u>Default value used</u>			
<b>YG(1):Crop Yield : Beef Cow Grain</b>	Crop yield for beef cattle grain	NORMAL(kg dry wt grain /m**2)	
<u>Default value used</u>		<u>Mean</u>	5.78E-01
		<u>Standard Deviation</u>	7.77E-02
<b>YG(2):Crop Yield : Poultry Grain</b>	Crop yield for poultry grain	DERIVED(kg wet wt grain /m**2)	
<u>Default value used</u>			
<b>YG(3):Crop Yield : Milk Cow Grain</b>	Crop yield for milk cow grain	DERIVED(kg wet wt grain /m**2)	
<u>Default value used</u>			

<b>YG(4):Crop Yield : Layer Hen Grain</b>	Crop yield for layer hen grain	DERIVED(kg wet wt grain /m**2)
<u>Default value used</u>		
<b>YH(1):Crop Yield : Beef Cow Hay</b>	Crop yield for beef cattle hay	DERIVED(kg wet wt/m**2)
<u>Default value used</u>		
<b>YH(2):Crop Yield : Poultry Hay</b>	Crop yield for poultry hay	DERIVED(kg wet wt/m**2)
<u>Default value used</u>		
<b>YH(3):Crop Yield : Milk Cow Hay</b>	Crop yield for milk cow hay	DERIVED(kg wet wt/m**2)
<u>Default value used</u>		
<b>YH(4):Crop Yield : Layer Hen Hay</b>	Crop yield for layer hen hay	DERIVED(kg wet wt/m**2)
<u>Default value used</u>		
<b>WV(1):Wet/dry : Leafy Vegetables</b>	Wet/dry conversion factor for leafy vegetables	CONTINUOUS LINEAR(none)
<u>Default value used</u>		<u>Value</u> <u>Probability</u>
		3.32E-02 0.00E+00
		4.89E-02 3.45E-02
		5.47E-02 6.91E-02
		5.96E-02 1.04E-01
		6.36E-02 1.38E-01
		6.70E-02 1.73E-01
		7.05E-02 2.07E-01
		7.38E-02 2.42E-01
		7.48E-02 2.50E-01
		7.72E-02 2.76E-01
		8.03E-02 3.11E-01
		8.34E-02 3.45E-01
		8.66E-02 3.80E-01
		9.00E-02 4.15E-01
		9.36E-02 4.49E-01
		9.73E-02 4.84E-01
		9.91E-02 4.99E-01
		1.01E-01 5.18E-01
		1.05E-01 5.53E-01
		1.09E-01 5.87E-01
		1.13E-01 6.22E-01
		1.18E-01 6.56E-01
		1.23E-01 6.91E-01
		1.29E-01 7.25E-01
		1.33E-01 7.50E-01
		1.35E-01 7.60E-01
		1.42E-01 7.94E-01
		1.50E-01 8.29E-01
		1.59E-01 8.64E-01
		1.70E-01 8.98E-01
		1.85E-01 9.33E-01
		2.10E-01 9.67E-01
		2.56E-01 9.91E-01
		3.24E-01 1.00E+00
<b>WV(2):Wet/dry : Other Vegetables</b>	Wet/dry conversion factor for other vegetables	CONTINUOUS LINEAR(none)
<u>Default value used</u>		<u>Value</u> <u>Probability</u>
		3.58E-02 0.00E+00

		4.87E-02	3.45E-02
		5.46E-02	6.91E-02
		5.90E-02	1.04E-01
		6.29E-02	1.38E-01
		6.69E-02	1.73E-01
		7.02E-02	2.07E-01
		7.34E-02	2.42E-01
		7.41E-02	2.50E-01
		7.65E-02	2.76E-01
		7.99E-02	3.11E-01
		8.32E-02	3.45E-01
		8.66E-02	3.80E-01
		9.05E-02	4.15E-01
		9.41E-02	4.49E-01
		9.82E-02	4.84E-01
		9.98E-02	4.99E-01
		1.02E-01	5.18E-01
		1.06E-01	5.53E-01
		1.09E-01	5.87E-01
		1.14E-01	6.22E-01
		1.19E-01	6.56E-01
		1.24E-01	6.91E-01
		1.29E-01	7.25E-01
		1.33E-01	7.50E-01
		1.35E-01	7.60E-01
		1.42E-01	7.94E-01
		1.50E-01	8.29E-01
		1.59E-01	8.64E-01
		1.70E-01	8.98E-01
		1.87E-01	9.33E-01
		2.12E-01	9.67E-01
		2.62E-01	9.91E-01
		3.13E-01	1.00E+00
<b>WV(3):Wet/dry : Fruit</b>		Wet/dry conversion factor for fruits	
Default value used		CONTINUOUS LINEAR(none)	
		<u>Value</u>	<u>Probability</u>
		3.66E-02	0.00E+00
		4.87E-02	3.45E-02
		5.45E-02	6.91E-02
		5.93E-02	1.04E-01
		6.31E-02	1.38E-01
		6.72E-02	1.73E-01
		7.10E-02	2.07E-01
		7.44E-02	2.42E-01
		7.52E-02	2.50E-01
		7.78E-02	2.76E-01
		8.13E-02	3.11E-01
		8.45E-02	3.45E-01
		8.78E-02	3.80E-01
		9.11E-02	4.15E-01
		9.46E-02	4.49E-01
		9.82E-02	4.84E-01
		9.97E-02	4.99E-01
		1.02E-01	5.18E-01
		1.06E-01	5.53E-01
		1.10E-01	5.87E-01
		1.14E-01	6.22E-01
		1.19E-01	6.56E-01
		1.24E-01	6.91E-01
		1.29E-01	7.25E-01
		1.34E-01	7.50E-01



		1.35E-01	7.60E-01
		1.42E-01	7.94E-01
		1.49E-01	8.29E-01
		1.58E-01	8.64E-01
		1.70E-01	8.98E-01
		1.87E-01	9.33E-01
		2.14E-01	9.67E-01
		2.58E-01	9.91E-01
		3.25E-01	1.00E+00
<b>WV(4):Wet/dry : Grain</b>	Wet/dry conversion factor for grains	CONSTANT(none)	
Default value used		Value	8.80E-01
<b>WF(1):Wet/dry : Beef Cow Forage</b>	Wet/dry conversion factor for beef cattle forage	BETA(none)	
Default value used		Lower Limit	1.83E-01
		Upper Limit	3.23E-01
		p	1.15E+00
		q	1.18E+00
<b>WF(2):Wet/dry : Poultry Forage</b>	Wet/dry conversion factor for poultry forage	DERIVED(none)	
Default value used			
<b>WF(3):Wet/dry : Milk Cow Forage</b>	Wet/dry conversion factor for milk cow forage	DERIVED(none)	
Default value used			
<b>WF(4):Wet/dry : Layer Hen Forage</b>	Wet/dry conversion factor for layer hen forage	DERIVED(none)	
Default value used			
<b>WG(1):Wet/dry : Beef Cow Grain</b>	Wet/dry conversion factor for beef cattle grain	CONSTANT(none)	
Default value used		Value	8.80E-01
<b>WG(2):Wet/dry : Poultry Grain</b>	Wet/dry conversion factor for poultry grain	DERIVED(none)	
Default value used			
<b>WG(3):Wet/dry : Milk Cow Grain</b>	Wet/dry conversion factor for milk cow grain	DERIVED(none)	
Default value used			
<b>WG(4):Wet/dry : Layer Hen Grain</b>	Wet/dry conversion factor for layer hen grain	DERIVED(none)	
Default value used			
<b>WH(1):Wet/dry : Beef Cow Hay</b>	Wet/dry conversion factor for beef cattle hay	DERIVED(none)	
Default value used			
<b>WH(2):Wet/dry : Poultry Hay</b>	Wet/dry conversion factor for poultry hay	DERIVED(none)	
Default value used			
<b>WH(3):Wet/dry : Milk Cow Hay</b>	Wet/dry conversion factor for milk cow hay	DERIVED(none)	
Default value used			
<b>WH(4):Wet/dry : Layer Hen Hay</b>	Wet/dry conversion factor for layer hen hay	DERIVED(none)	
Default value used			
<b>QF(1):Ingestion Rate : Beef</b>			

<b>Cow Forage</b>	Ingestion rate for beef cattle forage	BETA(kg dry wt forage/d)																																																																						
Default value used		<u>Lower Limit</u> 1.69E+00 <u>Upper Limit</u> 2.29E+00 <u>p</u> 1.99E+00 <u>q</u> 9.11E-01																																																																						
<b>QF(2):Ingestion Rate : Poultry Forage</b>	Ingestion rate for poultry forage	BETA(kg dry wt forage/d)																																																																						
Default value used		<u>Lower Limit</u> 3.48E-03 <u>Upper Limit</u> 2.82E-02 <u>p</u> 1.51E+00 <u>q</u> 1.41E+00																																																																						
<b>QF(3):Ingestion Rate : Milk Cow Forage</b>	Ingestion rate for milk cow forage	CONTINUOUS LINEAR(kg dry wt forage/d)																																																																						
Default value used		<table border="1"> <thead> <tr> <th>Value</th><th>Probability</th></tr> </thead> <tbody> <tr><td>6.35E+00</td><td>0.00E+00</td></tr> <tr><td>6.77E+00</td><td>3.45E-02</td></tr> <tr><td>6.96E+00</td><td>6.91E-02</td></tr> <tr><td>7.10E+00</td><td>1.04E-01</td></tr> <tr><td>7.24E+00</td><td>1.38E-01</td></tr> <tr><td>7.35E+00</td><td>1.73E-01</td></tr> <tr><td>7.47E+00</td><td>2.07E-01</td></tr> <tr><td>7.57E+00</td><td>2.42E-01</td></tr> <tr><td>7.60E+00</td><td>2.50E-01</td></tr> <tr><td>7.67E+00</td><td>2.76E-01</td></tr> <tr><td>7.77E+00</td><td>3.11E-01</td></tr> <tr><td>7.87E+00</td><td>3.45E-01</td></tr> <tr><td>7.98E+00</td><td>3.80E-01</td></tr> <tr><td>8.08E+00</td><td>4.15E-01</td></tr> <tr><td>8.18E+00</td><td>4.49E-01</td></tr> <tr><td>8.31E+00</td><td>4.84E-01</td></tr> <tr><td>8.37E+00</td><td>4.99E-01</td></tr> <tr><td>8.42E+00</td><td>5.18E-01</td></tr> <tr><td>8.54E+00</td><td>5.53E-01</td></tr> <tr><td>8.67E+00</td><td>5.87E-01</td></tr> <tr><td>8.81E+00</td><td>6.22E-01</td></tr> <tr><td>8.95E+00</td><td>6.56E-01</td></tr> <tr><td>9.10E+00</td><td>6.91E-01</td></tr> <tr><td>9.26E+00</td><td>7.25E-01</td></tr> <tr><td>9.38E+00</td><td>7.50E-01</td></tr> <tr><td>9.45E+00</td><td>7.60E-01</td></tr> <tr><td>9.68E+00</td><td>7.94E-01</td></tr> <tr><td>9.93E+00</td><td>8.29E-01</td></tr> <tr><td>1.02E+01</td><td>8.64E-01</td></tr> <tr><td>1.06E+01</td><td>8.98E-01</td></tr> <tr><td>1.11E+01</td><td>9.33E-01</td></tr> <tr><td>1.20E+01</td><td>9.67E-01</td></tr> <tr><td>1.33E+01</td><td>9.91E-01</td></tr> <tr><td>1.53E+01</td><td>1.00E+00</td></tr> </tbody> </table>	Value	Probability	6.35E+00	0.00E+00	6.77E+00	3.45E-02	6.96E+00	6.91E-02	7.10E+00	1.04E-01	7.24E+00	1.38E-01	7.35E+00	1.73E-01	7.47E+00	2.07E-01	7.57E+00	2.42E-01	7.60E+00	2.50E-01	7.67E+00	2.76E-01	7.77E+00	3.11E-01	7.87E+00	3.45E-01	7.98E+00	3.80E-01	8.08E+00	4.15E-01	8.18E+00	4.49E-01	8.31E+00	4.84E-01	8.37E+00	4.99E-01	8.42E+00	5.18E-01	8.54E+00	5.53E-01	8.67E+00	5.87E-01	8.81E+00	6.22E-01	8.95E+00	6.56E-01	9.10E+00	6.91E-01	9.26E+00	7.25E-01	9.38E+00	7.50E-01	9.45E+00	7.60E-01	9.68E+00	7.94E-01	9.93E+00	8.29E-01	1.02E+01	8.64E-01	1.06E+01	8.98E-01	1.11E+01	9.33E-01	1.20E+01	9.67E-01	1.33E+01	9.91E-01	1.53E+01	1.00E+00
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1.53E+01	1.00E+00																																																																							
<b>QF(4):Ingestion Rate : Layer Hen Forage</b>	Ingestion rate for layer hen forage	BETA(kg dry wt forage/d)																																																																						
Default value used		<u>Lower Limit</u> 1.19E-02 <u>Upper Limit</u> 2.22E-02 <u>p</u> 1.45E+00 <u>q</u> 7.92E-01																																																																						
<b>QG(1):Ingestion Rate : Beef Cattle Grain</b>	Ingestion rate for beef cattle grain	BETA(kg dry wt grain/d)																																																																						
Default value used		<u>Lower Limit</u> 1.69E+00																																																																						

		Upper Limit	2.29E+00
		p	1.99E+00
		q	9.11E-01
<b>QG(2):Ingestion Rate : Poultry Grain</b>	Ingestion rate for poultry grain	BETA(kg dry wt grain/d)	
Default value used		Lower Limit	1.04E-02
		Upper Limit	8.45E-02
		p	1.51E+00
		q	1.41E+00
<b>QG(3):Ingestion Rate : Milk Cow Grain</b>	Ingestion rate for milk cow grain	NORMAL(kg dry wt grain/d)	
Default value used		Mean	1.71E+00
		Standard Deviation	2.62E-01
<b>QG(4):Ingestion Rate : Layer Hen Grain</b>	Ingestion rate for layer hen grain	BETA(kg dry wt grain/d)	
Default value used		Lower Limit	3.58E-02
		Upper Limit	6.67E-02
		p	1.43E+00
		q	7.92E-01
<b>QH(1):Ingestion Rate : Beef Cattle Hay</b>	Ingestion rate for beef cattle hay	BETA(kg dry wt hay/d)	
Default value used		Lower Limit	3.38E+00
		Upper Limit	4.58E+00
		p	1.99E+00
		q	9.11E-01
<b>QH(2):Ingestion Rate : Poultry Hay</b>	Ingestion rate for poultry hay	CONSTANT(kg dry wt hay/d)	
Default value used		Value	0.00E+00
<b>QH(3):Ingestion Rate : Milk Cow Hay</b>	Ingestion rate for milk cow hay	CONTINUOUS LINEAR(kg dry wt hay/d)	
Default value used		Value	Probability
		5.12E+00	0.00E+00
		5.43E+00	3.45E-02
		5.57E+00	6.91E-02
		5.68E+00	1.04E-01
		5.79E+00	1.38E-01
		5.89E+00	1.73E-01
		5.98E+00	2.07E-01
		6.06E+00	2.42E-01
		6.08E+00	2.50E-01
		6.14E+00	2.76E-01
		6.22E+00	3.11E-01
		6.30E+00	3.45E-01
		6.38E+00	3.80E-01
		6.46E+00	4.15E-01
		6.54E+00	4.49E-01
		6.63E+00	4.84E-01
		6.67E+00	4.99E-01
		6.72E+00	5.18E-01
		6.81E+00	5.53E-01
		6.92E+00	5.87E-01
		7.03E+00	6.22E-01
		7.13E+00	6.56E-01
		7.26E+00	6.91E-01
		7.39E+00	7.25E-01
		7.49E+00	7.50E-01

		7.56E+00	7.60E-01
		7.70E+00	7.94E-01
		7.89E+00	8.29E-01
		8.11E+00	8.64E-01
		8.39E+00	8.98E-01
		8.75E+00	9.33E-01
		9.44E+00	9.67E-01
		1.05E+01	9.91E-01
		1.27E+01	1.00E+00
<b>QH(4):Ingestion Rate : Layer Hen Hay</b>	Ingestion rate for layer hen hay	CONSTANT(kg dry wt hay/d)	
Default value used		<u>Value</u>	0.00E+00
<b>QW(1):Water Rate : Beef Cattle</b>	Water ingestion rate for beef cattle	CONSTANT(L/d)	
Default value used		<u>Value</u>	5.00E+01
<b>QW(2):Water Rate : Poultry</b>	Water ingestion rate for poultry	CONSTANT(L/d)	
Default value used		<u>Value</u>	3.00E-01
<b>QW(3):Water Rate : Milk Cows</b>	Water ingestion rate for milk cows	CONSTANT(L/d)	
Default value used		<u>Value</u>	6.00E+01
<b>QW(4):Water Rate : Layer Hens</b>	Water ingestion rate for layer hens	CONSTANT(L/d)	
Default value used		<u>Value</u>	3.00E-01
<b>QD(1):Soil Fraction : Beef Cattle</b>	Soil intake fraction for beef cattle	CONSTANT(none)	
Default value used		<u>Value</u>	2.00E-02
<b>QD(2):Soil Fraction : Poultry</b>	Soil intake fraction for poultry	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>QD(3):Soil Fraction : Milk Cows</b>	Soil intake fraction for milk cows	CONSTANT(none)	
Default value used		<u>Value</u>	2.00E-02
<b>QD(4):Soil Fraction : Layer Hens</b>	Soil intake fraction for layer hens	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>MLV(1):Mass-Loading : Leafy Vegetables</b>	Mass-loading factor for leafy vegetables	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>MLV(2):Mass-Loading : Other Vegetables</b>	Mass-loading factor for other vegetables	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>MLV(3):Mass-Loading : Fruits</b>	Mass-loading factor for fruits	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>MLV(4):Mass-Loading : Grains</b>	Mass-loading factor for grains	CONSTANT(none)	
Default value used		<u>Value</u>	1.00E-01
<b>LAMBDW:Weathering</b>	Weathering rate for activity removal from	CONSTANT(1/d)	

<b>Rate</b>	plants	
Default value used		<u>Value</u> 4.95E-02
<b>MLF(1):Mass-Loading : Beef Cow Forage</b>	Mass-loading factor for beef cattle forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLF(2):Mass-Loading : Poultry Forage</b>	Mass-loading factor for poultry forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLF(3):Mass-Loading : Milk Cow Forage</b>	Mass-loading factor for milk cow forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLF(4):Mass-Loading : Layer Hen Forage</b>	Mass-loading factor for layer hen forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLG(1):Mass-Loading : Beef Cattle Grain</b>	Mass-loading factor for beef cattle grain	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLG(2):Mass-Loading : Poultry Grain</b>	Mass-loading factor for poultry grain	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLG(3):Mass-Loading : Milk Cow Grain</b>	Mass-loading factor for milk cow grain	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLG(4):Mass-Loading : Layer Hen Grain</b>	Mass-loading factor for layer hen grain	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLH(1):Mass-Loading : Beef Cattle Hay</b>	Mass-loading factor for beef cattle hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLH(2):Mass-Loading : Poultry Hay</b>	Mass-loading factor for poultry hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLH(3):Mass-Loading : Milk Cow Hay</b>	Mass-loading factor for milk cow hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>MLH(4):Mass-Loading : Layer Hen Hay</b>	Mass-loading factor for layer hen hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>TFF(1):Feeding Period : Beef Cow Forage</b>	Feeding period for beef cattle forage	CONSTANT(days)
Default value used		<u>Value</u> 3.65E+02
<b>TFF(2):Feeding Period : Poultry Forage</b>	Feeding period for poultry forage	CONSTANT(days)
Default value used		<u>Value</u> 3.65E+02
<b>TFF(3):Feeding Period : Milk Cow Forage</b>	Feeding period for milk cow forage	CONSTANT(days)
Default value used		<u>Value</u> 3.65E+02

<b>TFF(4):Feeding Period : Layer Hen Forage</b>	Feeding period for layer hen forage	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(1):Feeding Period : Beef Cattle Grain</b>	Feeding period for beef cattle grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(2):Feeding Period : Poultry Grain</b>	Feeding period for poultry grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(3):Feeding Period : Milk Cow Grain</b>	Feeding period for milk cow grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(4):Feeding Period : Layer Hen Grain</b>	Feeding period for layer hen grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(1):Feeding Period : Beef Cattle Hay</b>	Feeding period for beef cattle hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(2):Feeding Period : Poultry Hay</b>	Feeding period for poultry hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(3):Feeding Period : Milk Cow Hay</b>	Feeding period for milk cow hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(4):Feeding Period : Layer Hen Hay</b>	Feeding period for layer hen hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(1):Water Period : Beef Cattle</b>	Water ingestion period for beef cattle	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(2):Water Period : Poultry</b>	Water ingestion period for poultry	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(3):Water Period : Milk Cows</b>	Water ingestion period for milk cows	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(4):Water Period : Layer Hens</b>	Water ingestion period for layer hens	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>fha(1):Hydrogen Fraction : Beef Cattle</b>	Hydrogen fraction for beef cattle	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E-01
<b>fha(2):Hydrogen Fraction : Poultry</b>	Hydrogen fraction for poultry	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E-01
<b>fha(3):Hydrogen Fraction : Milk Cows</b>	Hydrogen fraction for milk cows	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.10E-01

<b>fha(4):Hydrogen Fraction : Eggs</b>	Hydrogen fraction for eggs	CONSTANT(none)
Default value used		<u>Value</u> 1.10E-01
<b>fhv(1):Hydrogen Fraction : Leafy Vegetables</b>	Hydrogen fraction for leafy vegetables	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhv(2):Hydrogen Fraction : Other Vegetables</b>	Hydrogen fraction for other vegetables	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhv(3):Hydrogen Fraction : Fruits</b>	Hydrogen fraction for fruits	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhv(4):Hydrogen Fraction : Grains</b>	Hydrogen fraction for grains	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhf(1):Hydrogen Fraction : Beef Cow Forage</b>	Hydrogen fraction for beef cattle forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(2):Hydrogen Fraction : Poultry Forage</b>	Hydrogen fraction for poultry forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(3):Hydrogen Fraction : Milk Cow Forage</b>	Hydrogen fraction for milk cow forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(4):Hydrogen Fraction : Layer Hen Forage</b>	Hydrogen fraction for layer hen forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(1):Hydrogen Fraction : Beef Cattle Hay</b>	Hydrogen fraction for beef cattle hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(2):Hydrogen Fraction : Poultry Hay</b>	Hydrogen fraction for poultry hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(3):Hydrogen Fraction : Milk Cow Hay</b>	Hydrogen fraction for milk cow hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(4):Hydrogen Fraction : Layer Hen Hay</b>	Hydrogen fraction for layer hen hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhg(1):Hydrogen Fraction : Beef Cattle Grain</b>	Hydrogen fraction for beef cattle grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhg(2):Hydrogen Fraction : Poultry Grain</b>	Hydrogen fraction for poultry grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhg(3):Hydrogen Fraction : Milk Cow Grain</b>	Hydrogen fraction for milk cow grain	CONSTANT(none)

Default value used		Value	6.80E-02
<b>fhg(4):Hydrogen Fraction : Layer Hen Grain</b>	Hydrogen fraction for layer hen grain	CONSTANT(none)	
Default value used		Value	6.80E-02
<b>fhd016:Hydrogen Fraction : Soil</b>	Fraction of hydrogen in soil	DERIVED(none)	
Default value used			
<b>sasvh:Tritium Equivalence: Plant/Soil</b>	Tritium equivalence: plant/soil	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>sawvh:Tritium Equivalence: Plant/Water</b>	Tritium equivalence: plant/water	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>satah:Tritium Equivalence: Animal Products</b>	Tritium equivalence: animal product intake	CONSTANT(none)	
Default value used		Value	1.00E+00
<b>YA(1):Animal Product Yield : Beef Cattle</b>	Annual yield of beef per individual animal	CONSTANT(kg/y)	
Default value used		Value	2.09E+02
<b>YA(2):Animal Product Yield : Poultry</b>	Annual yield of chicken per individual animal	CONSTANT(kg/y)	
Default value used		Value	1.53E+00
<b>YA(3):Animal Product Yield : Milk Cows</b>	Annual yield of milk per individual animal	CONSTANT(L/y)	
Default value used		Value	7.41E+03
<b>YA(4):Animal Product Yield : Layer Hens</b>	Annual yield of eggs per individual animal	CONSTANT(kg/y)	
Default value used		Value	1.26E+01
<b>ARExt:External Exposure Area</b>	Minimum surface area to which resident is exposed via external radiation during residential period	CONSTANT(m**2)	
Default value used		Value	1.00E+02
<b>ARInh:Inhalation Exposure Area</b>	Minimum surface area to which resident is exposed via inhalation during residential period	CONSTANT(m**2)	
Default value used		Value	1.00E+02
<b>ARIng:Secondary Ingestion Exposure Area</b>	Minimum surface area to which resident is exposed via secondary ingestion during residential period	CONSTANT(m**2)	
Default value used		Value	1.00E+02
<b>ARAgr:Agricultural Exposure Area</b>	Minimum surface area to which resident is exposed via any agricultural product during residential period	DERIVED(m**2)	
Default value used			
<b>ARH2O:Groundwater Exposure Area</b>	Minimum surface area to which resident is exposed via groundwater during residential period	DERIVED(m**2)	
Default value used			
<b>ARAll:Exposure Area</b>	Minimum surface area to which resident is exposed via any pathway during the	DERIVED(m**2)	



	residential period	
Default value used		

## Element Dependant Parameters

Parameter Name	Description	Distribution
<b>Tl:Coefficient</b>	Partition coefficient for Tl	NORMAL(Log10(mL/g))
Default value used		Mean 2.20E+00 Standard Deviation 1.40E+00
<b>Pb:Coefficient</b>	Partition coefficient for Pb	NORMAL(Log10(mL/g))
Default value used		Mean 3.38E+00 Standard Deviation 1.20E+00
<b>Bi:Coefficient</b>	Partition coefficient for Bi	NORMAL(Log10(mL/g))
Default value used		Mean 2.65E+00 Standard Deviation 1.40E+00
<b>Po:Coefficient</b>	Partition coefficient for Po	NORMAL(Log10(mL/g))
Default value used		Mean 2.26E+00 Standard Deviation 7.30E-01
<b>Rn:Coefficient</b>	Partition coefficient for Rn	CONSTANT(mL/g)
Default value used		Value 0.00E+00
<b>Ra:Coefficient</b>	Partition coefficient for Ra	NORMAL(Log10(mL/g))
Default value used		Mean 3.55E+00 Standard Deviation 7.40E-01
<b>Ac:Coefficient</b>	Partition coefficient for Ac	NORMAL(Log10(mL/g))
Default value used		Mean 3.24E+00 Standard Deviation 1.40E+00
<b>Th:Coefficient</b>	Partition coefficient for Th	NORMAL(Log10(mL/g))
Default value used		Mean 3.77E+00 Standard Deviation 1.57E+00
<b>Pa:Coefficient</b>	Partition coefficient for Pa	NORMAL(Log10(mL/g))
Default value used		Mean 3.31E+00 Standard Deviation 1.40E+00
<b>U:Coefficient</b>	Partition coefficient for U	NORMAL(Log10(mL/g))
Default value used		Mean 2.10E+00 Standard Deviation 1.36E+00
<b>Pu:Coefficient</b>	Partition coefficient for Pu	NORMAL(Log10(mL/g))
Default value used		Mean 2.98E+00 Standard Deviation 8.20E-01
<b>Tl:Leafy</b>	Leafy plant concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
Default value used		Mean of Ln(X) -5.52E+00 Standard Deviation of Ln 9.04E-01
<b>Pb:Leafy</b>	Leafy plant concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
Default value used		Mean of Ln(X) -3.10E+00 Standard Deviation of Ln 9.04E-01

<b>Bi:Leafy</b>	Leafy plant concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.35E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Po:Leafy</b>	Leafy plant concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.99E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Rn:Leafy</b>	Leafy plant concentration factor for Rn	CONSTANT(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Value</u> 0.00E+00
<b>Ra:Leafy</b>	Leafy plant concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.20E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ac:Leafy</b>	Leafy plant concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.65E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Th:Leafy</b>	Leafy plant concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.07E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pa:Leafy</b>	Leafy plant concentration factor for Pa	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.99E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>U:Leafy</b>	Leafy plant concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.77E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pu:Leafy</b>	Leafy plant concentration factor for Pu	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.71E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Tl:Root</b>	Root plant concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pb:Root</b>	Root plant concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.71E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Bi:Root</b>	Root plant concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Po:Root</b>	Root plant concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Rn:Root</b>	Root plant concentration factor for Rn	CONSTANT(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Value</u> 0.00E+00

<b>Ra:Root</b>	Root plant concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -6.50E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ac:Root</b>	Root plant concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.96E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Th:Root</b>	Root plant concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -9.37E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pa:Root</b>	Root plant concentration factor for Pa	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -8.29E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>U:Root</b>	Root plant concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pu:Root</b>	Root plant concentration factor for Pu	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -1.00E+01
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Tl:Fruit</b>	Fruit concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Pb:Fruit</b>	Fruit concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.71E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Bi:Fruit</b>	Fruit concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Po:Fruit</b>	Fruit concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.82E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Rn:Fruit</b>	Fruit concentration factor for Rn	CONSTANT(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Value</u> 0.00E+00
<b>Ra:Fruit</b>	Fruit concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -6.50E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Ac:Fruit</b>	Fruit concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.96E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Th:Fruit</b>	Fruit concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)

Default value used		Mean of Ln(X)	-9.37E+00
		Standard Deviation of Ln	9.04E-01
<b>Pa:Fruit</b>	Fruit concentration factor for Pa	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-8.29E+00
		Standard Deviation of Ln	9.04E-01
<b>U:Fruit</b>	Fruit concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Pu:Fruit</b>	Fruit concentration factor for Pu	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-1.00E+01
		Standard Deviation of Ln	9.04E-01
<b>Tl:Grain</b>	Grain concentration factor for Tl	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Pb:Grain</b>	Grain concentration factor for Pb	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.71E+00
		Standard Deviation of Ln	9.04E-01
<b>Bi:Grain</b>	Grain concentration factor for Bi	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01
<b>Po:Grain</b>	Grain concentration factor for Po	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.82E+00
		Standard Deviation of Ln	9.04E-01
<b>Rn:Grain</b>	Grain concentration factor for Rn	CONSTANT(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Value	0.00E+00
<b>Ra:Grain</b>	Grain concentration factor for Ra	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-6.50E+00
		Standard Deviation of Ln	9.04E-01
<b>Ac:Grain</b>	Grain concentration factor for Ac	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.96E+00
		Standard Deviation of Ln	9.04E-01
<b>Th:Grain</b>	Grain concentration factor for Th	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-9.37E+00
		Standard Deviation of Ln	9.04E-01
<b>Pa:Grain</b>	Grain concentration factor for Pa	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-8.29E+00
		Standard Deviation of Ln	9.04E-01
<b>U:Grain</b>	Grain concentration factor for U	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01

<b>Pu:Grain</b>	Grain concentration factor for Pu	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)
Default value used		Mean of Ln(X) -1.00E+01
		Standard Deviation of Ln 9.04E-01
<b>Tl:Beef</b>	Beef transfer factor for Tl	CONSTANT(d/kg)
Default value used		Value 4.00E-02
<b>Pb:Beef</b>	Beef transfer factor for Pb	CONSTANT(d/kg)
Default value used		Value 3.00E-04
<b>Bi:Beef</b>	Beef transfer factor for Bi	CONSTANT(d/kg)
Default value used		Value 4.00E-04
<b>Po:Beef</b>	Beef transfer factor for Po	CONSTANT(d/kg)
Default value used		Value 3.00E-04
<b>Rn:Beef</b>	Beef transfer factor for Rn	CONSTANT(d/kg)
Default value used		Value 0.00E+00
<b>Ra:Beef</b>	Beef transfer factor for Ra	CONSTANT(d/kg)
Default value used		Value 2.50E-04
<b>Ac:Beef</b>	Beef transfer factor for Ac	CONSTANT(d/kg)
Default value used		Value 2.50E-05
<b>Th:Beef</b>	Beef transfer factor for Th	CONSTANT(d/kg)
Default value used		Value 6.00E-06
<b>Pa:Beef</b>	Beef transfer factor for Pa	CONSTANT(d/kg)
Default value used		Value 1.00E-05
<b>U:Beef</b>	Beef transfer factor for U	CONSTANT(d/kg)
Default value used		Value 2.00E-04
<b>Pu:Beef</b>	Beef transfer factor for Pu	CONSTANT(d/kg)
Default value used		Value 5.00E-07
<b>Tl:Poultry</b>	Poultry transfer factor for Tl	CONSTANT(d/kg)
Default value used		Value 3.00E-01
<b>Pb:Poultry</b>	Poultry transfer factor for Pb	CONSTANT(d/kg)
Default value used		Value 2.00E-01
<b>Bi:Poultry</b>	Poultry transfer factor for Bi	CONSTANT(d/kg)
Default value used		Value 1.00E-01
<b>Po:Poultry</b>	Poultry transfer factor for Po	CONSTANT(d/kg)
Default value used		Value 9.00E-01
<b>Rn:Poultry</b>	Poultry transfer factor for Rn	CONSTANT(d/kg)
Default value used		Value 0.00E+00
<b>Ra:Poultry</b>	Poultry transfer factor for Ra	CONSTANT(d/kg)
Default value used		Value 3.00E-02
<b>Ac:Poultry</b>	Poultry transfer factor for Ac	CONSTANT(d/kg)
Default value used		Value 4.00E-03
<b>Th:Poultry</b>	Poultry transfer factor for Th	CONSTANT(d/kg)
Default value used		Value 4.00E-03
<b>Pa:Poultry</b>	Poultry transfer factor for Pa	CONSTANT(d/kg)
Default value used		Value 4.00E-03

<b>U:Poultry</b>	Poultry transfer factor for U	CONSTANT(d/kg)
Default value used		Value 1.20E+00
<b>Pu:Poultry</b>	Poultry transfer factor for Pu	CONSTANT(d/kg)
Default value used		Value 1.50E-04
<b>Tl:Milk</b>	Milk transfer factor for Tl	CONSTANT(d/L)
Default value used		Value 2.00E-03
<b>Pb:Milk</b>	Milk transfer factor for Pb	CONSTANT(d/L)
Default value used		Value 2.50E-04
<b>Bi:Milk</b>	Milk transfer factor for Bi	CONSTANT(d/L)
Default value used		Value 5.00E-04
<b>Po:Milk</b>	Milk transfer factor for Po	CONSTANT(d/L)
Default value used		Value 3.50E-04
<b>Rn:Milk</b>	Milk transfer factor for Rn	CONSTANT(d/L)
Default value used		Value 0.00E+00
<b>Ra:Milk</b>	Milk transfer factor for Ra	CONSTANT(d/L)
Default value used		Value 4.50E-04
<b>Ac:Milk</b>	Milk transfer factor for Ac	CONSTANT(d/L)
Default value used		Value 2.00E-05
<b>Th:Milk</b>	Milk transfer factor for Th	CONSTANT(d/L)
Default value used		Value 5.00E-06
<b>Pa:Milk</b>	Milk transfer factor for Pa	CONSTANT(d/L)
Default value used		Value 5.00E-06
<b>U:Milk</b>	Milk transfer factor for U	CONSTANT(d/L)
Default value used		Value 6.00E-04
<b>Pu:Milk</b>	Milk transfer factor for Pu	CONSTANT(d/L)
Default value used		Value 1.00E-07
<b>Tl:Eggs</b>	Egg transfer factor for Tl	CONSTANT(d/kg)
Default value used		Value 8.00E-01
<b>Pb:Eggs</b>	Egg transfer factor for Pb	CONSTANT(d/kg)
Default value used		Value 8.00E-01
<b>Bi:Eggs</b>	Egg transfer factor for Bi	CONSTANT(d/kg)
Default value used		Value 8.00E-01
<b>Po:Eggs</b>	Egg transfer factor for Po	CONSTANT(d/kg)
Default value used		Value 7.00E+00
<b>Rn:Eggs</b>	Egg transfer factor for Rn	CONSTANT(d/kg)
Default value used		Value 0.00E+00
<b>Ra:Eggs</b>	Egg transfer factor for Ra	CONSTANT(d/kg)
Default value used		Value 2.00E-05
<b>Ac:Eggs</b>	Egg transfer factor for Ac	CONSTANT(d/kg)
Default value used		Value 2.00E-03
<b>Th:Eggs</b>	Egg transfer factor for Th	CONSTANT(d/kg)
Default value used		Value 2.00E-03
<b>Pa:Eggs</b>	Egg transfer factor for Pa	CONSTANT(d/kg)
Default value used		Value 2.00E-03

<b>U:Eggs</b>	Egg transfer factor for U	CONSTANT(d/kg)
Default value used		Value 9.90E-01
<b>Pu:Eggs</b>	Egg transfer factor for Pu	CONSTANT(d/kg)
Default value used		Value 8.00E-03
<b>Tl:Factor</b>	Bioaccumulation factor for Tl in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 0.00E+00
<b>Pb:Factor</b>	Bioaccumulation factor for Pb in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 1.00E+02
<b>Bi:Factor</b>	Bioaccumulation factor for Bi in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 1.50E+01
<b>Po:Factor</b>	Bioaccumulation factor for Po in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 5.00E+02
<b>Rn:Factor</b>	Bioaccumulation factor for Rn in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 0.00E+00
<b>Ra:Factor</b>	Bioaccumulation factor for Ra in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 7.00E+01
<b>Ac:Factor</b>	Bioaccumulation factor for Ac in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.50E+01
<b>Th:Factor</b>	Bioaccumulation factor for Th in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 1.00E+02
<b>Pa:Factor</b>	Bioaccumulation factor for Pa in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 1.10E+01
<b>U:Factor</b>	Bioaccumulation factor for U in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 5.00E+01
<b>Pu:Factor</b>	Bioaccumulation factor for Pu in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.50E+02

### Correlation Coefficients:

Parameter One	Parameter Two	Correlation Coefficient
<b>KSDEV:Permeability Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		
<b>NDEV:Porosity Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		

### Summary Results:

90.00% of the 196 calculated TEDE values are < 1.42E-05 mrem/year .

The 95 % Confidence Interval for the 0.9 quantile value of TEDE is 1.36E-05 to 1.49E-05 mrem/year

### Detailed Results:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

### Concentration at Time of Peak Dose:

Nuclide	Soil Concentration (pCi/g)	Water Concentration (pCi/g)
239Pu	1.27E-06	9.78E-19
235U	0.00E+00	1.00E-22
231Th	0.00E+00	2.09E-22
231Pa	0.00E+00	4.93E-22
227Ac	0.00E+00	2.71E-21
223Fr	0.00E+00	3.74E-23
227Th	0.00E+00	3.28E-21
223Ra	0.00E+00	3.14E-21
219Rn	0.00E+00	3.14E-21
215Po	0.00E+00	3.14E-21
211Pb	0.00E+00	3.14E-21
211Bi	0.00E+00	3.14E-21
211Po	0.00E+00	8.79E-24
207Tl	0.00E+00	3.13E-21

Pathway Dose from All Nuclides (mrem)

All Pathways Dose	Agricultural	Drinking Water	Surface Water	External	Inhalation	Secondary Ingestion	Irrigation
1.49E-05	1.42E-05	1.60E-18	8.55E-18	1.76E-10	1.60E-07	6.36E-08	2.81E-18

Radionuclide Dose through All Active Pathways (mrem)

Nuclide	All Pathways Dose
239Pu	1.49E-05
235U	1.17E-15
231Th	1.55E-17
231Pa	3.35E-19
227Ac	6.39E-20
223Fr	5.83E-25
227Th	3.19E-22
223Ra	4.84E-21
219Rn	3.01E-24
215Po	9.73E-27
211Pb	6.70E-24
211Bi	2.49E-24
211Po	1.23E-27
207Tl	1.85E-25
All Nuclides	1.49E-05

Dose from Each Nuclide through Each Active Pathway (mrem)







# DandD Residential Scenario

**DandD Version:** 2.1.0

**Run Date/Time:** 6/20/2012 10:17:15 AM

**Site Name:** HBPP

**Description:** Analysis of potential dose of nuclides not discounted for building occupancy

**FileName:** C:\Documents and Settings\mxco\Desktop\TBDs\HBPP nondiscounted.mcd

## Options:

**Implicit progeny doses NOT included with explicit parent doses**

**Nuclide concentrations are distributed among all progeny**

**Number of simulations:** 196

**Seed for Random Generation:** 8718721

**Averages used for behavioral type parameters**

**External Pathway is ON**

**Inhalation Pathway is ON**

**Secondary Ingestion Pathway is ON**

**Agricultural Pathway is ON**

**Drinking Water Pathway is ON**

**Irrigation Pathway is ON**

**Surface Water Pathway is ON**

## Initial Activities:

Nuclide	Area of Contamination (m <sup>2</sup> )	Distribution
<b>3H</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 2.68E-07
<b>14C</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 1.43E-01
<b>55Fe</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 5.83E+00
<b>60Co</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 9.37E+00
<b>63Ni</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 1.17E-04
<b>90Sr</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 5.97E-09
<b>94Nb</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 8.80E-10
<b>99Tc</b>	UNLIMITED	CONSTANT(pCi/g)
Justification for concentration: Percent total		Value 5.67E-05
<b>137Cs</b>	UNLIMITED	CONSTANT(pCi/g)

Justification for concentration: Percent total		Value	1.38E-03
152Eu	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	1.53E-01
154Eu	UNLIMITED	CONSTANT(pCi/g)	
Justification for concentration: Percent total		Value	2.98E-05

## Chain Data:

Number of chains: 11

Chain No. 1: 3H

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
3H	1	4.51E+03					1.73E-11	1.73E-11	0.00E+00	0.00E+00

Chain No. 2: 14C

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
14C	1	2.09E+06					5.64E-10	5.64E-10	1.39E-15	6.22E-18

Chain No. 3: 55Fe

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
55Fe	1	9.86E+02					1.64E-10	7.26E-10	0.00E+00	0.00E+00

Chain No. 4: 60Co

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
60Co	1	1.93E+03					7.28E-09	5.91E-08	2.03E-10	6.26E-12

Chain No. 5: 63Ni

Nuclides in chain: 1

							Ingestion	Inhalation	Surface	15 cm
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Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	CEDE Factor (Sv/Bq)	CEDE Factor (Sv/Bq)	Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>63Ni</b>	1	3.51E+04					1.56E-10	1.70E-09	0.00E+00	0.00E+00

Chain No. 6: **90Sr**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>90Sr</b>	1	1.06E+04					3.85E-08	3.51E-07	2.46E-14	3.21E-16
<b>90Y</b>	2	2.67E+00	1	1	0	0	2.91E-09	2.28E-09	4.60E-13	1.03E-14

Chain No. 7: **94Nb**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>94Nb</b>	1	7.41E+06					1.93E-09	1.12E-07	1.32E-10	3.91E-12

Chain No. 8: **99Tc**

Nuclides in chain: 1

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>99Tc</b>	1	7.78E+07					3.95E-10	2.25E-09	6.73E-15	5.79E-17

Chain No. 9: **137Cs**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>137Cs</b>	1	1.10E+04					1.35E-08	8.63E-09	2.46E-14	3.40E-16
<b>137mBa</b>	Implicit		1	0.946			0.00E+00	0.00E+00	5.06E-11	1.48E-12

Chain No. 10: **152Eu**

Nuclides in chain: 2

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>152Eu</b>	1	4.87E+03					1.75E-09	5.97E-08	9.53E-11	2.78E-12

<b>152Gd</b>	2	3.94E+16	1	0.2792			4.34E-08	1.01E-06	0.00E+00	0.00E+00
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Chain No. 11: **154Eu**  
Nuclides in chain: **1**

Nuclide	Chain Position	Half Life	First Parent	Fractional Yield	Second Parent	Fractional Yield	Ingestion CEDE Factor (Sv/Bq)	Inhalation CEDE Factor (Sv/Bq)	Surface Dose Rate Factor ((Sv/d)/(Bq/m <sup>2</sup> ))	15 cm Dose Rate Factor ((Sv/d)/(Bq/m <sup>3</sup> ))
<b>154Eu</b>	1	3.21E+03					2.58E-09	7.73E-08	1.02E-10	3.04E-12

## Initial Concentrations:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

Nuclide	Soil Concentration (pCi/g)
3H	2.68E-07
14C	1.43E-01
55Fe	5.83E+00
60Co	9.37E+00
63Ni	1.17E-04
90Sr	5.97E-09
90Y	0.00E+00
94Nb	8.80E-10
99Tc	5.67E-05
137Cs	1.38E-03
137mBa	1.31E-03
152Eu	1.53E-01
152Gd	0.00E+00
154Eu	2.98E-05

## Model Parameters:

### General Parameters:

Parameter Name	Description	Distribution
<b>Tv(1):Translocation:Leafy</b>	Translocation factor for leafy vegetables	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tv(2):Translocation:Root</b>	Translocation factor for other vegetables	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tv(3):Translocation:Fruit</b>	Translocation factor for fruit	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tv(4):Translocation:Grain</b>	Translocation factor for grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tf(1):Translocation:Beef</b>	Translocation factor for forage consumed	CONSTANT(none)

<b>Forage</b>	by beef cattle	
Default value used		Value 1.00E+00
<b>Tf(2):Translocation:Poultry Forage</b>	Translocation factor for forage consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tf(3):Translocation:Milk Cow</b>	Translocation factor for forage consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tf(4):Translocation:Layer Hen Forage</b>	Translocation factor for forage consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Tg(1):Translocation:Beef Grain</b>	Translocation factor for stored grain consumed by beef cattle	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(2):Translocation:Poultry Grain</b>	Translocation factor for stored grain consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(3):Translocation:Milk Cow Grain</b>	Translocation factor for stored grain consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Tg(4):Translocation:Layer Hen Grain</b>	Translocation factor for stored grain consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E-01
<b>Th(1):Translocation:Beef Hay</b>	Translocation factor for stored hay consumed by beef cattle	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(2):Translocation:Poultry Hay</b>	Translocation factor for stored hay consumed by poultry	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(3):Translocation:Milk Cow Hay</b>	Translocation factor for stored hay consumed by milk cows	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Th(4):Translocation:Layer Hen Hay</b>	Translocation factor for stored hay consumed by layer hens	CONSTANT(none)
Default value used		Value 1.00E+00
<b>fca(1):Beef Carbon Fraction</b>	Mass fraction of beef cattle that is carbon	CONSTANT(none)
Default value used		Value 3.60E-01
<b>fca(2):Poultry Carbon Fraction</b>	Mass fraction of poultry that is carbon	CONSTANT(none)
Default value used		Value 1.80E-01
<b>fca(3):Milk Carbon Fraction</b>	Mass fraction of milk that is carbon	CONSTANT(none)
Default value used		Value 6.00E-02
<b>fca(4):Eggs Carbon Fraction</b>	Mass fraction of an egg that is carbon	CONSTANT(none)
Default value used		Value 1.60E-01
<b>fcf(1):Beef Forage Carbon</b>	Mass fraction of wet forage consumed by	CONSTANT(none)

<b>Fraction</b>	beef cattle that is carbon	
Default value used		Value 1.10E-01
<b>fcf(2):Poultry Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by poultry that is carbon	CONSTANT(none)
Default value used		Value 1.10E-01
<b>fcf(3):Milk Cow Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by milk cows that is carbon	CONSTANT(none)
Default value used		Value 1.10E-01
<b>fcf(4):Layer Hen Forage Carbon Fraction</b>	Mass fraction of wet forage consumed by layer hens that is carbon	CONSTANT(none)
Default value used		Value 1.10E-01
<b>fcg(1):Beef Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by beef cattle that is carbon	CONSTANT(none)
Default value used		Value 4.00E-01
<b>fcg(2):Poultry Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by poultry that is carbon	CONSTANT(none)
Default value used		Value 4.00E-01
<b>fcg(3):Milk Cow Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by milk cows that is carbon	CONSTANT(none)
Default value used		Value 4.00E-01
<b>fcg(4):Layer Hen Grain Carbon Fraction</b>	Mass fraction of wet stored grain consumed by layer hens that is carbon	CONSTANT(none)
Default value used		Value 4.00E-01
<b>fch(1):Beef Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by beef cattle that is carbon	CONSTANT(none)
Default value used		Value 7.00E-02
<b>fch(2):Poultry Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by poultry that is carbon	CONSTANT(none)
Default value used		Value 7.00E-02
<b>fch(3):Milk Cow Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by milk cows that is carbon	CONSTANT(none)
Default value used		Value 7.00E-02
<b>fch(4):Layer Hen Hay Carbon Fraction</b>	Mass fraction of wet stored hay consumed by layer hens that is carbon	CONSTANT(none)
Default value used		Value 7.00E-02
<b>fCd:Soil Carbon Fraction</b>	Mass fraction of dry soil that is carbon	CONSTANT(none)
Default value used		Value 3.00E-02
<b>SATac:Animal Product Specific Activity</b>	Specific activity equivalence of animal product and specific activity of animal feed, forage, and soil	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xf(1):Beef Forage Contaminated Fraction</b>	Fraction of forage consumed by beef cattle that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xf(2):Poultry Forage Contaminated Fraction</b>	Fraction of forage consumed by poultry that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xf(3):Milk Cow Forage</b>	Fraction of forage consumed by milk cows	

<b>Contaminated Fraction</b>	that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xf(4):Layer Hen Forage Contaminated Fraction</b>	Fraction of forage consumed by layer hens that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xg(1):Beef Grain Contaminated Fraction</b>	Fraction of stored grain consumed by beef cattle that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xg(2):Poultry Grain Contaminated Fraction</b>	Fraction of stored grain consumed by poultry that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xg(3):Milk Cow Grain Contaminated Fraction</b>	Fraction of stored grain consumed by milk cows that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xg(4):Layer Hen Grain Contaminated Fraction</b>	Fraction of stored grain that is consumed by layer hens that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xh(1):Beef Hay Contaminated Fraction</b>	Fraction of stored hay consumed by beef cattle that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xh(2):Poultry Hay Contaminated Fraction</b>	Fraction of stored hay consumed by poultry that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xh(3):Milk Cow Hay Contaminated Fraction</b>	Fraction of stored hay consumed by milk cows that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xh(4):Layer Hen Hay Contaminated Fraction</b>	Fraction of stored hay consumed by layer hens that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xw(1):Beef Water Contaminated Fraction</b>	Fraction of water that is consumed by beef cattle that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xw(2):Poultry Water Contaminated Fraction</b>	Fraction of water consumed by poultry that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xw(3):Milk Cow Water Contaminated Fraction</b>	Fraction of water consumed by milk cows that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>xw(4):Layer Hen Water Contaminated Fraction</b>	Fraction of water consumed by layer hens that is contaminated	CONSTANT(none)
Default value used		Value 1.00E+00
<b>DIET:Garden Diet</b>	Fraction of human diet grown onsite	CONSTANT(none)
Default value used		Value 1.00E+00
<b>Uv(1):Diet - Leafy</b>	Yearly human consumption of leafy vegetables	CONSTANT(kg/y)
Default value used		Value 2.14E+01
<b>Uv(2):Diet - Roots</b>	Yearly human consumption of other	CONSTANT(kg/y)



	vegetables	
Default value used		Value 4.46E+01
Uv(3):Diet - Fruit	Yearly human consumption of fruits	CONSTANT(kg/y)
Default value used		Value 5.28E+01
Uv(4):Diet - Grain	Yearly human consumption of grains	CONSTANT(kg/y)
Default value used		Value 1.44E+01
Ua(1):Diet - Beef	Yearly human consumption of beef	CONSTANT(kg/y)
Default value used		Value 3.98E+01
Ua(2):Diet - Poultry	Yearly human consumption of poultry	CONSTANT(kg/y)
Default value used		Value 2.53E+01
Ua(3):Diet - Milk	Yearly human consumption of milk	CONSTANT(L/y)
Default value used		Value 2.33E+02
Ua(4):Diet - Egg	Yearly human consumption of eggs	CONSTANT(kg/y)
Default value used		Value 1.91E+01
Uf:Diet - Fish	Yearly human consumption of fish produced from an onsite pond	CONSTANT(kg/y)
Default value used		Value 2.06E+01
tf:Consumption Period	Consumption period for fish	CONSTANT(days)
Default value used		Value 3.65E+02
tcv(1):Consumption Period - Leafy	Food consumption period for leafy vegetables	CONSTANT(days)
Default value used		Value 3.65E+02
tcv(2):Consumption Period - Roots	Food consumption period for other vegetables	CONSTANT(days)
Default value used		Value 3.65E+02
tcv(3):Consumption Period - Fruit	Food consumption period for fruits	CONSTANT(days)
Default value used		Value 3.65E+02
tcv(4):Consumption Period - Grain	Food consumption period for grains	CONSTANT(days)
Default value used		Value 3.65E+02
tca(1):Consumption Period - Beef	Food consumption period for beef	CONSTANT(days)
Default value used		Value 3.65E+02
tca(2):Consumption Period - Poultry	Food consumption period for poultry	CONSTANT(days)
Default value used		Value 3.65E+02
tca(3):Consumption Period - Milk	Food consumption period for milk	CONSTANT(days)
Default value used		Value 3.65E+02
tca(4):Consumption Period - Egg	Food consumption period for eggs	CONSTANT(days)
Default value used		Value 3.65E+02
Nunsat:Number of Unsaturated Layers	Number of model layers used to represent the unsaturated zone	CONSTANT(none)
Default value used		Value 1.00E+01

<b>TstartR:Start Time</b>	The start time of the scenario in days	CONSTANT(days)
Default value used		Value 0.00E+00
<b>TendR:End Time</b>	The ending time of the scenario in days	CONSTANT(days)
Default value used		Value 3.65E+05
<b>dtR:Time Step Size</b>	The time step size	CONSTANT(days)
Default value used		Value 3.65E+02
<b>PstepR:Print Step Size</b>	The time steps for the history file. Doses will be written to the history file every n time steps	CONSTANT(none)
Default value used		Value 1.00E+00
<b>TI:Indoor Exposure Period</b>	The time the resident spends indoors	CONSTANT(days/year)
Default value used		Value 2.40E+02
<b>TX:Outdoor Exposure Period</b>	The time the resident spends outdoors	CONSTANT(days/year)
Default value used		Value 4.02E+01
<b>TG:Gardening Period</b>	The time the resident spends gardening	CONSTANT(days/year)
Default value used		Value 2.92E+00
<b>TTR:Total time in period</b>	Total time in the one year exposure period	CONSTANT(days/year)
Default value used		Value 3.65E+02
<b>SFI:Indoor Shielding Factor</b>	Shielding factor for the residence	CONSTANT(none)
Default value used		Value 5.52E-01
<b>SFO:Outdoor Shielding Factor</b>	Shielding factor for the cover soil	CONSTANT(none)
Default value used		Value 1.00E+00
<b>PD:Floor dust loading</b>	Floor dust loading	UNIFORM(g/m**2)
Default value used		Lower Limit 2.00E-02 Upper Limit 3.00E-01
<b>RFR:Indoor Resuspension Factor</b>	Resuspension factor for indoor dust	LOGUNIFORM(1/m)
Default value used		Lower Limit 1.00E-07 Upper Limit 8.00E-05
<b>CDO:Outdoor Dust Loading</b>	Average dust loading outdoors	LOGUNIFORM(g/m**3)
Default value used		Lower Limit 1.00E-07 Upper Limit 1.00E-04
<b>CDI:Indoor Dust Loading</b>	Average dust loading indoors	DERIVED(g/m**3)
Default value used		
<b>PF:Indoor/Outdoor Penetration Factor</b>	Fraction of outdoor dust in indoor air	UNIFORM(none)
Default value used		Lower Limit 2.00E-01 Upper Limit 7.00E-01
<b>CDG:Gardening Dust Loading</b>	Average dust loading while gardening	UNIFORM(g/m**3)
Default value used		Lower Limit 1.00E-04 Upper Limit 7.00E-04
<b>VR:Indoor Breathing Rate</b>	Breathing rate while indoors	CONSTANT(m**3/hr)
Default value used		Value 9.00E-01

<b>VX:Outdoor Breathing Rate</b>	Breathing rate while outdoors	CONSTANT(m**3/hr)																																																																																		
Default value used		<u>Value</u> 1.40E+00																																																																																		
<b>VG:Gardening Breathing Rate</b>	Breathing rate while gardening	CONSTANT(m**3/hr)																																																																																		
Default value used		<u>Value</u> 1.70E+00																																																																																		
<b>GR:Soil Ingestion Transfer Rate</b>	Average rate of soil ingestion	CONSTANT(g/d)																																																																																		
Default value used		<u>Value</u> 5.00E-02																																																																																		
<b>UW:Diet - Water</b>	Drinking water ingestion rate	CONSTANT(L/d)																																																																																		
Default value used		<u>Value</u> 1.26E+00																																																																																		
<b>H1:Surface Soil Thickness</b>	Thickness of the surface soil layer	CONSTANT(m)																																																																																		
Default value used		<u>Value</u> 1.50E-01																																																																																		
<b>H2:Unsaturated Zone Thickness</b>	Thickness of the unsaturated zone	CONTINUOUS LINEAR(m)																																																																																		
Default value used		<table><tr><td><u>Value</u></td><td><u>Probability</u></td></tr><tr><td>3.05E-01</td><td>0.00E+00</td></tr><tr><td>6.68E-01</td><td>4.76E-03</td></tr><tr><td>8.11E-01</td><td>9.52E-03</td></tr><tr><td>9.21E-01</td><td>1.43E-02</td></tr><tr><td>9.94E-01</td><td>1.91E-02</td></tr><tr><td>1.03E+00</td><td>2.38E-02</td></tr><tr><td>1.07E+00</td><td>2.86E-02</td></tr><tr><td>1.14E+00</td><td>3.33E-02</td></tr><tr><td>1.21E+00</td><td>3.81E-02</td></tr><tr><td>1.30E+00</td><td>4.29E-02</td></tr><tr><td>1.31E+00</td><td>4.76E-02</td></tr><tr><td>1.32E+00</td><td>5.24E-02</td></tr><tr><td>1.56E+00</td><td>5.71E-02</td></tr><tr><td>1.58E+00</td><td>6.19E-02</td></tr><tr><td>1.61E+00</td><td>6.67E-02</td></tr><tr><td>1.69E+00</td><td>7.62E-02</td></tr><tr><td>1.78E+00</td><td>8.57E-02</td></tr><tr><td>1.80E+00</td><td>9.05E-02</td></tr><tr><td>1.81E+00</td><td>9.52E-02</td></tr><tr><td>1.84E+00</td><td>1.00E-01</td></tr><tr><td>1.87E+00</td><td>1.05E-01</td></tr><tr><td>1.92E+00</td><td>1.10E-01</td></tr><tr><td>2.04E+00</td><td>1.14E-01</td></tr><tr><td>2.10E+00</td><td>1.19E-01</td></tr><tr><td>2.11E+00</td><td>1.24E-01</td></tr><tr><td>2.32E+00</td><td>1.29E-01</td></tr><tr><td>2.36E+00</td><td>1.33E-01</td></tr><tr><td>2.37E+00</td><td>1.38E-01</td></tr><tr><td>2.39E+00</td><td>1.43E-01</td></tr><tr><td>2.44E+00</td><td>1.48E-01</td></tr><tr><td>2.44E+00</td><td>1.52E-01</td></tr><tr><td>2.45E+00</td><td>1.57E-01</td></tr><tr><td>2.59E+00</td><td>1.62E-01</td></tr><tr><td>2.63E+00</td><td>1.67E-01</td></tr><tr><td>2.69E+00</td><td>1.71E-01</td></tr><tr><td>2.79E+00</td><td>1.76E-01</td></tr><tr><td>2.81E+00</td><td>1.81E-01</td></tr><tr><td>2.90E+00</td><td>1.86E-01</td></tr><tr><td>2.95E+00</td><td>1.91E-01</td></tr><tr><td>3.07E+00</td><td>1.95E-01</td></tr></table>	<u>Value</u>	<u>Probability</u>	3.05E-01	0.00E+00	6.68E-01	4.76E-03	8.11E-01	9.52E-03	9.21E-01	1.43E-02	9.94E-01	1.91E-02	1.03E+00	2.38E-02	1.07E+00	2.86E-02	1.14E+00	3.33E-02	1.21E+00	3.81E-02	1.30E+00	4.29E-02	1.31E+00	4.76E-02	1.32E+00	5.24E-02	1.56E+00	5.71E-02	1.58E+00	6.19E-02	1.61E+00	6.67E-02	1.69E+00	7.62E-02	1.78E+00	8.57E-02	1.80E+00	9.05E-02	1.81E+00	9.52E-02	1.84E+00	1.00E-01	1.87E+00	1.05E-01	1.92E+00	1.10E-01	2.04E+00	1.14E-01	2.10E+00	1.19E-01	2.11E+00	1.24E-01	2.32E+00	1.29E-01	2.36E+00	1.33E-01	2.37E+00	1.38E-01	2.39E+00	1.43E-01	2.44E+00	1.48E-01	2.44E+00	1.52E-01	2.45E+00	1.57E-01	2.59E+00	1.62E-01	2.63E+00	1.67E-01	2.69E+00	1.71E-01	2.79E+00	1.76E-01	2.81E+00	1.81E-01	2.90E+00	1.86E-01	2.95E+00	1.91E-01	3.07E+00	1.95E-01
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2.95E+00	1.91E-01																																																																																			
3.07E+00	1.95E-01																																																																																			

3.18E+00	2.00E-01
3.22E+00	2.05E-01
3.30E+00	2.10E-01
3.34E+00	2.14E-01
3.37E+00	2.19E-01
3.44E+00	2.24E-01
3.58E+00	2.29E-01
3.62E+00	2.33E-01
3.66E+00	2.38E-01
3.74E+00	2.43E-01
3.86E+00	2.48E-01
3.88E+00	2.52E-01
4.17E+00	2.57E-01
4.26E+00	2.62E-01
4.44E+00	2.71E-01
4.63E+00	2.76E-01
4.87E+00	2.81E-01
5.13E+00	2.86E-01
5.18E+00	2.91E-01
5.54E+00	2.95E-01
5.83E+00	3.00E-01
5.86E+00	3.05E-01
5.86E+00	3.10E-01
5.90E+00	3.14E-01
6.06E+00	3.19E-01
6.13E+00	3.24E-01
6.17E+00	3.29E-01
6.22E+00	3.33E-01
6.31E+00	3.38E-01
6.36E+00	3.43E-01
6.40E+00	3.48E-01
6.46E+00	3.52E-01
6.51E+00	3.57E-01
6.55E+00	3.62E-01
6.60E+00	3.67E-01
6.86E+00	3.71E-01
6.93E+00	3.76E-01
6.95E+00	3.86E-01
6.97E+00	3.91E-01
7.09E+00	3.95E-01
7.18E+00	4.00E-01
7.35E+00	4.05E-01
7.36E+00	4.10E-01
7.40E+00	4.14E-01
7.43E+00	4.19E-01
7.46E+00	4.24E-01
7.59E+00	4.29E-01
7.60E+00	4.33E-01
7.64E+00	4.38E-01
7.87E+00	4.43E-01
8.10E+00	4.48E-01
8.28E+00	4.52E-01
8.35E+00	4.57E-01
8.71E+00	4.62E-01
8.71E+00	4.67E-01
8.73E+00	4.71E-01
8.79E+00	4.76E-01
8.80E+00	4.81E-01
8.82E+00	4.86E-01
8.85E+00	4.91E-01
8.89E+00	4.95E-01
8.90E+00	5.00E-01

8.99E+00	5.05E-01
9.00E+00	5.10E-01
9.13E+00	5.14E-01
9.14E+00	5.19E-01
9.21E+00	5.24E-01
9.31E+00	5.29E-01
9.55E+00	5.33E-01
9.60E+00	5.38E-01
9.63E+00	5.43E-01
9.86E+00	5.48E-01
1.05E+01	5.52E-01
1.07E+01	5.57E-01
1.13E+01	5.62E-01
1.15E+01	5.67E-01
1.17E+01	5.71E-01
1.20E+01	5.76E-01
1.26E+01	5.81E-01
1.26E+01	5.86E-01
1.28E+01	5.91E-01
1.32E+01	5.95E-01
1.32E+01	6.00E-01
1.34E+01	6.05E-01
1.34E+01	6.10E-01
1.36E+01	6.14E-01
1.37E+01	6.19E-01
1.38E+01	6.24E-01
1.41E+01	6.29E-01
1.45E+01	6.33E-01
1.51E+01	6.38E-01
1.52E+01	6.43E-01
1.61E+01	6.48E-01
1.62E+01	6.52E-01
1.65E+01	6.57E-01
1.66E+01	6.62E-01
1.69E+01	6.67E-01
1.74E+01	6.71E-01
1.82E+01	6.76E-01
1.84E+01	6.81E-01
1.84E+01	6.86E-01
1.87E+01	6.91E-01
1.95E+01	6.95E-01
2.01E+01	7.00E-01
2.07E+01	7.05E-01
2.08E+01	7.10E-01
2.17E+01	7.14E-01
2.24E+01	7.19E-01
2.27E+01	7.24E-01
2.29E+01	7.29E-01
2.29E+01	7.33E-01
2.40E+01	7.38E-01
2.47E+01	7.43E-01
2.60E+01	7.48E-01
2.65E+01	7.52E-01
2.72E+01	7.57E-01
2.73E+01	7.62E-01
2.76E+01	7.67E-01
2.77E+01	7.71E-01
2.78E+01	7.76E-01
2.80E+01	7.81E-01
2.86E+01	7.86E-01
2.94E+01	7.91E-01

			3.01E+01	7.95E-01
			3.03E+01	8.00E-01
			3.06E+01	8.10E-01
			3.08E+01	8.14E-01
			3.11E+01	8.19E-01
			3.17E+01	8.24E-01
			3.17E+01	8.29E-01
			3.17E+01	8.33E-01
			3.22E+01	8.38E-01
			3.39E+01	8.43E-01
			3.48E+01	8.48E-01
			3.54E+01	8.52E-01
			3.60E+01	8.57E-01
			3.68E+01	8.62E-01
			4.03E+01	8.67E-01
			4.07E+01	8.71E-01
			4.24E+01	8.76E-01
			4.29E+01	8.81E-01
			4.42E+01	8.86E-01
			4.72E+01	8.91E-01
			4.97E+01	8.95E-01
			5.12E+01	9.00E-01
			6.13E+01	9.05E-01
			6.19E+01	9.10E-01
			6.23E+01	9.14E-01
			6.32E+01	9.19E-01
			6.59E+01	9.24E-01
			6.73E+01	9.29E-01
			7.47E+01	9.33E-01
			7.92E+01	9.38E-01
			8.12E+01	9.43E-01
			8.28E+01	9.48E-01
			8.47E+01	9.52E-01
			8.96E+01	9.57E-01
			9.47E+01	9.62E-01
			1.08E+02	9.67E-01
			1.13E+02	9.71E-01
			1.15E+02	9.76E-01
			1.42E+02	9.81E-01
			1.77E+02	9.86E-01
			1.78E+02	9.91E-01
			1.80E+02	9.95E-01
			3.16E+02	1.00E+00
<b>N1:Surface Soil Porosity</b>		Porosity of the surface soil layer	DERIVED(none)	
Default value used				
<b>N2:Unsaturated Zone Porosity</b>		Porosity of the unsaturated zone	DERIVED(none)	
Default value used				
<b>F1:Surface Soil Saturation</b>		Saturation ratio of the surface soil layer	DERIVED(none)	
Default value used				
<b>F2:Unsaturated Zone Saturation</b>		Saturation ratio of the unsaturated zone	DERIVED(none)	
Default value used				
<b>INFIL:Infiltration Rate</b>		Net rate of infiltration to aquifer	DERIVED(m/y)	
Default value used				
<b>SCSST:Soil Classification</b>		SCS soil classification ID	DISCRETE CUMULATIVE(none)	
Default value used			<u>Value</u>	<u>Probability</u>

		1.00E+00	1.00E-04
		2.00E+00	1.34E-03
		3.00E+00	1.06E-02
		4.00E+00	2.51E-02
		5.00E+00	6.17E-02
		6.00E+00	1.09E-01
		7.00E+00	1.62E-01
		8.00E+00	2.12E-01
		9.00E+00	2.85E-01
		1.00E+01	5.10E-01
		1.10E+01	7.58E-01
		1.20E+01	1.00E+00
<b>NDEV:Porosity Probability</b>	Relative porosity value within the distribution for this soil type	UNIFORM(none)	
<u>Default value used</u>		<u>Lower Limit</u>	0.00E+00
		<u>Upper Limit</u>	1.00E+00
<b>KSDEV:Permeability Probability</b>	Relative permeability value within the distribution for this soil type	UNIFORM(none)	
<u>Default value used</u>		<u>Lower Limit</u>	0.00E+00
		<u>Upper Limit</u>	1.00E+00
<b>BDEV:Parameter "b" Probability</b>	Relative value of "b" parameter within the distribution for this soil type	UNIFORM(none)	
<u>Default value used</u>		<u>Lower Limit</u>	0.00E+00
		<u>Upper Limit</u>	1.00E+00
<b>AP:Water Application Rate</b>	Total water application rate on cultivated area	CONTINUOUS LINEAR(m/y)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		6.07E-01	0.00E+00
		6.10E-01	4.62E-01
		6.35E-01	4.76E-01
		7.62E-01	5.40E-01
		8.89E-01	6.29E-01
		1.02E+00	7.05E-01
		1.14E+00	8.04E-01
		1.27E+00	8.79E-01
		1.40E+00	9.41E-01
		1.52E+00	9.82E-01
		1.65E+00	9.98E-01
		1.78E+00	1.00E+00
<b>IR:Irrigation Rate</b>	Annual average irrigation rate	CONSTANT(L/m**2-d)	
<u>Default value used</u>		<u>Value</u>	1.29E+00
<b>RHO1:Surface Soil Density</b>	Bulk density of soil in the surface soil layer	DERIVED(g/mL)	
<u>Default value used</u>			
<b>RHO2:Unsaturated Zone Density</b>	Bulk density of soil in the unsaturated zone	DERIVED(g/mL)	
<u>Default value used</u>			
<b>Ksat1:Surface Soil Permeability</b>	Saturated permeability of the surface soil layer	DERIVED(cm/sec)	
<u>Default value used</u>			
<b>VDR:Volume of Water Consumed</b>	Volume of water withdrawn for consumptive use	CONSTANT(L)	
<u>Default value used</u>		<u>Value</u>	1.18E+05
<b>VSW:Volume of Water in Pond</b>	Volume of water in the pond	CONSTANT(L)	

Default value used		Value	1.30E+06
<b>AR:Cultivated Area</b>	Area of land cultivated	DERIVED(m**2)	
Default value used			
<b>sh:Soil Moisture Content</b>	Moisture content of soil	DERIVED(none)	
Default value used			
<b>TTG:Gardening Period</b>	Total time in gardening period	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TD:Drinking-water consumption period</b>	Drinking-water consumption period	CONSTANT(days)	
Default value used		Value	3.65E+02
<b>THV(1):Holdup Period : Leafy</b>	Holdup period for leafy vegetables	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THV(2):Holdup Period : Other vegetables</b>	Holdup period for other vegetables	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THV(3):Holdup Period : Fruits</b>	Holdup period for fruits	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THV(4):Holdup Period : Grains</b>	Holdup period for grains	CONSTANT(days)	
Default value used		Value	1.40E+01
<b>THA(1):Holdup Period : Beef</b>	Holdup period for beef	CONSTANT(days)	
Default value used		Value	2.00E+01
<b>THA(2):Holdup Period : Poultry</b>	Holdup period for poultry	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THA(3):Holdup Period : Milk</b>	Holdup period for milk	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>THA(4):Holdup Period : Eggs</b>	Holdup period for eggs	CONSTANT(days)	
Default value used		Value	1.00E+00
<b>TGV(1):Growing Period : Leafy</b>	Minimum growing period for leafy vegetables	CONSTANT(days)	
Default value used		Value	4.50E+01
<b>TGV(2):Growing Period : Other vegetables</b>	Minimum growing period for other vegetables	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGV(3):Growing Period : Fruits</b>	Minimum growing period for fruits	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGV(4):Growing Period : Grains</b>	Minimum growing period for grains	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGF(1):Growing Period :</b>	Minimum growing period for forage	CONSTANT(days)	



<b>Beef Forage</b>		consumed by beef cattle	
Default value used		Value	3.00E+01
<b>TGF(2):Growing Period : Poultry Forage</b>	Minimum growing period for forage consumed by poultry	DERIVED(days)	
Default value used			
<b>TGF(3):Growing Period : Milk Cow Forage</b>	Minimum growing period for forage consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGF(4):Growing Period : Layer Hen Forage</b>	Minimum growing period for forage consumed by layer hens	DERIVED(days)	
Default value used			
<b>TGG(1):Growing Period : Beef Cow Grain</b>	Minimum growing period for stored grain consumed by beef cattle	CONSTANT(days)	
Default value used		Value	9.00E+01
<b>TGG(2):Growing Period : Poultry Grain</b>	Minimum growing period for stored grain consumed by poultry	DERIVED(days)	
Default value used			
<b>TGG(3):Growing Period : Milk Cow Grain</b>	Minimum growing period for stored grain consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGG(4):Growing Period : Layer Hen Grain</b>	Minimum growing period for stored grain consumed by layer hens	DERIVED(days)	
Default value used			
<b>TGH(1):Growing Period : Beef Cow Hay</b>	Minimum growing period for stored hay consumed by beef cattle	CONSTANT(days)	
Default value used		Value	4.50E+01
<b>TGH(2):Growing Period : Poultry Hay</b>	Minimum growing period for stored hay consumed by poultry	DERIVED(days)	
Default value used			
<b>TGH(3):Growing Period : Milk Cow Hay</b>	Minimum growing period for stored hay consumed by milk cows	DERIVED(days)	
Default value used			
<b>TGH(4):Growing Period : Layer Hen Hay</b>	Minimum growing period for stored hay consumed by layer hens	DERIVED(days)	
Default value used			
<b>RV(1):Interception Fraction : Leafy</b>	Interception fraction for leafy vegetables	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RV(2):Interception Fraction : Other vegetables</b>	Interception fraction for other vegetables	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RV(3):Interception Fraction : Fruits</b>	Interception fraction for fruits	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RV(4):Interception Fraction : Grains</b>	Interception fraction for grains	UNIFORM(none)	

Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RF(1):Interception Fraction : Beef Forage</b>	Interception fraction for beef cattle forage	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RF(2):Interception Fraction : Poultry forage</b>	Interception fraction for poultry forage	DERIVED(none)	
Default value used			
<b>RF(3):Interception Fraction : Milk Cow Forage</b>	Interception fraction for milk cow forage	DERIVED(none)	
Default value used			
<b>RF(4):Interception Fraction : Layer Hen Forage</b>	Interception fraction for layer hen forage	DERIVED(none)	
Default value used			
<b>RG(1):Interception Fraction : Beef Cow Grain</b>	Interception fraction for beef cattle grain	UNIFORM(none)	
Default value used		Lower Limit	1.00E-01
		Upper Limit	6.00E-01
<b>RG(2):Interception Fraction : Poultry Grain</b>	Interception fraction for poultry grain	DERIVED(none)	
Default value used			
<b>RG(3):Interception Fraction : Milk Cow Grain</b>	Interception fraction for milk cow grain	DERIVED(none)	
Default value used			
<b>RG(4):Interception Fraction : Layer Hen Grain</b>	Interception fraction for layer hen grain	DERIVED(none)	
Default value used			
<b>RH(1):Interception Fraction : Beef Cow Hay</b>	Interception fraction for beef cattle hay	DERIVED(none)	
Default value used			
<b>RH(2):Interception Fraction : Poultry Hay</b>	Interception fraction for poultry hay	DERIVED(none)	
Default value used			
<b>RH(3):Interception Fraction : Milk Cow Hay</b>	Interception fraction for milk cow hay	DERIVED(none)	
Default value used			
<b>RH(4):Interception Fraction : Layer Hen Hay</b>	Interception fraction for layer hen hay	DERIVED(none)	
Default value used			
<b>YV(1):Crop Yield : Leafy</b>	Crop yield for leafy vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		Value	Probability
		2.70E+00	0.00E+00
		2.71E+00	1.60E-03
		2.74E+00	6.00E-03
		2.76E+00	1.76E-02
		2.78E+00	4.36E-02
		2.80E+00	8.48E-02
		2.82E+00	1.56E-01
		2.85E+00	2.57E-01
		2.87E+00	3.64E-01

		2.89E+00	5.00E-01
		2.91E+00	6.39E-01
		2.93E+00	7.46E-01
		2.96E+00	8.42E-01
		2.98E+00	9.09E-01
		3.00E+00	9.60E-01
		3.02E+00	9.84E-01
		3.04E+00	9.94E-01
		3.07E+00	9.97E-01
		3.09E+00	9.99E-01
		3.11E+00	1.00E+00
		3.13E+00	1.00E+00
		3.15E+00	1.00E+00
<b>YV(2):Crop Yield : Other</b>	Crop yield for other vegetables	CONTINUOUS LINEAR(kg wet wt/m**2)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		2.26E+00	0.00E+00
		2.29E+00	8.00E-04
		2.30E+00	1.20E-03
		2.31E+00	6.40E-03
		2.33E+00	1.52E-02
		2.34E+00	3.28E-02
		2.35E+00	7.44E-02
		2.36E+00	1.40E-01
		2.38E+00	2.49E-01
		2.39E+00	3.80E-01
		2.40E+00	5.30E-01
		2.42E+00	6.61E-01
		2.43E+00	7.88E-01
		2.44E+00	8.86E-01
		2.45E+00	9.42E-01
		2.47E+00	9.75E-01
		2.48E+00	9.88E-01
		2.49E+00	9.96E-01
		2.51E+00	9.97E-01
		2.52E+00	9.99E-01
		2.53E+00	1.00E+00
		2.54E+00	1.00E+00
<b>YV(3):Crop Yield : Fruits</b>	Crop yield for fruits	CONTINUOUS LINEAR(kg wet wt/m**2)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		2.17E+00	0.00E+00
		2.20E+00	1.20E-03
		2.21E+00	2.40E-03
		2.23E+00	6.80E-03
		2.25E+00	1.80E-02
		2.27E+00	4.36E-02
		2.29E+00	7.64E-02
		2.31E+00	1.38E-01
		2.32E+00	2.14E-01
		2.34E+00	3.27E-01
		2.36E+00	4.50E-01
		2.38E+00	5.76E-01
		2.40E+00	6.87E-01
		2.42E+00	7.88E-01
		2.43E+00	8.68E-01
		2.45E+00	9.25E-01
		2.47E+00	9.60E-01
		2.49E+00	9.81E-01
		2.51E+00	9.92E-01
		2.53E+00	9.98E-01
		2.54E+00	1.00E+00

		2.56E+00	1.00E+00
<b>YV(4):Crop Yield : Grains</b>	Crop yield for grains	CONTINUOUS LINEAR(kg wet wt/m**2)	
Default value used		<u>Value</u>	<u>Probability</u>
		2.85E-01	0.00E+00
		2.90E-01	6.00E-04
		3.02E-01	2.80E-03
		3.14E-01	9.40E-03
		3.26E-01	2.14E-02
		3.38E-01	5.42E-02
		3.50E-01	1.08E-01
		3.62E-01	2.02E-01
		3.74E-01	3.15E-01
		3.86E-01	4.50E-01
		3.98E-01	5.92E-01
		4.10E-01	7.20E-01
		4.23E-01	8.26E-01
		4.35E-01	9.03E-01
		4.47E-01	9.51E-01
		4.59E-01	9.77E-01
		4.71E-01	9.91E-01
		4.83E-01	9.96E-01
		4.95E-01	9.99E-01
		5.07E-01	1.00E+00
		5.19E-01	1.00E+00
		5.31E-01	1.00E+00
<b>YF(1):Crop Yield : Beef Forage</b>	Crop yield for beef cattle forage	BETA(kg dry wt forage/m**2)	
Default value used		<u>Lower Limit</u>	3.70E-01
		<u>Upper Limit</u>	5.24E-01
		<u>p</u>	2.36E+00
		<u>q</u>	1.40E+00
<b>YF(2):Crop Yield : Poultry Forage</b>	Crop yield for poultry forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YF(3):Crop Yield : Milk Cow Forage</b>	Crop yield for milk cow forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YF(4):Crop Yield : Layer Hen Forage</b>	Crop yield for layer hen forage	DERIVED(kg wet wt forage/m**2)	
Default value used			
<b>YG(1):Crop Yield : Beef Cow Grain</b>	Crop yield for beef cattle grain	NORMAL(kg dry wt grain /m**2)	
Default value used		<u>Mean</u>	5.78E-01
		<u>Standard Deviation</u>	7.77E-02
<b>YG(2):Crop Yield : Poultry Grain</b>	Crop yield for poultry grain	DERIVED(kg wet wt grain /m**2)	
Default value used			
<b>YG(3):Crop Yield : Milk Cow Grain</b>	Crop yield for milk cow grain	DERIVED(kg wet wt grain /m**2)	
Default value used			
<b>YG(4):Crop Yield : Layer Hen Grain</b>	Crop yield for layer hen grain	DERIVED(kg wet wt grain /m**2)	
Default value used			
<b>YH(1):Crop Yield : Beef</b>			

Cow Hay	Crop yield for beef cattle hay	DERIVED(kg wet wt/m**2)																																																																						
Default value used																																																																								
YH(2):Crop Yield : Poultry Hay	Crop yield for poultry hay	DERIVED(kg wet wt/m**2)																																																																						
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WV(1):Wet/dry : Leafy Vegetables	Wet/dry conversion factor for leafy vegetables	CONTINUOUS LINEAR(none)																																																																						
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		8.32E-02	3.45E-01
		8.66E-02	3.80E-01
		9.05E-02	4.15E-01
		9.41E-02	4.49E-01
		9.82E-02	4.84E-01
		9.98E-02	4.99E-01
		1.02E-01	5.18E-01
		1.06E-01	5.53E-01
		1.09E-01	5.87E-01
		1.14E-01	6.22E-01
		1.19E-01	6.56E-01
		1.24E-01	6.91E-01
		1.29E-01	7.25E-01
		1.33E-01	7.50E-01
		1.35E-01	7.60E-01
		1.42E-01	7.94E-01
		1.50E-01	8.29E-01
		1.59E-01	8.64E-01
		1.70E-01	8.98E-01
		1.87E-01	9.33E-01
		2.12E-01	9.67E-01
		2.62E-01	9.91E-01
		3.13E-01	1.00E+00
<b>WV(3):Wet/dry : Fruit</b>	Wet/dry conversion factor for fruits	CONTINUOUS LINEAR(none)	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		3.66E-02	0.00E+00
		4.87E-02	3.45E-02
		5.45E-02	6.91E-02
		5.93E-02	1.04E-01
		6.31E-02	1.38E-01
		6.72E-02	1.73E-01
		7.10E-02	2.07E-01
		7.44E-02	2.42E-01
		7.52E-02	2.50E-01
		7.78E-02	2.76E-01
		8.13E-02	3.11E-01
		8.45E-02	3.45E-01
		8.78E-02	3.80E-01
		9.11E-02	4.15E-01
		9.46E-02	4.49E-01
		9.82E-02	4.84E-01
		9.97E-02	4.99E-01
		1.02E-01	5.18E-01
		1.06E-01	5.53E-01
		1.10E-01	5.87E-01
		1.14E-01	6.22E-01
		1.19E-01	6.56E-01
		1.24E-01	6.91E-01
		1.29E-01	7.25E-01
		1.34E-01	7.50E-01
		1.35E-01	7.60E-01
		1.42E-01	7.94E-01
		1.49E-01	8.29E-01
		1.58E-01	8.64E-01
		1.70E-01	8.98E-01
		1.87E-01	9.33E-01

		2.14E-01	9.67E-01
		2.58E-01	9.91E-01
		3.25E-01	1.00E+00
<b>WV(4):Wet/dry : Grain</b>	Wet/dry conversion factor for grains	CONSTANT(none)	
Default value used		Value	8.80E-01
<b>WF(1):Wet/dry : Beef Cow Forage</b>	Wet/dry conversion factor for beef cattle forage	BETA(none)	
Default value used		Lower Limit	1.83E-01
		Upper Limit	3.23E-01
		p	1.15E+00
		q	1.18E+00
<b>WF(2):Wet/dry : Poultry Forage</b>	Wet/dry conversion factor for poultry forage	DERIVED(none)	
Default value used			
<b>WF(3):Wet/dry : Milk Cow Forage</b>	Wet/dry conversion factor for milk cow forage	DERIVED(none)	
Default value used			
<b>WF(4):Wet/dry : Layer Hen Forage</b>	Wet/dry conversion factor for layer hen forage	DERIVED(none)	
Default value used			
<b>WG(1):Wet/dry : Beef Cow Grain</b>	Wet/dry conversion factor for beef cattle grain	CONSTANT(none)	
Default value used		Value	8.80E-01
<b>WG(2):Wet/dry : Poultry Grain</b>	Wet/dry conversion factor for poultry grain	DERIVED(none)	
Default value used			
<b>WG(3):Wet/dry : Milk Cow Grain</b>	Wet/dry conversion factor for milk cow grain	DERIVED(none)	
Default value used			
<b>WG(4):Wet/dry : Layer Hen Grain</b>	Wet/dry conversion factor for layer hen grain	DERIVED(none)	
Default value used			
<b>WH(1):Wet/dry : Beef Cow Hay</b>	Wet/dry conversion factor for beef cattle hay	DERIVED(none)	
Default value used			
<b>WH(2):Wet/dry : Poultry Hay</b>	Wet/dry conversion factor for poultry hay	DERIVED(none)	
Default value used			
<b>WH(3):Wet/dry : Milk Cow Hay</b>	Wet/dry conversion factor for milk cow hay	DERIVED(none)	
Default value used			
<b>WH(4):Wet/dry : Layer Hen Hay</b>	Wet/dry conversion factor for layer hen hay	DERIVED(none)	
Default value used			
<b>QF(1):Ingestion Rate : Beef Cow Forage</b>	Ingestion rate for beef cattle forage	BETA(kg dry wt forage/d)	
Default value used		Lower Limit	1.69E+00
		Upper Limit	2.29E+00
		p	1.99E+00
		q	9.11E-01

<b>QF(2):Ingestion Rate : Poultry Forage</b>	Ingestion rate for poultry forage	BETA(kg dry wt forage/d)																																																																						
Default value used		<table border="1"> <tr><td>Lower Limit</td><td>3.48E-03</td></tr> <tr><td>Upper Limit</td><td>2.82E-02</td></tr> <tr><td>p</td><td>1.51E+00</td></tr> <tr><td>q</td><td>1.41E+00</td></tr> </table>	Lower Limit	3.48E-03	Upper Limit	2.82E-02	p	1.51E+00	q	1.41E+00																																																														
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<b>QF(3):Ingestion Rate : Milk Cow Forage</b>	Ingestion rate for milk cow forage	CONTINUOUS LINEAR(kg dry wt forage/d)																																																																						
Default value used		<table border="1"> <tr> <th>Value</th> <th>Probability</th> </tr> <tr><td>6.35E+00</td><td>0.00E+00</td></tr> <tr><td>6.77E+00</td><td>3.45E-02</td></tr> <tr><td>6.96E+00</td><td>6.91E-02</td></tr> <tr><td>7.10E+00</td><td>1.04E-01</td></tr> <tr><td>7.24E+00</td><td>1.38E-01</td></tr> <tr><td>7.35E+00</td><td>1.73E-01</td></tr> <tr><td>7.47E+00</td><td>2.07E-01</td></tr> <tr><td>7.57E+00</td><td>2.42E-01</td></tr> <tr><td>7.60E+00</td><td>2.50E-01</td></tr> <tr><td>7.67E+00</td><td>2.76E-01</td></tr> <tr><td>7.77E+00</td><td>3.11E-01</td></tr> <tr><td>7.87E+00</td><td>3.45E-01</td></tr> <tr><td>7.98E+00</td><td>3.80E-01</td></tr> <tr><td>8.08E+00</td><td>4.15E-01</td></tr> <tr><td>8.18E+00</td><td>4.49E-01</td></tr> <tr><td>8.31E+00</td><td>4.84E-01</td></tr> <tr><td>8.37E+00</td><td>4.99E-01</td></tr> <tr><td>8.42E+00</td><td>5.18E-01</td></tr> <tr><td>8.54E+00</td><td>5.53E-01</td></tr> <tr><td>8.67E+00</td><td>5.87E-01</td></tr> <tr><td>8.81E+00</td><td>6.22E-01</td></tr> <tr><td>8.95E+00</td><td>6.56E-01</td></tr> <tr><td>9.10E+00</td><td>6.91E-01</td></tr> <tr><td>9.26E+00</td><td>7.25E-01</td></tr> <tr><td>9.38E+00</td><td>7.50E-01</td></tr> <tr><td>9.45E+00</td><td>7.60E-01</td></tr> <tr><td>9.68E+00</td><td>7.94E-01</td></tr> <tr><td>9.93E+00</td><td>8.29E-01</td></tr> <tr><td>1.02E+01</td><td>8.64E-01</td></tr> <tr><td>1.06E+01</td><td>8.98E-01</td></tr> <tr><td>1.11E+01</td><td>9.33E-01</td></tr> <tr><td>1.20E+01</td><td>9.67E-01</td></tr> <tr><td>1.33E+01</td><td>9.91E-01</td></tr> <tr><td>1.53E+01</td><td>1.00E+00</td></tr> </table>	Value	Probability	6.35E+00	0.00E+00	6.77E+00	3.45E-02	6.96E+00	6.91E-02	7.10E+00	1.04E-01	7.24E+00	1.38E-01	7.35E+00	1.73E-01	7.47E+00	2.07E-01	7.57E+00	2.42E-01	7.60E+00	2.50E-01	7.67E+00	2.76E-01	7.77E+00	3.11E-01	7.87E+00	3.45E-01	7.98E+00	3.80E-01	8.08E+00	4.15E-01	8.18E+00	4.49E-01	8.31E+00	4.84E-01	8.37E+00	4.99E-01	8.42E+00	5.18E-01	8.54E+00	5.53E-01	8.67E+00	5.87E-01	8.81E+00	6.22E-01	8.95E+00	6.56E-01	9.10E+00	6.91E-01	9.26E+00	7.25E-01	9.38E+00	7.50E-01	9.45E+00	7.60E-01	9.68E+00	7.94E-01	9.93E+00	8.29E-01	1.02E+01	8.64E-01	1.06E+01	8.98E-01	1.11E+01	9.33E-01	1.20E+01	9.67E-01	1.33E+01	9.91E-01	1.53E+01	1.00E+00
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<b>QF(4):Ingestion Rate : Layer Hen Forage</b>	Ingestion rate for layer hen forage	BETA(kg dry wt forage/d)																																																																						
Default value used		<table border="1"> <tr><td>Lower Limit</td><td>1.19E-02</td></tr> <tr><td>Upper Limit</td><td>2.22E-02</td></tr> <tr><td>p</td><td>1.45E+00</td></tr> <tr><td>q</td><td>7.92E-01</td></tr> </table>	Lower Limit	1.19E-02	Upper Limit	2.22E-02	p	1.45E+00	q	7.92E-01																																																														
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q	7.92E-01																																																																							
<b>QG(1):Ingestion Rate : Beef Cattle Grain</b>	Ingestion rate for beef cattle grain	BETA(kg dry wt grain/d)																																																																						
Default value used		<table border="1"> <tr><td>Lower Limit</td><td>1.69E+00</td></tr> <tr><td>Upper Limit</td><td>2.29E+00</td></tr> <tr><td>p</td><td>1.99E+00</td></tr> <tr><td>q</td><td>9.11E-01</td></tr> </table>	Lower Limit	1.69E+00	Upper Limit	2.29E+00	p	1.99E+00	q	9.11E-01																																																														
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q	9.11E-01																																																																							
<b>QG(2):Ingestion Rate : Poultry Grain</b>	Ingestion rate for poultry grain	BETA(kg dry wt grain/d)																																																																						



Default value used		Lower Limit	1.04E-02
		Upper Limit	8.45E-02
		p	1.51E+00
		q	1.41E+00
<b>QG(3):Ingestion Rate : Milk Cow Grain</b>	Ingestion rate for milk cow grain	NORMAL(kg dry wt grain/d)	
Default value used		Mean	1.71E+00
		Standard Deviation	2.62E-01
<b>QG(4):Ingestion Rate : Layer Hen Grain</b>	Ingestion rate for layer hen grain	BETA(kg dry wt grain/d)	
Default value used		Lower Limit	3.58E-02
		Upper Limit	6.67E-02
		p	1.43E+00
		q	7.92E-01
<b>QH(1):Ingestion Rate : Beef Cattle Hay</b>	Ingestion rate for beef cattle hay	BETA(kg dry wt hay/d)	
Default value used		Lower Limit	3.38E+00
		Upper Limit	4.58E+00
		p	1.99E+00
		q	9.11E-01
<b>QH(2):Ingestion Rate : Poultry Hay</b>	Ingestion rate for poultry hay	CONSTANT(kg dry wt hay/d)	
Default value used		Value	0.00E+00
<b>QH(3):Ingestion Rate : Milk Cow Hay</b>	Ingestion rate for milk cow hay	CONTINUOUS LINEAR(kg dry wt hay/d)	
Default value used		Value	Probability
		5.12E+00	0.00E+00
		5.43E+00	3.45E-02
		5.57E+00	6.91E-02
		5.68E+00	1.04E-01
		5.79E+00	1.38E-01
		5.89E+00	1.73E-01
		5.98E+00	2.07E-01
		6.06E+00	2.42E-01
		6.08E+00	2.50E-01
		6.14E+00	2.76E-01
		6.22E+00	3.11E-01
		6.30E+00	3.45E-01
		6.38E+00	3.80E-01
		6.46E+00	4.15E-01
		6.54E+00	4.49E-01
		6.63E+00	4.84E-01
		6.67E+00	4.99E-01
		6.72E+00	5.18E-01
		6.81E+00	5.53E-01
		6.92E+00	5.87E-01
		7.03E+00	6.22E-01
		7.13E+00	6.56E-01
		7.26E+00	6.91E-01
		7.39E+00	7.25E-01
		7.49E+00	7.50E-01
		7.56E+00	7.60E-01
		7.70E+00	7.94E-01
		7.89E+00	8.29E-01
		8.11E+00	8.64E-01
		8.39E+00	8.98E-01
		8.75E+00	9.33E-01

		9.44E+00	9.67E-01
		1.05E+01	9.91E-01
		1.27E+01	1.00E+00
<b>QH(4):Ingestion Rate : Layer Hen Hay</b>	Ingestion rate for layer hen hay	CONSTANT(kg dry wt hay/d)	
Default value used		Value	0.00E+00
<b>QW(1):Water Rate : Beef Cattle</b>	Water ingestion rate for beef cattle	CONSTANT(L/d)	
Default value used		Value	5.00E+01
<b>QW(2):Water Rate : Poultry</b>	Water ingestion rate for poultry	CONSTANT(L/d)	
Default value used		Value	3.00E-01
<b>QW(3):Water Rate : Milk Cows</b>	Water ingestion rate for milk cows	CONSTANT(L/d)	
Default value used		Value	6.00E+01
<b>QW(4):Water Rate : Layer Hens</b>	Water ingestion rate for layer hens	CONSTANT(L/d)	
Default value used		Value	3.00E-01
<b>QD(1):Soil Fraction : Beef Cattle</b>	Soil intake fraction for beef cattle	CONSTANT(none)	
Default value used		Value	2.00E-02
<b>QD(2):Soil Fraction : Poultry</b>	Soil intake fraction for poultry	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>QD(3):Soil Fraction : Milk Cows</b>	Soil intake fraction for milk cows	CONSTANT(none)	
Default value used		Value	2.00E-02
<b>QD(4):Soil Fraction : Layer Hens</b>	Soil intake fraction for layer hens	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(1):Mass-Loading : Leafy Vegetables</b>	Mass-loading factor for leafy vegetables	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(2):Mass-Loading : Other Vegetables</b>	Mass-loading factor for other vegetables	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(3):Mass-Loading : Fruits</b>	Mass-loading factor for fruits	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>MLV(4):Mass-Loading : Grains</b>	Mass-loading factor for grains	CONSTANT(none)	
Default value used		Value	1.00E-01
<b>LAMBDW:Weathering Rate</b>	Weathering rate for activity removal from plants	CONSTANT(1/d)	
Default value used		Value	4.95E-02
<b>MLF(1):Mass-Loading : Beef Cow Forage</b>	Mass-loading factor for beef cattle forage	CONSTANT(none)	
Default value used		Value	1.00E-01

<b>MLF(2):Mass-Loading : Poultry Forage</b>	Mass-loading factor for poultry forage	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLF(3):Mass-Loading : Milk Cow Forage</b>	Mass-loading factor for milk cow forage	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLF(4):Mass-Loading : Layer Hen Forage</b>	Mass-loading factor for layer hen forage	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLG(1):Mass-Loading : Beef Cattle Grain</b>	Mass-loading factor for beef cattle grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLG(2):Mass-Loading : Poultry Grain</b>	Mass-loading factor for poultry grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLG(3):Mass-Loading : Milk Cow Grain</b>	Mass-loading factor for milk cow grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLG(4):Mass-Loading : Layer Hen Grain</b>	Mass-loading factor for layer hen grain	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLH(1):Mass-Loading : Beef Cattle Hay</b>	Mass-loading factor for beef cattle hay	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLH(2):Mass-Loading : Poultry Hay</b>	Mass-loading factor for poultry hay	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLH(3):Mass-Loading : Milk Cow Hay</b>	Mass-loading factor for milk cow hay	CONSTANT(none)
Default value used		Value 1.00E-01
<b>MLH(4):Mass-Loading : Layer Hen Hay</b>	Mass-loading factor for layer hen hay	CONSTANT(none)
Default value used		Value 1.00E-01
<b>TFF(1):Feeding Period : Beef Cow Forage</b>	Feeding period for beef cattle forage	CONSTANT(days)
Default value used		Value 3.65E+02
<b>TFF(2):Feeding Period : Poultry Forage</b>	Feeding period for poultry forage	CONSTANT(days)
Default value used		Value 3.65E+02
<b>TFF(3):Feeding Period : Milk Cow Forage</b>	Feeding period for milk cow forage	CONSTANT(days)
Default value used		Value 3.65E+02
<b>TFF(4):Feeding Period : Layer Hen Forage</b>	Feeding period for layer hen forage	CONSTANT(days)
Default value used		Value 3.65E+02
<b>TFG(1):Feeding Period : Beef Cattle Grain</b>	Feeding period for beef cattle grain	CONSTANT(days)
Default value used		Value 3.65E+02

<b>TFG(2):Feeding Period : Poultry Grain</b>	Feeding period for poultry grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(3):Feeding Period : Milk Cow Grain</b>	Feeding period for milk cow grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFG(4):Feeding Period : Layer Hen Grain</b>	Feeding period for layer hen grain	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(1):Feeding Period : Beef Cattle Hay</b>	Feeding period for beef cattle hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(2):Feeding Period : Poultry Hay</b>	Feeding period for poultry hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(3):Feeding Period : Milk Cow Hay</b>	Feeding period for milk cow hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFH(4):Feeding Period : Layer Hen Hay</b>	Feeding period for layer hen hay	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(1):Water Period : Beef Cattle</b>	Water ingestion period for beef cattle	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(2):Water Period : Poultry</b>	Water ingestion period for poultry	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(3):Water Period : Milk Cows</b>	Water ingestion period for milk cows	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>TFW(4):Water Period : Layer Hens</b>	Water ingestion period for layer hens	CONSTANT(days)
<u>Default value used</u>		<u>Value</u> 3.65E+02
<b>fha(1):Hydrogen Fraction : Beef Cattle</b>	Hydrogen fraction for beef cattle	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E-01
<b>fha(2):Hydrogen Fraction : Poultry</b>	Hydrogen fraction for poultry	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E-01
<b>fha(3):Hydrogen Fraction : Milk Cows</b>	Hydrogen fraction for milk cows	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.10E-01
<b>fha(4):Hydrogen Fraction : Eggs</b>	Hydrogen fraction for eggs	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.10E-01
<b>fhv(1):Hydrogen Fraction : Leafy Vegetables</b>	Hydrogen fraction for leafy vegetables	CONSTANT(none)
<u>Default value used</u>		<u>Value</u> 1.00E-01

<b>fhv(2):Hydrogen Fraction : Other Vegetables</b>	Hydrogen fraction for other vegetables	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhv(3):Hydrogen Fraction : Fruits</b>	Hydrogen fraction for fruits	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhv(4):Hydrogen Fraction : Grains</b>	Hydrogen fraction for grains	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhf(1):Hydrogen Fraction : Beef Cow Forage</b>	Hydrogen fraction for beef cattle forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(2):Hydrogen Fraction : Poultry Forage</b>	Hydrogen fraction for poultry forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(3):Hydrogen Fraction : Milk Cow Forage</b>	Hydrogen fraction for milk cow forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhf(4):Hydrogen Fraction : Layer Hen Forage</b>	Hydrogen fraction for layer hen forage	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(1):Hydrogen Fraction : Beef Cattle Hay</b>	Hydrogen fraction for beef cattle hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(2):Hydrogen Fraction : Poultry Hay</b>	Hydrogen fraction for poultry hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(3):Hydrogen Fraction : Milk Cow Hay</b>	Hydrogen fraction for milk cow hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhh(4):Hydrogen Fraction : Layer Hen Hay</b>	Hydrogen fraction for layer hen hay	CONSTANT(none)
Default value used		<u>Value</u> 1.00E-01
<b>fhg(1):Hydrogen Fraction : Beef Cattle Grain</b>	Hydrogen fraction for beef cattle grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhg(2):Hydrogen Fraction : Poultry Grain</b>	Hydrogen fraction for poultry grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhg(3):Hydrogen Fraction : Milk Cow Grain</b>	Hydrogen fraction for milk cow grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhg(4):Hydrogen Fraction : Layer Hen Grain</b>	Hydrogen fraction for layer hen grain	CONSTANT(none)
Default value used		<u>Value</u> 6.80E-02
<b>fhd016:Hydrogen Fraction : Soil</b>	Fraction of hydrogen in soil	DERIVED(none)

Default value used		
<b>sasvh:Tritium Equivalence: Plant/Soil</b>	Tritium equivalence: plant/soil	CONSTANT(none)
Default value used		Value 1.00E+00
<b>sawvh:Tritium Equivalence: Plant/Water</b>	Tritium equivalence: plant/water	CONSTANT(none)
Default value used		Value 1.00E+00
<b>satah:Tritium Equivalence: Animal Products</b>	Tritium equivalence: animal product intake	CONSTANT(none)
Default value used		Value 1.00E+00
<b>YA(1):Animal Product Yield : Beef Cattle</b>	Annual yield of beef per individual animal	CONSTANT(kg/y)
Default value used		Value 2.09E+02
<b>YA(2):Animal Product Yield : Poultry</b>	Annual yield of chicken per individual animal	CONSTANT(kg/y)
Default value used		Value 1.53E+00
<b>YA(3):Animal Product Yield : Milk Cows</b>	Annual yield of milk per individual animal	CONSTANT(L/y)
Default value used		Value 7.41E+03
<b>YA(4):Animal Product Yield : Layer Hens</b>	Annual yield of eggs per individual animal	CONSTANT(kg/y)
Default value used		Value 1.26E+01
<b>ARExt:External Exposure Area</b>	Minimum surface area to which resident is exposed via external radiation during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARInh:Inhalation Exposure Area</b>	Minimum surface area to which resident is exposed via inhalation during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARIng:Secondary Ingestion Exposure Area</b>	Minimum surface area to which resident is exposed via secondary ingestion during residential period	CONSTANT(m**2)
Default value used		Value 1.00E+02
<b>ARAgr:Agricultural Exposure Area</b>	Minimum surface area to which resident is exposed via any agricultural product during residential period	DERIVED(m**2)
Default value used		
<b>ARH2O:Groundwater Exposure Area</b>	Minimum surface area to which resident is exposed via groundwater during residential period	DERIVED(m**2)
Default value used		
<b>ARAll:Exposure Area</b>	Minimum surface area to which resident is exposed via any pathway during the residential period	DERIVED(m**2)
Default value used		

## Element Dependant Parameters

Parameter Name	Description	Distribution	
<b>H:Coefficient</b>	Partition coefficient for H	CONSTANT(mL/g)	
Default value used		Value	0.00E+00
<b>C:Coefficient</b>	Partition coefficient for C	CONTINUOUS LINEAR(Log10(mL/g))	
Default value used		Value	Probability
		-5.67E-01	0.00E+00
		-4.70E-01	1.03E-02
		-3.63E-01	3.44E-02
		-2.73E-01	6.71E-02
		-1.99E-01	9.98E-02
		-1.30E-01	1.33E-01
		-6.49E-02	1.65E-01
		-3.96E-03	1.98E-01
		5.94E-02	2.31E-01
		1.24E-01	2.63E-01
		1.86E-01	2.96E-01
		2.51E-01	3.29E-01
		3.18E-01	3.61E-01
		3.89E-01	3.94E-01
		4.64E-01	4.27E-01
		5.40E-01	4.60E-01
		6.19E-01	4.92E-01
		6.40E-01	5.01E-01
		7.07E-01	5.25E-01
		7.99E-01	5.58E-01
		9.00E-01	5.90E-01
		1.01E+00	6.23E-01
		1.13E+00	6.56E-01
		1.26E+00	6.88E-01
		1.41E+00	7.21E-01
		1.59E+00	7.54E-01
		1.78E+00	7.87E-01
		2.03E+00	8.19E-01
		2.32E+00	8.52E-01
		2.71E+00	8.85E-01
		3.26E+00	9.17E-01
		4.14E+00	9.50E-01
		5.03E+00	9.69E-01
		6.32E+00	9.83E-01
		8.02E+00	9.91E-01
		1.44E+01	1.00E+00
<b>Fe:Coefficient</b>	Partition coefficient for Fe	CONTINUOUS LINEAR(Log10(mL/g))	
Default value used		Value	Probability
		-1.11E+00	0.00E+00
		9.49E-01	3.45E-02
		1.35E+00	6.91E-02
		1.62E+00	1.04E-01
		1.80E+00	1.38E-01
		1.94E+00	1.73E-01
		2.07E+00	2.07E-01
		2.17E+00	2.42E-01
		2.20E+00	2.50E-01
		2.26E+00	2.76E-01
		2.35E+00	3.11E-01
		2.43E+00	3.45E-01
		2.50E+00	3.80E-01
		2.57E+00	4.15E-01
		2.64E+00	4.49E-01

		2.70E+00	4.84E-01
		2.73E+00	4.99E-01
		2.76E+00	5.18E-01
		2.82E+00	5.53E-01
		2.87E+00	5.87E-01
		2.93E+00	6.22E-01
		2.99E+00	6.56E-01
		3.05E+00	6.91E-01
		3.11E+00	7.25E-01
		3.15E+00	7.50E-01
		3.17E+00	7.60E-01
		3.23E+00	7.94E-01
		3.29E+00	8.29E-01
		3.36E+00	8.64E-01
		3.45E+00	8.98E-01
		3.55E+00	9.33E-01
		3.69E+00	9.67E-01
		3.89E+00	9.91E-01
		4.14E+00	1.00E+00
<b>Co:Coefficient</b>	Partition coefficient for Co	CONTINUOUS LINEAR(Log10(mL/g))	
<u>Default value used</u>		<u>Value</u>	<u>Probability</u>
		-2.47E+00	0.00E+00
		1.95E-01	3.45E-02
		7.70E-01	6.91E-02
		1.13E+00	1.04E-01
		1.39E+00	1.38E-01
		1.59E+00	1.73E-01
		1.77E+00	2.07E-01
		1.91E+00	2.42E-01
		1.95E+00	2.50E-01
		2.04E+00	2.76E-01
		2.16E+00	3.11E-01
		2.28E+00	3.45E-01
		2.38E+00	3.80E-01
		2.47E+00	4.15E-01
		2.56E+00	4.49E-01
		2.65E+00	4.84E-01
		2.69E+00	4.99E-01
		2.73E+00	5.18E-01
		2.82E+00	5.53E-01
		2.90E+00	5.87E-01
		2.97E+00	6.22E-01
		3.05E+00	6.56E-01
		3.13E+00	6.91E-01
		3.21E+00	7.25E-01
		3.28E+00	7.50E-01
		3.30E+00	7.60E-01
		3.39E+00	7.94E-01
		3.48E+00	8.29E-01
		3.58E+00	8.64E-01
		3.70E+00	8.98E-01
		3.84E+00	9.33E-01
		4.03E+00	9.67E-01
		4.30E+00	9.91E-01
		4.65E+00	1.00E+00
<b>Ni:Coefficient</b>	Partition coefficient for Ni	NORMAL(Log10(mL/g))	
<u>Default value used</u>		<u>Mean</u>	1.57E+00
		<u>Standard Deviation</u>	1.48E+00
<b>Sr:Coefficient</b>	Partition coefficient for Sr	NORMAL(Log10(mL/g))	



Default value used		Mean	1.50E+00
		Standard Deviation	9.20E-01
<b>Y:Coefficient</b>	Partition coefficient for Y	NORMAL(Log10(mL/g))	
Default value used		Mean	2.90E+00
		Standard Deviation	1.40E+00
<b>Nb:Coefficient</b>	Partition coefficient for Nb	NORMAL(Log10(mL/g))	
Default value used		Mean	2.80E+00
		Standard Deviation	1.40E+00
<b>Tc:Coefficient</b>	Partition coefficient for Tc	NORMAL(Log10(mL/g))	
Default value used		Mean	8.70E-01
		Standard Deviation	1.33E+00
<b>Cs:Coefficient</b>	Partition coefficient for Cs	NORMAL(Log10(mL/g))	
Default value used		Mean	2.65E+00
		Standard Deviation	1.01E+00
<b>Ba:Coefficient</b>	Partition coefficient for Ba	NORMAL(Log10(mL/g))	
Default value used		Mean	1.65E+00
		Standard Deviation	3.53E+00
<b>Eu:Coefficient</b>	Partition coefficient for Eu	NORMAL(Log10(mL/g))	
Default value used		Mean	2.98E+00
		Standard Deviation	1.74E+00
<b>Gd:Coefficient</b>	Partition coefficient for Gd	NORMAL(Log10(mL/g))	
Default value used		Mean	7.00E-01
		Standard Deviation	1.40E+00
<b>H:Leafy</b>	Leafy plant concentration factor for H	CONSTANT(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Value	0.00E+00
<b>C:Leafy</b>	Leafy plant concentration factor for C	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.57E-01
		Standard Deviation of Ln	9.04E-01
<b>Fe:Leafy</b>	Leafy plant concentration factor for Fe	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.18E+00
		Standard Deviation of Ln	1.34E+00
<b>Co:Leafy</b>	Leafy plant concentration factor for Co	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.43E+00
		Standard Deviation of Ln	1.55E+00
<b>Ni:Leafy</b>	Leafy plant concentration factor for Ni	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.38E+00
		Standard Deviation of Ln	1.16E+00
<b>Sr:Leafy</b>	Leafy plant concentration factor for Sr	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	5.88E-01
		Standard Deviation of Ln	1.34E+00
<b>Y:Leafy</b>	Leafy plant concentration factor for Y	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.20E+00
		Standard Deviation of Ln	9.04E-01
<b>Nb:Leafy</b>	Leafy plant concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	

Default value used		Mean of Ln(X)	-3.91E+00
		Standard Deviation of Ln	9.04E-01
<b>Tc:Leafy</b>	Leafy plant concentration factor for Tc	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	2.25E+00
		Standard Deviation of Ln	9.04E-01
<b>Cs:Leafy</b>	Leafy plant concentration factor for Cs	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.19E+00
		Standard Deviation of Ln	1.25E+00
<b>Ba:Leafy</b>	Leafy plant concentration factor for Ba	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.24E+00
		Standard Deviation of Ln	1.06E+00
<b>Eu:Leafy</b>	Leafy plant concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.61E+00
		Standard Deviation of Ln	9.04E-01
<b>Gd:Leafy</b>	Leafy plant concentration factor for Gd	LOGNORMAL-N(pCi/kg dry-wt leafy per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.61E+00
		Standard Deviation of Ln	9.04E-01
<b>H:Root</b>	Root plant concentration factor for H	CONSTANT(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Value	0.00E+00
<b>C:Root</b>	Root plant concentration factor for C	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.57E-01
		Standard Deviation of Ln	9.04E-01
<b>Fe:Root</b>	Root plant concentration factor for Fe	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.78E+00
		Standard Deviation of Ln	1.25E+00
<b>Co:Root</b>	Root plant concentration factor for Co	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.20E+00
		Standard Deviation of Ln	1.19E+00
<b>Ni:Root</b>	Root plant concentration factor for Ni	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.86E+00
		Standard Deviation of Ln	9.16E-01
<b>Sr:Root</b>	Root plant concentration factor for Sr	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.59E+00
		Standard Deviation of Ln	1.34E+00
<b>Y:Root</b>	Root plant concentration factor for Y	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.12E+00
		Standard Deviation of Ln	9.04E-01
<b>Nb:Root</b>	Root plant concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01

<b>Tc:Root</b>	Root plant concentration factor for Tc	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 4.05E-01
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Cs:Root</b>	Root plant concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 1.41E+00
<b>Ba:Root</b>	Root plant concentration factor for Ba	LOGNORMAL-N(pCi/kg wet-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -6.65E+00
		<u>Standard Deviation of Ln</u> 1.13E+00
<b>Eu:Root</b>	Root plant concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Gd:Root</b>	Root plant concentration factor for Gd	LOGNORMAL-N(pCi/kg dry-wt roots per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.52E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>H:Fruit</b>	Fruit concentration factor for H	CONSTANT(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Value</u> 0.00E+00
<b>C:Fruit</b>	Fruit concentration factor for C	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.57E-01
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Fe:Fruit</b>	Fruit concentration factor for Fe	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -7.78E+00
		<u>Standard Deviation of Ln</u> 1.25E+00
<b>Co:Fruit</b>	Fruit concentration factor for Co	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -4.20E+00
		<u>Standard Deviation of Ln</u> 1.19E+00
<b>Ni:Fruit</b>	Fruit concentration factor for Ni	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -3.86E+00
		<u>Standard Deviation of Ln</u> 9.16E-01
<b>Sr:Fruit</b>	Fruit concentration factor for Sr	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -2.59E+00
		<u>Standard Deviation of Ln</u> 1.34E+00
<b>Y:Fruit</b>	Fruit concentration factor for Y	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.12E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Nb:Fruit</b>	Fruit concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> -5.30E+00
		<u>Standard Deviation of Ln</u> 9.04E-01
<b>Tc:Fruit</b>	Fruit concentration factor for Tc	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)
<u>Default value used</u>		<u>Mean of Ln(X)</u> 4.05E-01

		Standard Deviation of Ln	9.04E-01
<b>Cs:Fruit</b>	Fruit concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	1.41E+00
<b>Ba:Fruit</b>	Fruit concentration factor for Ba	LOGNORMAL-N(pCi/kg wet-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-6.65E+00
		Standard Deviation of Ln	1.13E+00
<b>Eu:Fruit</b>	Fruit concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Gd:Fruit</b>	Fruit concentration factor for Gd	LOGNORMAL-N(pCi/kg dry-wt fruit per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>H:Grain</b>	Grain concentration factor for H	CONSTANT(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Value	0.00E+00
<b>C:Grain</b>	Grain concentration factor for C	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.57E-01
		Standard Deviation of Ln	9.04E-01
<b>Fe:Grain</b>	Grain concentration factor for Fe	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-7.78E+00
		Standard Deviation of Ln	1.25E+00
<b>Co:Grain</b>	Grain concentration factor for Co	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-4.20E+00
		Standard Deviation of Ln	1.19E+00
<b>Ni:Grain</b>	Grain concentration factor for Ni	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-3.86E+00
		Standard Deviation of Ln	9.16E-01
<b>Sr:Grain</b>	Grain concentration factor for Sr	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-2.59E+00
		Standard Deviation of Ln	1.34E+00
<b>Y:Grain</b>	Grain concentration factor for Y	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.12E+00
		Standard Deviation of Ln	9.04E-01
<b>Nb:Grain</b>	Grain concentration factor for Nb	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	9.04E-01
<b>Tc:Grain</b>	Grain concentration factor for Tc	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	4.05E-01
		Standard Deviation of Ln	9.04E-01
<b>Cs:Grain</b>	Grain concentration factor for Cs	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	

Default value used		Mean of Ln(X)	-5.30E+00
		Standard Deviation of Ln	1.41E+00
<b>Ba:Grain</b>	Grain concentration factor for Ba	LOGNORMAL-N(pCi/kg wet-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-6.65E+00
		Standard Deviation of Ln	1.13E+00
<b>Eu:Grain</b>	Grain concentration factor for Eu	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>Gd:Grain</b>	Grain concentration factor for Gd	LOGNORMAL-N(pCi/kg dry-wt grain per pCi/kg soil)	
Default value used		Mean of Ln(X)	-5.52E+00
		Standard Deviation of Ln	9.04E-01
<b>H:Beef</b>	Beef transfer factor for H	CONSTANT(d/kg)	
Default value used		Value	0.00E+00
<b>C:Beef</b>	Beef transfer factor for C	CONSTANT(d/kg)	
Default value used		Value	0.00E+00
<b>Fe:Beef</b>	Beef transfer factor for Fe	CONSTANT(d/kg)	
Default value used		Value	2.00E-02
<b>Co:Beef</b>	Beef transfer factor for Co	CONSTANT(d/kg)	
Default value used		Value	2.00E-02
<b>Ni:Beef</b>	Beef transfer factor for Ni	CONSTANT(d/kg)	
Default value used		Value	6.00E-03
<b>Sr:Beef</b>	Beef transfer factor for Sr	CONSTANT(d/kg)	
Default value used		Value	3.00E-04
<b>Y:Beef</b>	Beef transfer factor for Y	CONSTANT(d/kg)	
Default value used		Value	3.00E-04
<b>Nb:Beef</b>	Beef transfer factor for Nb	CONSTANT(d/kg)	
Default value used		Value	2.50E-01
<b>Tc:Beef</b>	Beef transfer factor for Tc	CONSTANT(d/kg)	
Default value used		Value	8.50E-03
<b>Cs:Beef</b>	Beef transfer factor for Cs	CONSTANT(d/kg)	
Default value used		Value	2.00E-02
<b>Ba:Beef</b>	Beef transfer factor for Ba	CONSTANT(d/kg)	
Default value used		Value	1.50E-04
<b>Eu:Beef</b>	Beef transfer factor for Eu	CONSTANT(d/kg)	
Default value used		Value	5.00E-03
<b>Gd:Beef</b>	Beef transfer factor for Gd	CONSTANT(d/kg)	
Default value used		Value	3.50E-03
<b>H:Poultry</b>	Poultry transfer factor for H	CONSTANT(d/kg)	
Default value used		Value	0.00E+00
<b>C:Poultry</b>	Poultry transfer factor for C	CONSTANT(d/kg)	
Default value used		Value	0.00E+00
<b>Fe:Poultry</b>	Poultry transfer factor for Fe	CONSTANT(d/kg)	
Default value used		Value	1.50E+00

<b>Co:Poultry</b>	Poultry transfer factor for Co	CONSTANT(d/kg)
Default value used		Value 5.00E-01
<b>Ni:Poultry</b>	Poultry transfer factor for Ni	CONSTANT(d/kg)
Default value used		Value 1.00E-03
<b>Sr:Poultry</b>	Poultry transfer factor for Sr	CONSTANT(d/kg)
Default value used		Value 3.50E-02
<b>Y:Poultry</b>	Poultry transfer factor for Y	CONSTANT(d/kg)
Default value used		Value 1.00E-02
<b>Nb:Poultry</b>	Poultry transfer factor for Nb	CONSTANT(d/kg)
Default value used		Value 3.10E-04
<b>Tc:Poultry</b>	Poultry transfer factor for Tc	CONSTANT(d/kg)
Default value used		Value 3.00E-02
<b>Cs:Poultry</b>	Poultry transfer factor for Cs	CONSTANT(d/kg)
Default value used		Value 4.40E+00
<b>Ba:Poultry</b>	Poultry transfer factor for Ba	CONSTANT(d/kg)
Default value used		Value 8.10E-04
<b>Eu:Poultry</b>	Poultry transfer factor for Eu	CONSTANT(d/kg)
Default value used		Value 4.00E-03
<b>Gd:Poultry</b>	Poultry transfer factor for Gd	CONSTANT(d/kg)
Default value used		Value 4.00E-03
<b>H:Milk</b>	Milk transfer factor for H	CONSTANT(d/L)
Default value used		Value 0.00E+00
<b>C:Milk</b>	Milk transfer factor for C	CONSTANT(d/L)
Default value used		Value 0.00E+00
<b>Fe:Milk</b>	Milk transfer factor for Fe	CONSTANT(d/L)
Default value used		Value 2.50E-04
<b>Co:Milk</b>	Milk transfer factor for Co	CONSTANT(d/L)
Default value used		Value 2.00E-03
<b>Ni:Milk</b>	Milk transfer factor for Ni	CONSTANT(d/L)
Default value used		Value 1.00E-03
<b>Sr:Milk</b>	Milk transfer factor for Sr	CONSTANT(d/L)
Default value used		Value 1.50E-03
<b>Y:Milk</b>	Milk transfer factor for Y	CONSTANT(d/L)
Default value used		Value 2.00E-05
<b>Nb:Milk</b>	Milk transfer factor for Nb	CONSTANT(d/L)
Default value used		Value 2.00E-02
<b>Tc:Milk</b>	Milk transfer factor for Tc	CONSTANT(d/L)
Default value used		Value 1.00E-02
<b>Cs:Milk</b>	Milk transfer factor for Cs	CONSTANT(d/L)
Default value used		Value 7.00E-03
<b>Ba:Milk</b>	Milk transfer factor for Ba	CONSTANT(d/L)
Default value used		Value 3.50E-04
<b>Eu:Milk</b>	Milk transfer factor for Eu	CONSTANT(d/L)
Default value used		Value 2.00E-05

<b>Gd:Milk</b>	Milk transfer factor for Gd	CONSTANT(d/L)
Default value used	Value	2.00E-05
<b>H:Eggs</b>	Egg transfer factor for H	CONSTANT(d/kg)
Default value used	Value	0.00E+00
<b>C:Eggs</b>	Egg transfer factor for C	CONSTANT(d/kg)
Default value used	Value	0.00E+00
<b>Fe:Eggs</b>	Egg transfer factor for Fe	CONSTANT(d/kg)
Default value used	Value	1.30E+00
<b>Co:Eggs</b>	Egg transfer factor for Co	CONSTANT(d/kg)
Default value used	Value	1.00E-01
<b>Ni:Eggs</b>	Egg transfer factor for Ni	CONSTANT(d/kg)
Default value used	Value	1.00E-01
<b>Sr:Eggs</b>	Egg transfer factor for Sr	CONSTANT(d/kg)
Default value used	Value	3.00E-01
<b>Y:Eggs</b>	Egg transfer factor for Y	CONSTANT(d/kg)
Default value used	Value	2.00E-03
<b>Nb:Eggs</b>	Egg transfer factor for Nb	CONSTANT(d/kg)
Default value used	Value	1.30E-03
<b>Tc:Eggs</b>	Egg transfer factor for Tc	CONSTANT(d/kg)
Default value used	Value	3.00E+00
<b>Cs:Eggs</b>	Egg transfer factor for Cs	CONSTANT(d/kg)
Default value used	Value	4.90E-01
<b>Ba:Eggs</b>	Egg transfer factor for Ba	CONSTANT(d/kg)
Default value used	Value	1.50E+00
<b>Eu:Eggs</b>	Egg transfer factor for Eu	CONSTANT(d/kg)
Default value used	Value	7.00E-03
<b>Gd:Eggs</b>	Egg transfer factor for Gd	CONSTANT(d/kg)
Default value used	Value	7.00E-03
<b>H:Factor</b>	Bioaccumulation factor for H in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	1.00E+00
<b>C:Factor</b>	Bioaccumulation factor for C in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	4.60E+03
<b>Fe:Factor</b>	Bioaccumulation factor for Fe in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	2.00E+03
<b>Co:Factor</b>	Bioaccumulation factor for Co in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	3.30E+02
<b>Ni:Factor</b>	Bioaccumulation factor for Ni in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	1.00E+02
<b>Sr:Factor</b>	Bioaccumulation factor for Sr in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	5.00E+01
<b>Y:Factor</b>	Bioaccumulation factor for Y in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	2.50E+01
<b>Nb:Factor</b>	Bioaccumulation factor for Nb in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used	Value	2.00E+02

<b>Tc:Factor</b>	Bioaccumulation factor for Tc in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 1.50E+01
<b>Cs:Factor</b>	Bioaccumulation factor for Cs in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.00E+03
<b>Ba:Factor</b>	Bioaccumulation factor for Ba in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.00E+02
<b>Eu:Factor</b>	Bioaccumulation factor for Eu in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.50E+01
<b>Gd:Factor</b>	Bioaccumulation factor for Gd in fish	CONSTANT(pCi/kg wet-wt fish per pCi/L water)
Default value used		Value 2.50E+01

### Correlation Coefficients:

Parameter One	Parameter Two	Correlation Coefficient
<b>KSDEV:Permeability Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		
<b>NDEV:Porosity Probability</b>	<b>BDEV:Parameter "b" Probability</b>	-0.35
Default value used		

### Summary Results:

90.00% of the 196 calculated TEDE values are < 6.23E+01 mrem/year .

The 95 % Confidence Interval for the 0.9 quantile value of TEDE is 6.17E+01 to 6.31E+01 mrem/year

### Detailed Results:

Note: All reported values are the upper bound of the symmetric 95% confidence interval for the 0.9 quantile value

### Concentration at Time of Peak Dose:

Nuclide	Soil Concentration (pCi/g)	Water Concentration (pCi/g)
3H	2.68E-07	7.23E-06
14C	1.43E-01	6.26E-10
55Fe	5.83E+00	2.10E-26
60Co	9.37E+00	1.29E-20
63Ni	1.17E-04	8.65E-14
90Sr	5.97E-09	3.08E-20
90Y	0.00E+00	2.72E-20
94Nb	8.80E-10	7.75E-22
99Tc	5.67E-05	1.19E-10
137Cs	1.38E-03	9.76E-23
137mBa	1.31E-03	9.23E-23
152Eu	1.53E-01	2.39E-20
152Gd	0.00E+00	6.46E-21



154Eu	2.98E-05	9.40E-23
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### Pathway Dose from All Nuclides (mrem)

All Pathways Dose	Agricultural	Drinking Water	Surface Water	External	Inhalation	Secondary Ingestion	Irrigation
6.31E+01	4.51E+00	2.62E-09	1.87E-08	5.85E+01	6.00E-04	3.41E-03	1.55E-08

### Radionuclide Dose through All Active Pathways (mrem)

Nuclide	All Pathways Dose
3H	9.88E-08
14C	8.96E-02
55Fe	1.41E-02
60Co	6.25E+01
63Ni	7.78E-07
90Sr	1.02E-07
90Y	5.71E-09
94Nb	3.80E-09
99Tc	8.97E-05
137Cs	1.10E-03
137mBa	2.02E-03
152Eu	4.41E-01
152Gd	1.20E-16
154Eu	9.30E-05
All Nuclides	6.31E+01

### Dose from Each Nuclide through Each Active Pathway (mrem)

Nuclide	Agricultural	Drinking Water	Surface Water	External	Inhalation	Secondary Ingestion	Irrigation
3H	9.88E-08	2.14E-10	4.90E-12	0.00E+00	5.07E-15	2.36E-13	1.96E-10
14C	8.81E-02	6.04E-13	6.04E-11	9.39E-07	9.03E-08	4.22E-06	1.01E-11
55Fe	1.41E-02	5.89E-30	2.71E-28	0.00E+00	4.25E-06	4.42E-05	1.73E-29
60Co	4.43E+00	1.60E-22	1.14E-21	5.81E+01	5.86E-04	3.35E-03	5.72E-22
63Ni	7.72E-07	2.31E-17	4.93E-17	0.00E+00	2.22E-10	9.53E-10	4.05E-17
90Sr	1.02E-07	2.02E-21	2.31E-21	2.00E-12	2.32E-12	1.19E-11	5.15E-21
90Y	5.65E-09	1.35E-22	7.71E-23	6.35E-11	1.48E-14	8.90E-13	3.66E-22
94Nb	1.68E-10	2.56E-24	1.17E-23	3.63E-09	1.10E-13	8.90E-14	6.55E-23
99Tc	8.91E-05	8.05E-14	2.61E-14	3.47E-09	1.43E-10	1.17E-09	1.25E-12
137Cs	1.10E-03	2.25E-24	9.57E-23	4.90E-07	1.32E-08	9.65E-07	2.19E-23
137mBa	0.00E+00	0.00E+00	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00
152Eu	3.38E-03	7.16E-23	4.05E-23	4.38E-01	1.00E-05	1.37E-05	1.02E-22
152Gd	1.16E-16	4.79E-22	2.76E-22	0.00E+00	1.33E-19	3.07E-19	8.58E-22
154Eu	9.52E-07	4.15E-25	2.27E-25	9.20E-05	2.49E-09	3.87E-09	5.63E-25