APPENDIX C
TYPE CURVE MATCHES

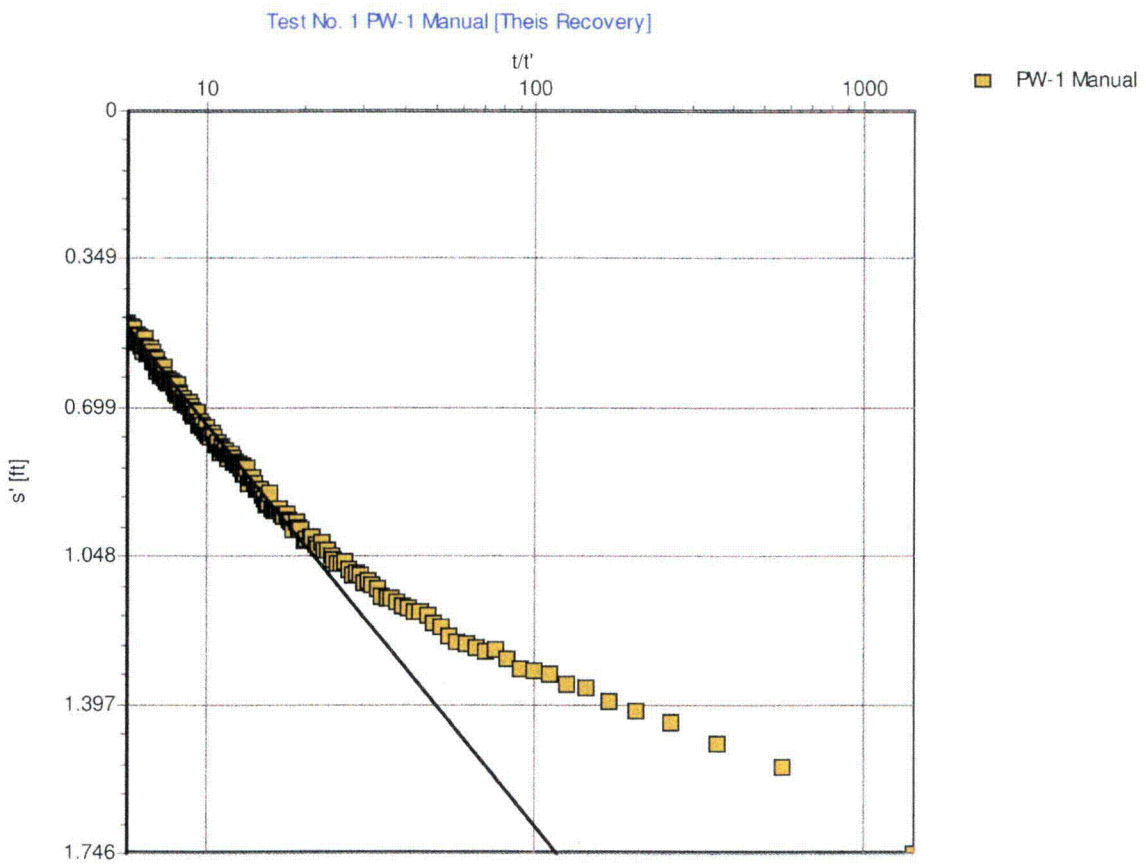
Petrotek
10288 West Chatfield Ave., Ste 201
Littleton, Colorado 80127
303-290-9414
www.petrotek.com

Pumping Test Analysis Report

Project: EMC Moore Ranch

Number: 312-4-5

Client: Energy Metals Corporation



Pumping Test: **Test No. 1 PW-1 Manual**

Analysis Method: **Theis Recovery**

Analysis Results:	Transmissivity:	6.06E+2 [ft²/d]	Conductivity:	8.19E+0 [ft/d]

Test parameters:	Pumping Well:	PW-1 Manual	Aquifer Thickness:	74 [ft]
	Casing radius:	0.1875 [ft]	Unconfined Aquifer	
	Screen length:	70 [ft]		
	Boring radius:	0.333333 [ft]		
	Discharge Rate:	16.290086 [U.S. gal/min]		
	Pumping Time	14285 [min]		

Comments:

Evaluated by: KRS/HPD

Evaluation Date: 8/16/2007

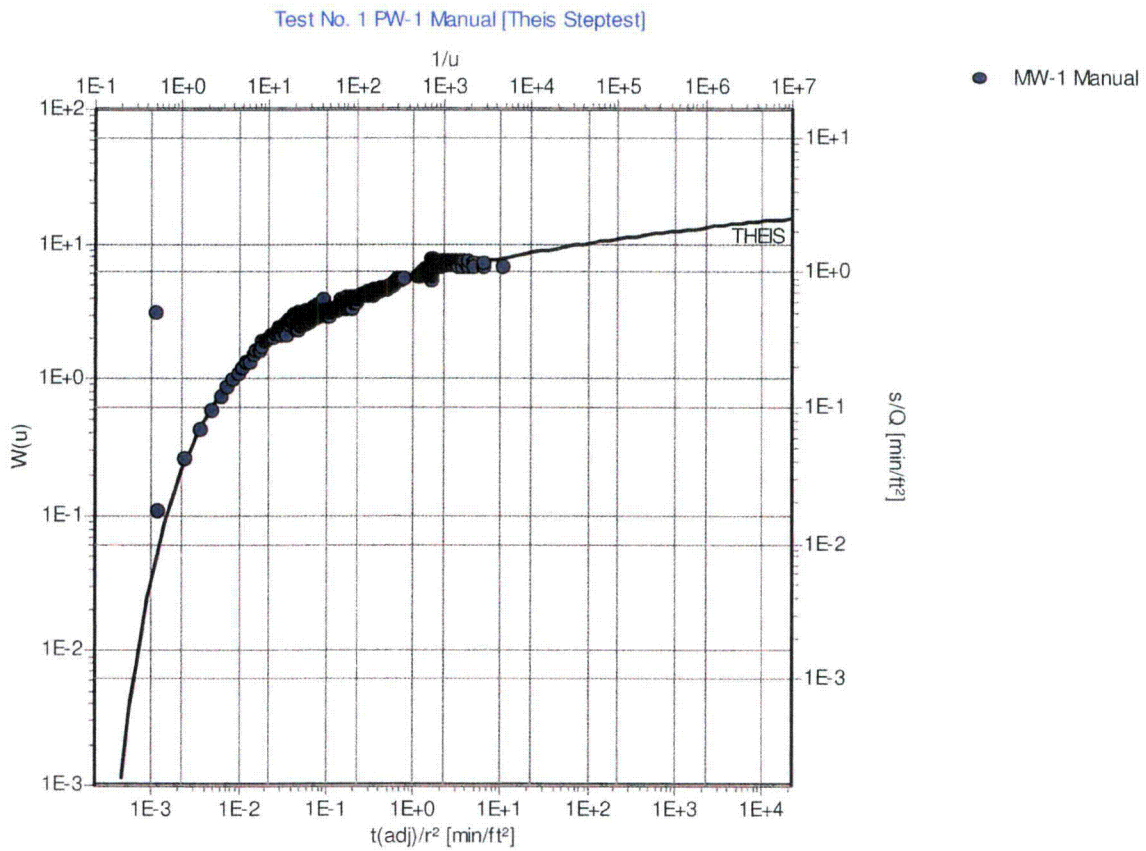
Petrotek
10288 West Chatfield Ave., Ste 201
Littleton, Colorado 80127
303-290-9414
www.petrotek.com

Pumping Test Analysis Report

Project: EMC Moore Ranch

Number: 312-4-5

Client: Energy Metals Corporation



Pumping Test: **Test No. 1 PW-1 Manual**

Analysis Method: **Theis Steptest**

Analysis Results:	Transmissivity:	7.07E+2 [ft²/d]	Conductivity:	9.55E+0 [ft/d]
	Storativity:	4.39E-3		
Test parameters:	Pumping Well:	PW-1 Manual	Aquifer Thickness:	74 [ft]
	Casing radius:	0.1875 [ft]	Confined Aquifer	
	Screen length:	70 [ft]		
	Boring radius:	0.333333 [ft]		
	Discharge Rate:	16.290086 [U.S. gal/min]		

Comments:

Evaluated by: KRS/HPD

Evaluation Date: 8/17/2007

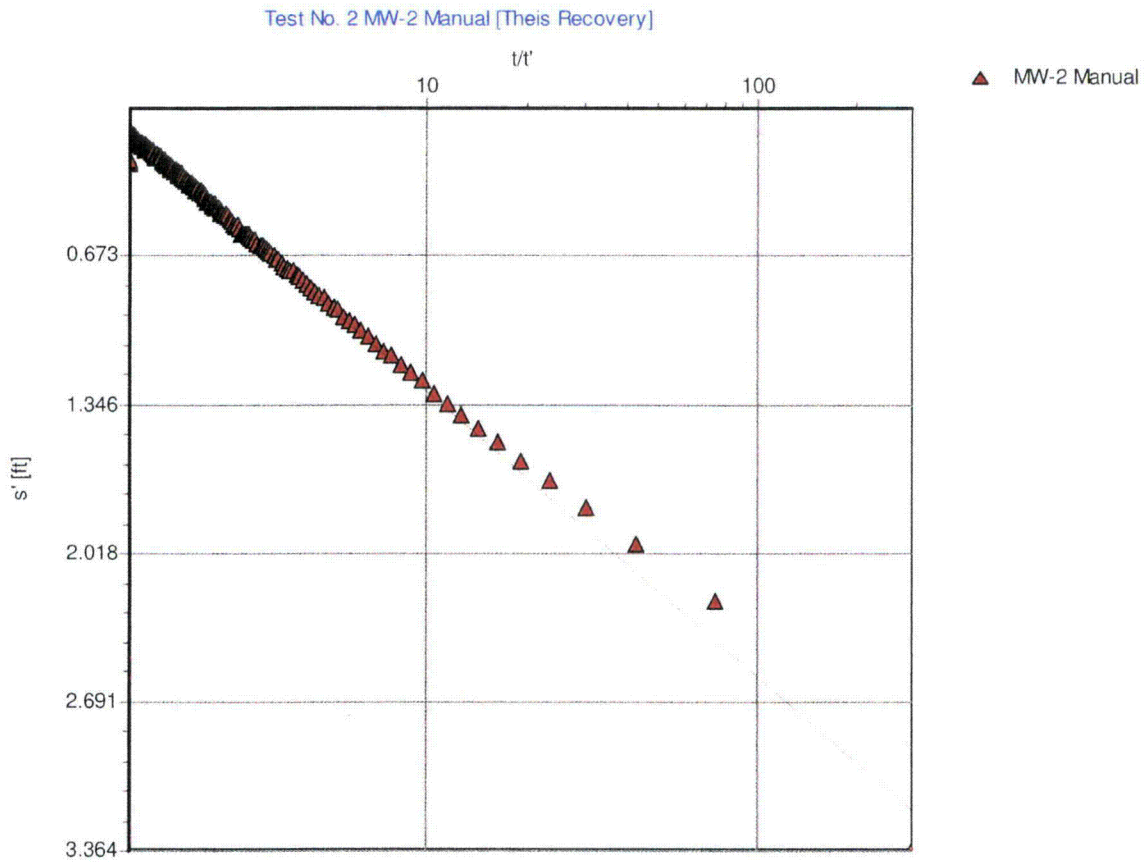
Petrotek
10288 West Chatfield Ave., Ste 201
Littleton, Colorado 80127
303-290-9414
www.petrotek.com

Pumping Test Analysis Report

Project: EMC Moore Ranch

Number: 312-4-5

Client: Energy Metals Corporation



Pumping Test: **Test No. 2 MW-2 Manual**

Analysis Method: **Theis Recovery**

Analysis Results:	Transmissivity:	7.11E+2 [ft²/d]	Conductivity:	7.33E+0 [ft/d]

Test parameters:	Pumping Well:	MW-2	Aquifer Thickness:	97 [ft]
	Casing radius:	0.1875 [ft]	Confined Aquifer	
	Screen length:	65 [ft]		
	Boring radius:	0.33333333 [ft]		
	Discharge Rate:	26.04 [U.S. gal/min]		
	Pumping Time	1465 [min]		

Comments:

Evaluated by: KRS/HPD

Evaluation Date: 8/17/2007

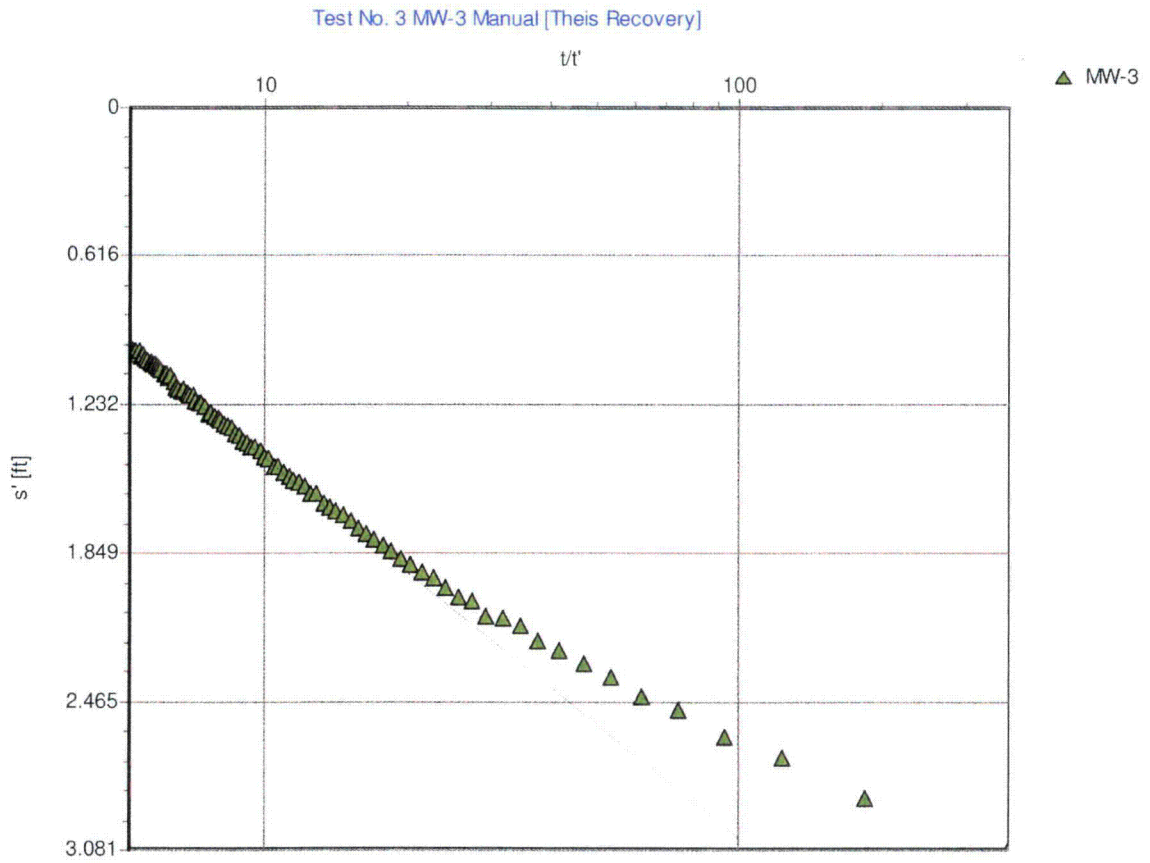
Petrotek
10288 West Chatfield Ave., Ste 201
Littleton, Colorado 80127
303-290-9414
www.petrotek.com

Pumping Test Analysis Report

Project: EMC Moore Ranch

Number: 312-4-5

Client: Energy Metals Corporation



Pumping Test: **Test No. 3 MW-3 Manual**

Analysis Method: **Theis Recovery**

Analysis Results:	Transmissivity:	3.21E+2 [ft²/d]	Conductivity:	4.46E+0 [ft/d]

Test parameters:	Pumping Well:	MW-3	Aquifer Thickness:	72 [ft]
	Casing radius:	0.1875 [ft]	Confined Aquifer	
	Screen length:	48 [ft]		
	Boring radius:	0.33333333 [ft]		
	Discharge Rate:	14.4 [U.S. gal/min]		
	Pumping Time	5535 [min]		

Comments:

Evaluated by: KRS/HPD

Evaluation Date: 7/26/2007

EMC MOORE RANCH
PUMP TEST REPORT – TABLES

T[illegible]2-1
Energy Metals Corporation
Summary of Historic Conoco Wells at Moore Ranch

Well	Northing	Easting	Township/ Range	Section	TOC Elevation (ft; amsl)	Hole Depth (ft; bgs)	Casing Depth (ft; bgs)	Top Screen (ft; bgs)	Bottom Screen (ft; bgs)	Screen Length (ft; bgs)	Aquifer	Casing I.D. (inches)
1822	321,574	1,060,356	T42N R75W	35	5,355	740	560	560	600	40	50/40 Sand	NI
887	318,000	1,058,278	T42N R75W	34	5,347	320	290	290	320	30	68 Sand	3
1823	320,630	1,056,440	T42N R75W	35	5,345	240	210	210	240	30	68 Sand	NI
1807	322,729	1,057,976	T42N R75W	35	5,328	290	250	250	290	40	68 Sand	3
1	322,598	1,058,010	T42N R75W	35	5,331	240	200	200	240	40	70 Sand	5
885	317,898	1,058,399	T42N R75W	34	5,350	240	180	180	240	60	70 Sand	5
886	317,819	1,058,258	T42N R75W	34	5,349	240	180	180	240	60	70 Sand	3
888	317,910	1,058,398	T42N R75W	34	5,352	250	180	180	240	60	70 Sand	3
889	315,219	1,057,936	T42N R75W	34	5,334	260	200	200	260	60	70 Sand	3
893	317,890	1,058,318	T42N R75W	34	5,348	240	153	153	240	87	70 Sand	5
1805	322,638	1,058,047	T42N R75W	35	5,331	240	120	120	240	120	70 Sand	3
1806	322,578	1,057,946	T42N R75W	35	5,324	220	120	120	200	80	70 Sand	3
1809	325,349	1,058,177	T42N R75W	35	5,356	230	135	135	225	90	70 Sand	3
1810	320,128	1,057,966	T42N R75W	35	5,378	265	200	200	260	60	70 Sand	3
1814	320,620	1,056,541	T42N R75W	35	5,345	207	143	143	207	64	70 Sand	5
1815	320,550	1,056,471	T42N R75W	35	5,348	208	142	142	208	66	70 Sand	3
1816	320,701	1,056,501	T42N R75W	35	5,343	207	137	138	207	69	70 Sand	3
1817	320,610	1,056,752	T42N R75W	35	5,350	233	143	143	233	90	70 Sand	3
22-2	322,809	1,054,603	T41N R75W	2	5,287	165	85	85	165	80	70 Sand	3
890	317,428	1,060,376	T42N R75W	34	5,410	330	240	240	330	90	70/68 Sand	3
1808	322,427	1,060,516	T42N R75W	35	5,377	275	195	195	275	80	70/68 Sand	5
8-3	318,060	1,054,523	T41N R75W	3	5,308	175	105	105	175	70	70/68 Sand	5
1821	321,534	1,060,275	T42N R75W	35	5,355	1,200	1,120	1,120	1,200	80	Roland Coal	6

Northing and Easting coordinates were converted from historic Conoco survey data to NAD 27 East State Plane Datum, accuracy is unknown.
NI - No information provided

Table 2-2
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Summary of Pumping Test Results

Summary of Aquifer Test Results– 70 Sand (Conoco 1979)		
	Range of Values	**Representative Value**
34-Orebody		
Transmissivity (T; ft2/d)	23 to 240	110
Hydraulic Conductivity (k; ft/day)	0.38 to 4.0	1.9
Net Sand Thickness (h; ft)	60	60
Storativity (S)	5.3 x 10-6 to 2.9 x 10^{-3}	9.8 x 10^{-4}
35N-Orebody		
Transmissivity (T; ft2/d)	112 to 297	165
Hydraulic Conductivity (k; ft/day)	0.95 to 1.52	1.4 ft/d
Net Sand Thickness (h; ft)	80	80
Storativity (S)	8.0 x 10-5 to 5.2 x 10^{-4}	2.5 x 10^{-4}
35S-Orebody		
Transmissivity (T; ft2/d)	374 to 735 ft2/d	555
Hydraulic Conductivity (k; ft/day)	9.35 to 18.3	13.8
Net Sand Thickness (h; ft)	40	40
Storativity (S)	3.2 x 10^{-4} to 4.3 x 10^{-3}	1.4 x 10^{-3}
Specific Yield	0.01 to 0.058	0.032

Summary of Aquifer Test Results– 70 Sand (Petrotek 2007)	
	Representative Value
Between 34 & 35-Orebody (PW-1 Test)	
Transmissivity (T; ft2/d)	656.5
Hydraulic Conductivity (k; ft/day)	8.87
Net Sand Thickness (h; ft)	77
Storativity (S)	4.39 x 10^{-3}
34-Orebody (MW-3 Test)	
Transmissivity (T; ft2/d)	321
Hydraulic Conductivity (k; ft/day)	4.46
Net Sand Thickness (h; ft)	72
Storativity (S)	NA
35N-Orebody (MW-2 Test)	
Transmissivity (T; ft2/d)	711
Hydraulic Conductivity (k; ft/day)	7.33
Net Sand Thickness (h; ft)	97
Storativity (S)	NA

Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Well Information

Well	Northing	Easting	Township/ Range	Section	Ground Surface Elevation (ft; amsl)	TOC Elevation (ft; amsl)	Hole Depth (ft; bgs)	Casing Depth (ft; bgs)	Top Screen (ft; bgs)	Bottom Screen (ft; bgs)	Screen Length (ft; bgs)	Aquifer	Casing I.D. (inches)	02/14/07 Static Depth to Water (ft from TOC)	2/14/2007 Water Elevation	Top of Sand Elevation	02/14/07 Water Elevation	Feet of H2O Above/Below Screen	Confined/ Unconfined
PW-1	320,209.00	1,057,961.00	T42N R75W	35	5,373.80	5,373.88	280	174	176	246	70	PZ '70' Sand	4.5	186.16	5,187.72	5,200.88	5187.72	-13.16	Unconfined
MW-1	320,100.00	1,057,961.00	T42N R75W	35	5,379.00	5,379.28	280	180	182	250	68	PZ '70' Sand	4.5	191.33	5,187.95	5,200.28	5187.95	-12.33	Unconfined
MW-2	322,635.00	1,057,708.00	T42N R75W	35	5,312.30	5,312.40	200	128	130	195	65	PZ '70' Sand	4.5	124.27	5,188.13	5,207.40	5188.13	-19.27	Unconfined
MW-3	317,948.00	1,060,543.00	T42N R75W	34	5,426.90	5,428.19	320	267	269	317	48	PZ '70' Sand	4.5	250.50	5,177.69	5,167.19	5177.69	10.50	Confined
MW-4	318,697.00	1,056,272.00	T42N R75W	34	5,312.60	5,312.59	280	190	126	164	38	PZ '70' Sand	4.5	116.05	5,196.54	5,189.59	5196.54	6.95	Confined
MW-5	321,452.00	1,056,678.00	T42N R75W	35	5,328.20	5,328.85	280	190	128	198	70	PZ '70' Sand	4.5	135.55	5,193.30	5,216.85	5193.30	-23.55	Unconfined
MW-6	323,791.00	1,058,277.00	T42N R75W	35	5,351.90	5,352.34	280	190	177	257	80	PZ '70' Sand	4.5	168.95	5,183.39	5,202.34	5183.39	-18.95	Unconfined
MW-7	322,535.00	1,056,299.00	T42N R75W	35	5,311.10	5,311.73	280	190	90	177	87	PZ '70' Sand	4.5	118.61	5,193.12	5,224.73	5193.12	-31.61	Unconfined
MW-8	317,921.00	1,057,961.00	T42N R75W	34	5,335.40	5,336.06	280	190	152	205	53	PZ '70' Sand	4.5	149.40	5,186.66	5,190.06	5186.66	-3.40	Unconfined
MW-9	317,099.00	1,059,198.00	T42N R75W	34	5,365.90	5,366.78	280	190	192	252	60	PZ '70' Sand	4.5	184.94	5,181.84	5,185.78	5181.84	-3.94	Unconfined
MW-10	320,115.00	1,059,378.00	T42N R75W	35	5,366.60	5,367.28	280	183	185	250	65	PZ '70' Sand	4.5	185.34	5,181.94	5,189.28	5181.94	-7.34	Unconfined
MW-11	317,693.00	1,061,868.00	T42N R75W	27	5,413.20	5,414.43	340	279	281	331	50	PZ '70' Sand	4.5	242.21	5,172.22	5,155.43	5172.22	16.79	Confined
OMW-1	320,090.00	1,057,961.00	T42N R75W	35	5,379.70	5,379.79	180	146	148	168	20	Overlying '72' Sand	4.5	141.05	5,238.74	5,239.79	5238.74	-1.05	Unconfined
OMW-2	322,625.00	1,057,708.00	T42N R75W	35	5,312.50	5,312.32	100	59	60	78	18	Overlying '72' Sand	4.5	67.35	5,244.97	5,272.32	5244.97	-27.35	Unconfined
OMW-3	317938	1,060,543.00	T42N R75W	34	5,427.00	5,427.72	250	203	205	245	40	Overlying '72' Sand	4.5	188.34	5,239.38	5,266.72	5239.38	-27.34	Unconfined
OMW-4	318687	1,056,272.00	T42N R75W	34	5,312.60	5,312.41	120	74	76	91	15	Overlying '72' Sand	4.5	66.10	5,246.31	5,258.41	5246.31	-12.10	Unconfined
UMW-1	320,110.00	1,057,961.00	T42N R75W	35	5,378.70	5,379.39	340	280	282	312	30	Underlying '68' Sand	4.5	193.58	5,185.81	5,105.39	5185.81	80.42	Confined
UMW-2	322,645.00	1,057,708.00	T42N R75W	35	5,312.40	5,313.07	280	228	230	250	20	Underlying '68' Sand	4.5	125.48	5,187.59	5,111.07	5187.59	76.52	Confined
UMW-3	317958	1,060,543.00	T42N R75W	34	5,426.50	5,426.89	380	351	353	378	25	Underlying '68' Sand	4.5	241.67	5,185.22	5,075.89	5185.22	109.33	Confined
UMW-4	318707	1,056,272.00	T42N R75W	34	5,312.70	5,313.37	300	220	222	252	30	Underlying '68' Sand	4.5	126.06	5,187.31	5,100.37	5187.31	86.94	Confined

Table 4-1
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Monitoring Equipment List

Test 1 - PW-1		
Location	**Monitoring Equipment**	**PSI Range**
PW-1	In-Situ LevelTROLL	100
MW-1	In-Situ LevelTROLL	30
MW-2	In-Situ LevelTROLL	30
MW-3	In-Situ LevelTROLL	30
MW-4	In-Situ LevelTROLL	30
MW-5	In-Situ LevelTROLL	30
MW-6	In-Situ LevelTROLL	30
MW-7	In-Situ LevelTROLL	30
MW-8	In-Situ LevelTROLL	30
MW-9	In-Situ LevelTROLL	30
MW-10	In-Situ LevelTROLL	30
MW-11	In-Situ LevelTROLL	30
OMW-1	In-Situ LevelTROLL	30
OMW-2	In-Situ LevelTROLL	30
OMW-3	In-Situ LevelTROLL	30
OMW-4	In-Situ LevelTROLL	30
UMW-1	In-Situ LevelTROLL	30
UMW-2	In-Situ LevelTROLL	30
UMW-3	In-Situ LevelTROLL	30
UMW-4	In-Situ LevelTROLL	30

Test No. 2 - MW-2		
Location	**Monitoring Equipment**	**PSI Range**
MW-2	In-Situ LevelTROLL	30
MW-5	In-Situ LevelTROLL	30
MW-6	In-Situ LevelTROLL	30
MW-7	In-Situ LevelTROLL	30
1805	In-Situ LevelTROLL	30
OMW-2	In-Situ LevelTROLL	30
UMW-2	In-Situ LevelTROLL	30
1807	In-Situ LevelTROLL	30

Test No. 3 - MW-3		
Location	**Monitoring Equipment**	**PSI Range**
MW-3	In-Situ LevelTROLL	30
MW-8	In-Situ LevelTROLL	30
MW-9	In-Situ LevelTROLL	30
MW-10	In-Situ LevelTROLL	30
MW-11	In-Situ LevelTROLL	30
OMW-3	In-Situ LevelTROLL	30
UMW-3	In-Situ LevelTROLL	30

Table 4-2
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Distances to Pumping Well and Observed Drawdown

Test 1 - PW-1

Start Date & Time: 2/15/07 11:00
End Date & Time: 2/25/07 9:05
Duration (minutes): 14,285
Ave. Pumping Rate: 15.60 (variable)

Completion Type	Well No.	Distance from Pumping Well (ft)	Drawdown At End of Test (ft)
Pumping Well	PW-1	0	20.61
Production Zone Completions	MW-1	109	2.17
	MW-2	2,440	No response
	MW-3	3,432	No response
	MW-4	2,268	No response
	MW-5	1,787	No response
	MW-6	3,596	No response
	MW-7	2,859	No response
	MW-8	2,288	No response
	MW-9	3,347	No response
	MW-10	1,420	No response
	MW-11	4,647	No response
Overlying Completions	OMW-1	~109	No response
	OMW-2	~ 2439	No response
	OMW-3	~ 3432	No response
	OMW-4	~ 2267	No response
Underlying Completions	UMW-1	~109	No response
	UMW-2	~ 2439	No response
	UMW-3	~ 3432	No response
	UMW-4	~ 2267	No response

Table 4-2
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Distances to Pumping Well and Observed Drawdown

Test 2 - MW-2

Start Date & Time: 3/20/07 13:45
End Date & Time: 3/21/07 14:10
Duration (minutes): 1,465
Ave. Pumping Rate: 26.04

Completion Type	Well No.	Distance from Pumping Well (ft)	Drawdown At End of Test (ft)
Pumping Well	MW-2	0	19.24
Production Zone Completions	MW-5	1,569	No response
	MW-6	1,289	No response
	MW-7	1,413	No response
	1805	346	0.71
Overlying Completions	OMW-2	10	No response
Underlying Completions	UMW-2	10	1.98
	1807	252	1.32

Test 3 - MW-3

Start Date & Time: 3/21/07 15:45
End Date & Time: 3/25/07 12:00
Duration (minutes): 5,535
Ave. Pumping Rate: 14.4

Completion Type	Well No.	Distance from Pumping Well (ft)	Drawdown At End of Test (ft)
Pumping Well	MW-3	0	17.87
Production Zone Completions	MW-8	2,584	No response
	MW-9	1,592	No response
	MW-10	2,461	No response
	MW-11	1,349	No response
Overlying Completions	OMW-3	10	No response
Underlying Completions	UMW-3	10	No response

Table 4-3
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Flow Rate vs. Time:

Test No. 1 - PW-1

DATE/TIME	MINUTES	INCREMENTAL MINUTES	TOTALIZER 1	TOTALIZER 2	T1 INCREMENTAL	CALC. T1 RATE	CALC. T2 RATE	CALC. T1T2 AVG	INSTANTANEOUS T1 RATE	INSTANTANEOUS T2 RATE	Comments
2/15/07 10:15	-----	-----	0	0	0	-----	-----	-----	-----		Attempted to start pump test but couldn't get pump to run. After several phone calls and troubleshooting, discovered that riser pipe had frozen at 3.4' below top of riser. Had no tools to fix problem....will stop by Home Depot tonight to get tools to break through ice.
2/15/07 10:20	-----	-----	30	1	30	-----	-----	-----	-----		Turn pump on after clearing ice in riser. Bumped pump on at 10:10 to clear any ice debris and prevent damage to totalizers.
2/15/07 11:00	0	-----	30	1	0	-----	-----	-----	-----		Pump off due to totalizers zeroing. Inspect discharge line and discover it is frozen in places. Totalizer numbers shown here were recorded after bleeding back pressure on the upgradient side of the first totalizer. Some water from the backpressure may have subtracted gallons from the totalizers. Discover blue plug in line at coupling ~ 400 - 500' downgradient. Removed obstructions and blue plug.
2/15/07 11:12	12	12	146	108	116	9.6	-----	-----	10.6	9.9	Pump back on at 11:00...adjusting rate at 11:00 - 11:08.
2/15/07 14:20	200	188	2,020	1,868	1,874	10.0	-----	-----	10.1	9.3	
2/16/07 9:00	1,320	1120	13,157	12,387	11,137	9.9	-----	-----	9.4	8.8	
2/16/07 15:30	1,710	390	16,564	15,588	3,407	8.7	-----	-----	9.8	9.1	
2/16/07 15:50	1,730	20	16,886	15,903	322	16.1	-----	-----	16.3	15.9	Bump rate to 16.35 at T1 and 16.0 at T2 at 15:30
2/16/07 16:30	1,770	40	17,529	-----	643	16.1	-----	-----	16.0	-----	
2/16/07 16:51	1,791	21	17,873	-----	344	16.4	-----	-----	16.0	-----	Lost T2 while toggling between totalizer and rate
2/17/07 10:32	2,852	1061	34,535	-----	16,662	15.7	-----	-----	15.0	-----	T2 still down
2/17/07 13:15	3,015	163	36,952	-----	2,417	14.8	-----	-----	14.7	-----	T2 still down
2/17/07 14:30	3,090	75	38,050	-----	1,098	14.6	-----	-----	14.7	-----	5 gallon bucket = 20 seconds = 15 gpm
2/17/07 14:46	3,106	16	38,343	-----	293	18.3	-----	-----	18.2	-----	Bump rate to 18.34 @14:30. valve is wide open
2/17/07 16:00	3,180	74	39,693	-----	1,350	18.2	-----	-----	18.3	-----	5 gallon bucket = 17.23 seconds = 17.41 gpm
2/18/07 8:50	4,190	1010	58,113	-----	18,420	18.2	-----	-----	18.3	-----	
2/19/07 8:55	5,635	1445	84,610	-----	26,497	18.3	-----	-----	18.4	-----	5 gallon bucket = 16.5 seconds = 18.18 gpm
2/19/07 12:51	5,871	236	88,950	-----	4,340	18.4	-----	-----	18.4	-----	5 gallon bucket = 16.5 seconds = 18.18 gpm
2/20/07 8:10	7,030	1159	102,846	-----	13,896	12.0	-----	-----	varying	-----	
2/20/07 9:08	7,088	58	103,862	-----	1,016	17.5	-----	-----	18.1	-----	onsite at 08:00 generator has 1/2 tank of fuel but is not idling at normal throttle...idling in and out. Power down at 0813 and restart at 0814 and back to operating at normal throttle. Suspect jelling of fuel...added anti-jelling agent to tank and topped off tank.
2/21/07 8:20	8,480	1392	129,219	-----	25,357	18.2	-----	-----	18.3	-----	
2/22/07 8:07	9,907	1427	155,362	-----	26,143	18.3	-----	-----	18.3	-----	
2/23/07 8:05	11,345	1438	181,748	-----	26,386	18.3	-----	-----	18.4	-----	
2/25/07 9:05	14,285	2940	222,855	-----	41,107	14.0	-----	-----	varying	-----	generator is surging again, so is pump rate. Pump off at 09:05, begin recovery at 09:05
						15.3			15.6		

Table 4-4
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Flow Rate vs. Time:

Test No. 2 - MW-2 Rate Data											
DATE/TIME	MINUTES	INCREMENTAL MINUTES	TOTALIZER 1	TOTALIZER 2	T1 INCREMENTAL	CALC. T1 RATE	CALC. T2 RATE	CALC. T1T2 AVG	INSTANTANEOUS T1 RATE	INSTANTANEOUS T2 RATE	Comments
3/20/07 12:45	0	0	0	-----	0	0.0	-----	-----	0.0	-----	Pump on
3/20/07 12:50	5	5	136	-----	136	24.8	-----	-----	26.2	-----	
3/20/07 13:05	20	15	516	-----	380	26.2	-----	-----	26.2	-----	
3/20/07 13:43	58	38	1,510	-----	994	26.2			26.1	-----	
3/20/07 15:56	191	133	4,979	-----	3,469	26.1			26.1	-----	
3/21/07 8:17	1,172	981	30,543	-----	25,564	26.1			25.9	-----	
3/21/07 11:41	1,376	204	35,833	-----	5,290	25.9			25.9	-----	
3/21/07 13:10	1,465	89	38,142	-----	2,309	25.9			25.9	-----	Pump off
						25.9			**26.0**		

Table 4-5
Energy Metals Corporation
Moore Ranch Regional Aquifer Tests
Flow Rate vs. Time:

Test No. 3 - MW-3 Rate Data											
DATE/TIME	MINUTES	INCREMENTAL MINUTES	TOTALIZER 1	TOTALIZER 2	T1 INCREMENTAL	CALC. T1 RATE	CALC. T2 RATE	CALC. T1T2 AVG	INSTANTANEOUS T1 RATE	INSTANTANEOUS T2 RATE	Comments
3/21/07 15:45	0	0	38,142	-----	0	-----	-----	-----	0.0	-----	Pump on
3/21/07 16:00	15	15	38,358	-----	216	14.4	-----	-----	14.8	-----	
3/21/07 17:00	75	60	39,242	-----	884	14.7	-----	-----	14.7	-----	
3/22/07 8:43	1,018	943	53,007	-----	13,765	14.6	-----	-----	14.3	-----	
3/22/07 12:10	1,225	207	55,957	-----	2,950	14.3	-----	-----	14.3	-----	
3/23/07 8:52	2,467	1242	73,700	-----	17,743	14.3	-----	-----	14.3	-----	
3/24/07 14:21	4,236	1769	98,966	-----	25,266	14.3	-----	-----	14.3	-----	
3/25/07 11:30	5,505	1269	117,635	-----	18,669	14.7	-----	-----	14.7	-----	
3/25/07 12:00	5,535	30	118,078	-----	443	14.8	-----	-----	-----	-----	Pump off
						14.5			14.5		

APPENDIX C-1

RESRAD Data Input Basis Parameters

RESRAD Data Input Basis

Parameters

This document summarizes the data input and modeling scenario that was used to determine the radium benchmark dose for the MRISR Project. The modeling was performed using RESRAD for Windows Version 6.3 developed by the Environmental Assessment Division at Argonne National Laboratory.

The resident farmer scenario was used since this is the most likely this is the most likely land use near the site. The following sections describe the data parameters that were used to model site-specific conditions.

The data input was based upon four principal sources:

1. The RESRAD Data Collection Handbook (ANL, 1993)

2. The RESRAD Users' Manual (ANL, 2003)

3. The NUREG-1569

4. Site specific information to be included in the MRISR license application

Soil Concentration

1. Lead 210: Used 5.0 pCi/g per the NUREG-1569.

2. Radium 226: Used 5.0 pCi/g regulatory limit as basis for determining benchmark.

Distribution Coefficient (K_d) (values based upon data in RESRAD Handbook)

1. Lead 210: Used a distribution coefficient of 270 cm^3/g for sandy soil based upon soil type at the mine. The RESRAD User's Manual specifies the following values:

   - Sand = 270
   - Loam = 16,000

Sensitivity analysis indicates with a multiple of 100, no appreciable impact on maximum dose for the external dose pathway using higher or lower K_d.. For the Plant (water independent) pathway, the lower K_d value resulted in a slightly lower maximum dose for this pathway. In this case, using the midrange value of 270 would result in a conservative maximum dose estimate. Used values of 2.7, 270 (mid range), and 27,000 which covers the range of potential values at the site based upon sandy and loamy soil types. Graph attached.

2. Radium 226: Used a distribution coefficient of 500 cm^3/g for sandy soil based upon soil type at the mine. The RESRAD User's Manual specifies the following values:

   - Sand = 500
   - Loam = 36,000

Sensitivity analysis indicates with a multiple of 100, no appreciable impact on maximum dose using higher K_d. Used values of 5, 500 (mid range), and 50,000 which covers the range of potential values at the site based upon sandy and loamy soil types. Graph attached.

Contaminated Zone

1. Area: Used default value of 10,000 square meters.

Sensitivity analysis was performed with a 2 multiple (5,000, 10,000 and 20,000 square meters). There was no impact on maximum dose for the External dose component. Graph attached.

2. Thickness: 15 cm (6 inches) based upon regulatory requirement (minimum in RESRAD Handbook)

3. Length parallel to aquifer flow: Default of 100 meters was used and is based upon the square root of a 10,000 square meter contaminated zone.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

Cover and Contaminated Zone

1. Cover depth: 0 inches (in accordance with NUREG-1569).

2. Density of contaminated zone: Used the default value of 1.5 g/cc, which corresponds to sandy soil in the RESRAD Handbook. This compares with the soil types at the MRISR and data in the MRISR license application.

   Because the RESRAD Data Collection Handbook considers this default value representative of the soil type, no sensitivity analysis was performed.

3. Contaminated zone erosion rate: Used the default value of 0.001 meters/year. NUREG-1569 states that the erosion rate should be lower at uranium recovery sites due to the semi-arid environment. The RESRAD Handbook states that this value should be adequate for screening purposes. It also states that, while water erosion is the primary factor, wind erosion can also be significant.

Sensitivity analysis was run using a multiple of 5 (i.e., 0.0002, 0.001 and 0.005). The lower erosion rate resulted in the total dose remaining at a higher level over a longer period of time for both the external and vegetation (water independent) pathways. However, there was no impact on the maximum dose.

4. Contaminated zone total porosity: Default value of 0.4 is based upon the soil types at MRISR.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

5. Contaminated zone field capacity: Default value of 0.2 was used. This value was used because it is at the midpoint of the range for the soil types at MRISR.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

6. Contaminated zone hydraulic conductivity: The range given in RESRAD handbook for silty sand is 1×10^1 to 1×10^4 m/yr. The soil types in the licensed area are principally Hiland fine sandy loam and Cushman loam. The hydraulic conductivity (K_{sat}) in m/yr. given in the RESRAD Manual for loamy sand is 4.93×10^3 m/yr. Very fine sand is given a K_{sat} of 3.0×10^3 m/yr in the RESRAD Handbook. To be conservative, a high value of 4.3×10^3 representative of Hiland fine sandy loam was chosen since site specific data is unavailable.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

7. Contaminated zone b parameter: Default parameter is 5.3 for silty loam. The RESRAD Handbook and RESRAD Manual specify the range from sand to loam is 4.05 to 5.39. Used default value.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

8. Evapotranspiration Coefficient: The RESRAD default value is 0.5. NUREG-1569 suggests that a value of 0.6 to 0.99 for uranium recovery sites is appropriate because they are located in a semiarid environment. For screening purposes, a mid-value (0.75) was used.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

9. Wind Speed: The RESRAD default is 2 m/s. The average for the MRISR is 5 m/s based on meteorological data from.

   No sensitivity analysis was performed since this is actual site data.

10. Precipitation: The RESRAD default is 1 m/yr. The average for the MRISR site is 0.3 m/yr. Site data was used. No sensitivity analysis was performed since this is actual site data as recommended in NUREG-1569.

11. Irrigation Rate: The RESRAD default is 0.2 m/yr. This default value is high for western states where irrigation may not be an option for some area.

    No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

12. Runoff Coefficient: The RESRAD default value is 0.2. This is the value for open rolling land in the RESRAD Handbook and was used for MRISR. The potential range in the RESRAD handbook for the site would be 0.1 to 0.4.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

13. Watershed Area for nearby stream or pond: The RESRAD default value is 1 x 10^6 m^2.

    No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

14. Accuracy: Used the default value of 0.001.

Saturated Zone

1. Density of saturated zone: Used the default value of 1.5 g/cc, which corresponds to sandy soil in the RESRAD Handbook. This compares with the first saturated zone at the MRISR.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

2. Saturated zone total porosity: Value of 0.43 is based upon formation type and data for the RESRAD Handbook.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

3. Saturated zone effective porosity: Value of 0.33 was used based upon formation type and data for the RESRAD Handbook.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

4. Contaminated zone field capacity: Default value of 0.2 was used. This value was used because it is at the midpoint of the range for the soil types at MRISR.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

5. Saturated zone hydraulic conductivity: A value of 5550 m/y was used based upon formation type and data for the RESRAD Handbook.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

6. Saturated zone hydraulic gradient: The default value of 0.02 was used for screening purposes.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

7. Saturated zone b parameter: Default parameter is 5.3 for silty loam was used. The RESRAD Handbook and RESRAD Manual specify a value of 4.38 for loamy sand, which corresponds to the soil classification used for the hydraulic conductivity. The range from sand to loam is 4.05 to 5.39.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

8. Water Table Drop Rate: The default value of 0.001 m/yr. was used for screening purposes. The site specific drop rate should be similar because there is little consumptive use of groundwater in the immediate area other than ranches that use local wells for domestic and livestock.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

9. Well Pump Intake Depth: The RESRAD default is 10 m. Since the depth to saturated zone is 21 meters and this zone is relatively thin and intermittent, a value of 22 meters was chosen.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

10. Model for Water Transport Parameters: Used non-dispersion per NUREG-1569.

11. Well Pumping Rate: Used default of 250 m^3/yr. (66,000 gal/yr.).

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

Unsaturated Zone

1. Unsaturated zone thickness: Used 21 meters based on site specific data to top of first saturated zone..

2. Density of unsaturated zone: Used 1.5 g/cc, which is similar to the saturated zone as discussed in NUREG-1569.

3. Unsaturated zone total Porosity: The default value of 0.4 is the same as used for the saturated zone as discussed in NUREG-1569.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

4. Unsaturated zone effective porosity: The default value of 0.2 is the same as used for the saturated zone as discussed in NUREG-1569.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

5. Unsaturated zone field capacity: Default value of 0.2 was used. This value was used because it is at the midpoint of the range for the soil types at MRISR.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

6. Unsaturated zone hydraulic conductivity: The range given in RESRAD handbook for silty sand is 1×10^1 to 1×10^4 m/yr. The soil types in the licensed area are principally Hiland fine sandy loam and Cushman loam. The hydraulic conductivity (K_{sat}) in m/yr. given in the RESRAD Manual for loamy sand is 4.93×10^3 m/yr. Very fine sand is given a K_{sat} of 3.0×10^3 m/yr in the RESRAD Handbook. To be conservative, a high value of 4.3×10^3 representative of Hiland fine sandy loam was chosen since site specific data is unavailable.

   No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

7. Saturated zone b parameter: Used default parameter of 5.3. The RESRAD Handbook and RESRAD Manual specify a value of 4.38 for loamy sand, which corresponds to the soil classification used for the hydraulic conductivity. The range from sand to loam is 4.05 to 5.39.

No Sensitivity analysis was performed since water dependent pathways were not significant contributors to dose.

Occupancy

1. Inhalation Rate: Used default value of 8,400 m^3/yr.

2. Mass Loading for Inhalation: Default is 0.0001 g/m^3. Handbook gives a value of 0.0003 g/ m^3 for agricultural generated dust loading. Used 0.0003 g/ m^3

   No Sensitivity analysis was performed since inhalation pathways were not significant contributors to dose.

3. Exposure Duration: Used default value of 30 years.

4. Indoor dust filtration factor: Used default value of 0.4.

5. External gamma shielding factor: The RESRAD default is 0.7, which assumes that the indoor gamma radiation level is 30% lower than the outdoor gamma radiation level. NUREG-1569 requires that a value between 0.33 and 0.55 be used. The screening level was set at 0.55. This is a value suitable for a 7-inch thick concrete slab on grade house (NUREG/CR-5512 Vol.3, p 6-25). This is representative of the thickness of the local slab or basement floor thicknesses.

Sensitivity analysis using a 1.5 multiple (i.e., 0.367, 0.55 and 0.825 resulted in a change in the maximum dose. See graph. The low range (0.367) resulted in a maximum dose for the external exposure pathway of approximately 20 mrem/yr compared to a dose of 23 mrem/yr for a shielding factor of 0.55. Based upon the fact that most construction of rural homes in the local area includes a thick concrete basement floor or slab, a shielding factor of 0.55 for the MRISR area is justified.

6. Indoor/Outdoor Fractions: Used defaults of 0.5 indoors and 0.25 outdoors for farmer scenario. As discussed above, the resident farmer scenario was chosen as the most likely land use for the foreseeable future (i.e., 200 years).

7. Shape of contaminated zone: NUREG-1569 suggests use of actual shape. However, the shape is unknown at this time. Various shapes were assumed including a rectangle having a length of up to four times the width. The results were independent of these shapes as long as the receptor was centered. When the receptor was at the edge of the area, the dose was reduced significantly as expected. A circular shape was adopted for the modeling.

Ingestion: Dietary

1. Consumption Rates:

A. Fruit, vegetable and grain: RESRAD default is 160 kg/yr. This value was used based upon EPA estimated consumption. NRC Reg. Guide 1.109 has an estimated consumption for an adult of 190 kg/yr. Screening level set at default of 160 kg/yr. This amount is the total consumption. RESRAD adjusts for contaminated and uncontaminated fractions based upon the size of the contaminated area.

B. Leafy Vegetable: Used default value of 14 kg/yr. NRC Reg. Guide 1.109 has an estimated consumption for an adult of 64 kg/yr, while NRC estimates for dose from nuclear power plants uses a consumption rate of 30 kg/yr. Screening level for total set at default of 190 kg/yr (see above entry). This amount is the total consumption. RESRAD adjusts for contaminated and uncontaminated fractions based upon the size of the contaminated area.

C. Milk: No consumption of locally produced and consumed milk per NUREG-1569. Dairy operations are not prevalent in the area.

D. Meat and Poultry: Used RESRAD default value of 63 kg/yr. According to NRC Regulatory Guide 1.109 (NRC, 1977), the recommended average value for consumption of meat and poultry is 37 kg/yr for children, 59 kg/yr for teenagers, and 95 kg/yr. for adults.

E. Fish/Seafood: No consumption of locally produced and consumed fish or seafood products was considered as recommended by NUREG-1569.

F. Soil ingestion: Used the RESRAD default value of 36.5 g/yr..

G. Drinking water intake: Used the RESRAD default of 510 l/yr. (1.4 L/d) as a screening level. This value is based upon EPA estimates of drinking water intake. The EPA (1990) has suggested that the average adult drinking water consumption rate is 1.4 L/d; the reasonable worst-case value is 2.0 L/d. .

2. Contaminated Fractions:

NUREG-1569 states that for sites with over 25 acres (10,117 square meters) of contamination, the fraction of diet from contaminated area should be assumed to be 25% (0.25). A sensitivity analysis on these parameters was not performed based upon the guidance.

A. Water: Used the default value of 1 (i.e., 100% of consumption is from contaminated well water). All current water use in rural areas around the site is from private wells and will likely continue to be in the foreseeable future.

B. Livestock Water: Used default of 1 (i.e., 100% is from contaminated water). All current water use in rural areas around the site is from private wells and will likely continue to be in the foreseeable future.

C. Irrigation Water: Used the RESRAD default of 1 (i.e., 100% is from contaminated water). All current water use in rural areas around the site is from private wells and will likely continue to be in the foreseeable future.

D. Plant food: Used 0.25 as percentage of plant food that is contaminated.

E. Meat: Used 0.25 as percentage of meat that is contaminated.

Ingestion: Nondietary

1. Consumption Rates:

A. Livestock fodder intake for meat: Used the RESRAD default of 68 kg/day.

B. Livestock water intake for meat: Used the RESRAD default of 50 L/day. According to NRC Regulatory Guide 1.109 (NRC 1977), the water ingestion rate for beef cattle is 50 L/d.

C. Livestock intake of soil for meat: Used the RESRAD default of 0.5 g/day.

D. Mass loading for foliar deposition: Used the same value of 0.0003 g/m^3 for agricultural generated dust loading as the inhalation parameter discussed above.

Sensitivity analysis was run with a multiple of 100 (i.e., 0.000003, 0.0003, and 0.03 g/m^3). There was no impact on dose.

E. Depth of soil mixing layer: Used the RESRAD default of 0.15 meters.

F. Depth of roots: Used 0.3 meters as a screening level based upon NUREG-1569 instead of the RESRAD default of 0.9. The root depth varies for different plants. For some plants, such as beets, carrots, lettuce, and so forth, it does not extend below about 0.3 m, which is the basis of the NRC guidance. For others, such as fruit trees, the roots may extend 2 or 3 m below the surface. Tap roots for some crops (e.g., alfalfa) can extend to 5 m. Most of the plant roots from which nutrients are obtained, however, usually extend to less than 1 m below the surface. Due to the common use of grazing crops such as alfalfa in the immediate area surrounding the MRISR site, a sensitivity analysis was chosen that would determine the dose using the 0.3 m NRC guidance as the screening level as well as the 0.9 m RESRAD default.

Sensitivity analysis was run with a multiple of 2 (i.e., 0.15, 0.3, and 0.6 meters). There was a significant impact on the maximum dose. Assumption of a shallow root system increased the dose significantly. In a review of the exposure pathways, the plant pathway resulted in approximately 35% of the total maximum dose. The meat pathway, which would be the primary pathway affected by deeper roots such as alfalfa was insignificant.. Therefore, the root depth recommended in the NRC NUREG-1569 was chosen for this parameter.

G. Groundwater fractional usage:

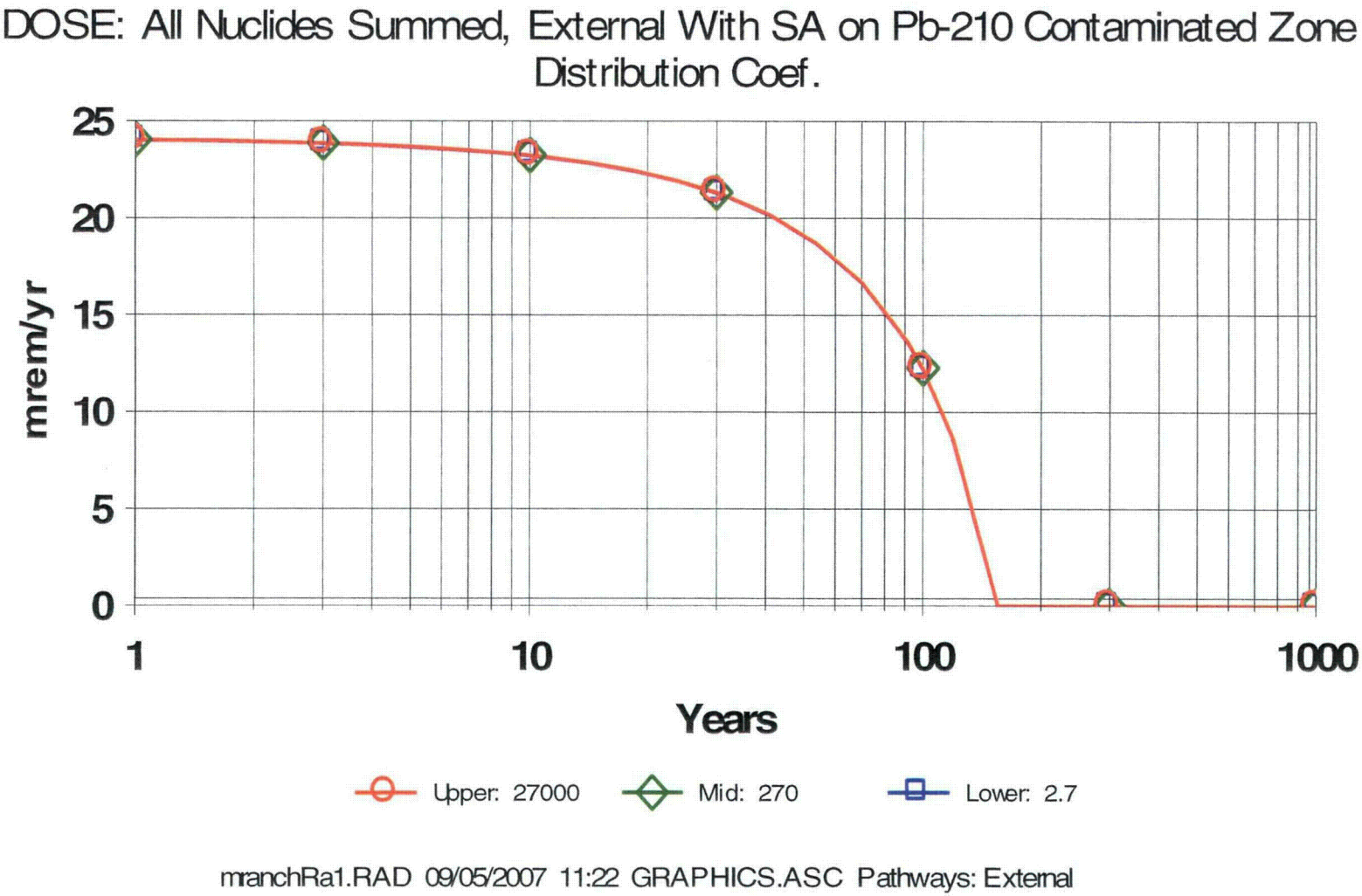
- Drinking water: Used the RESRAD default of 1 (i.e., 100% from well).
- Livestock water: Used the RESRAD default of 1 (i.e., 100% from well).
- Irrigation water: Used the RESRAD default of 1 (i.e., 100% from well).

Storage Times

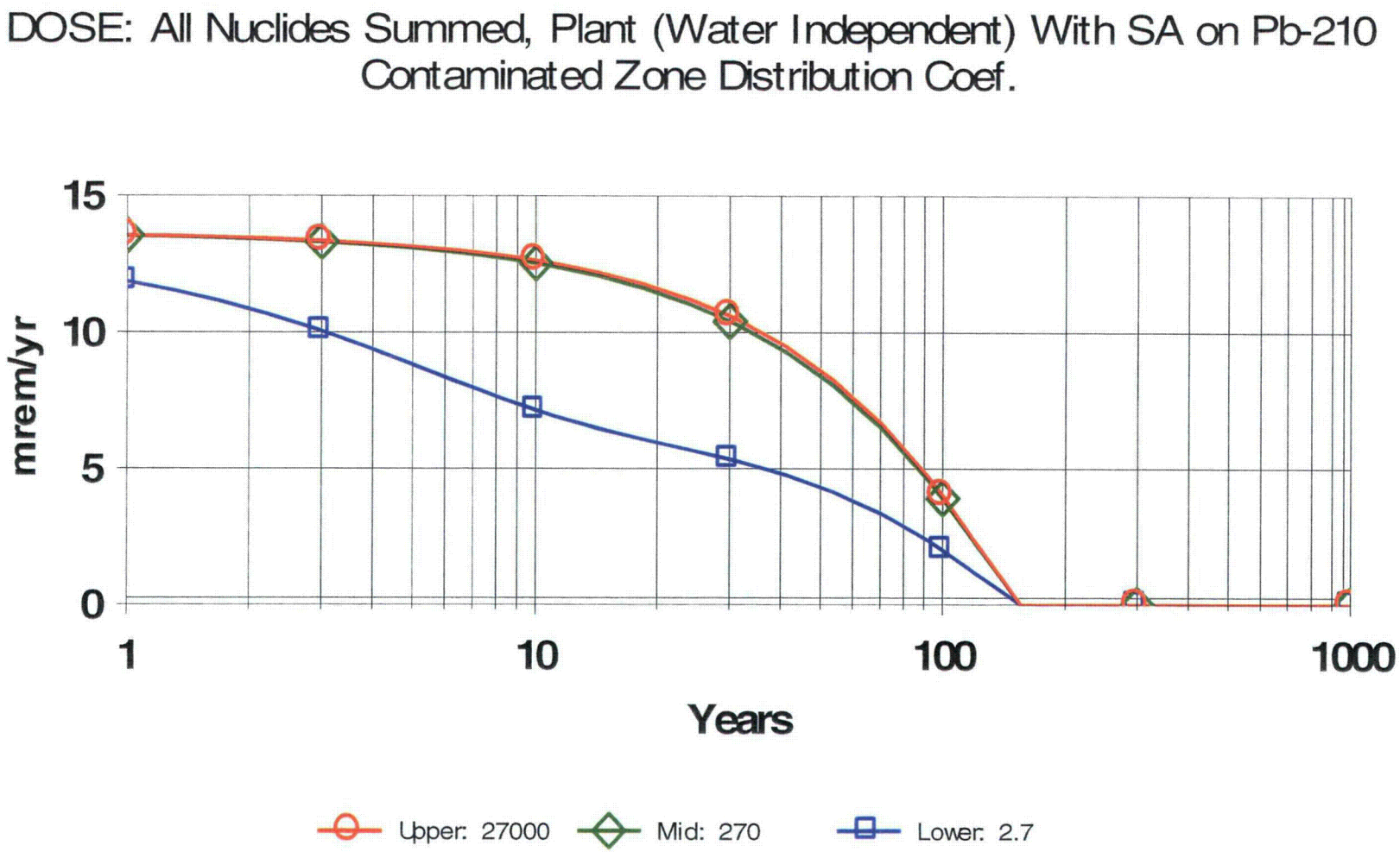
Used the RESRAD default values for all storage times (for vegetables, meats, fodder, etc.).

APPENDIX C-2

RESRAD Input Parameter Sensitivity Analysis

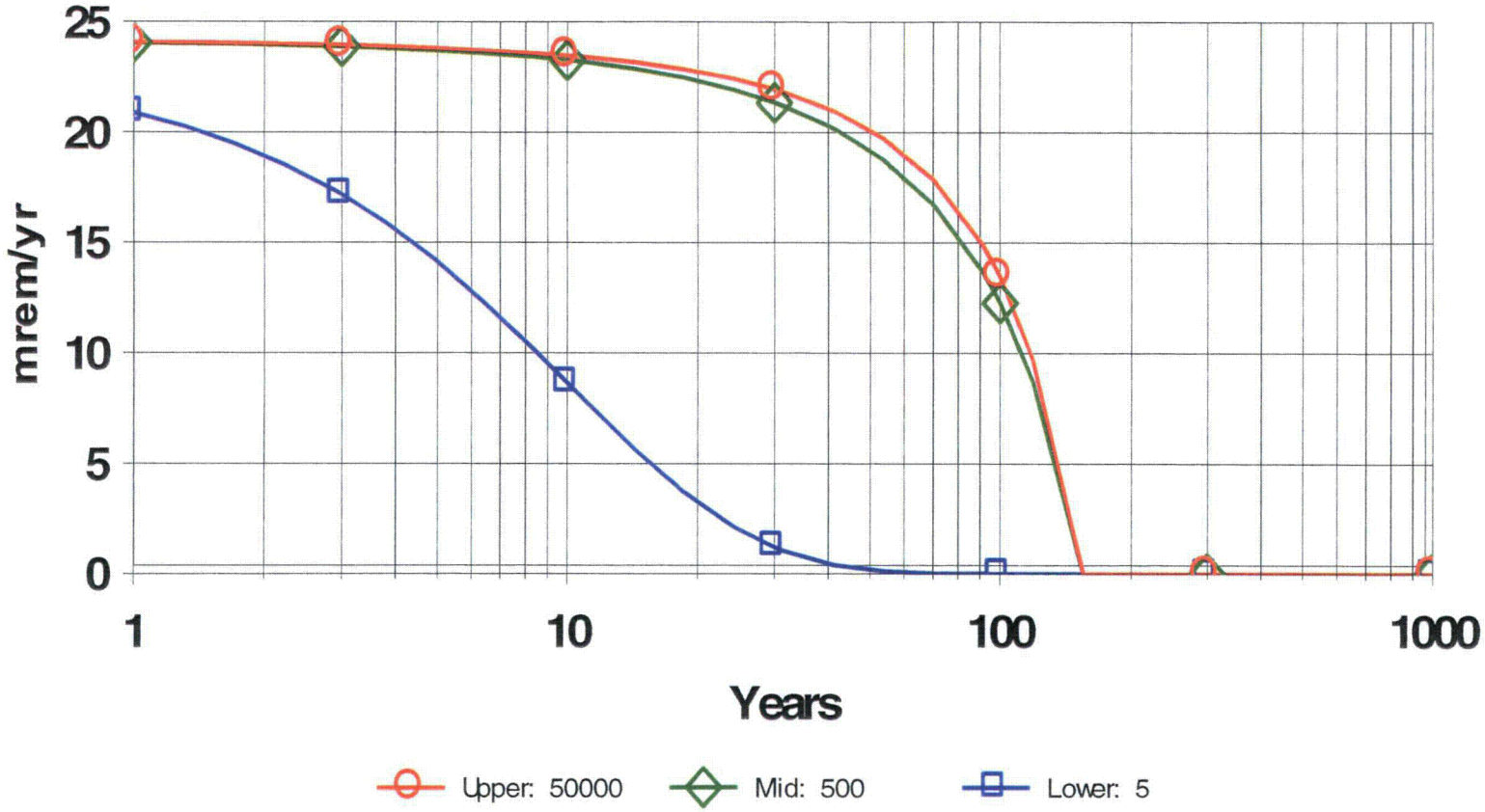


mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Pathways: External

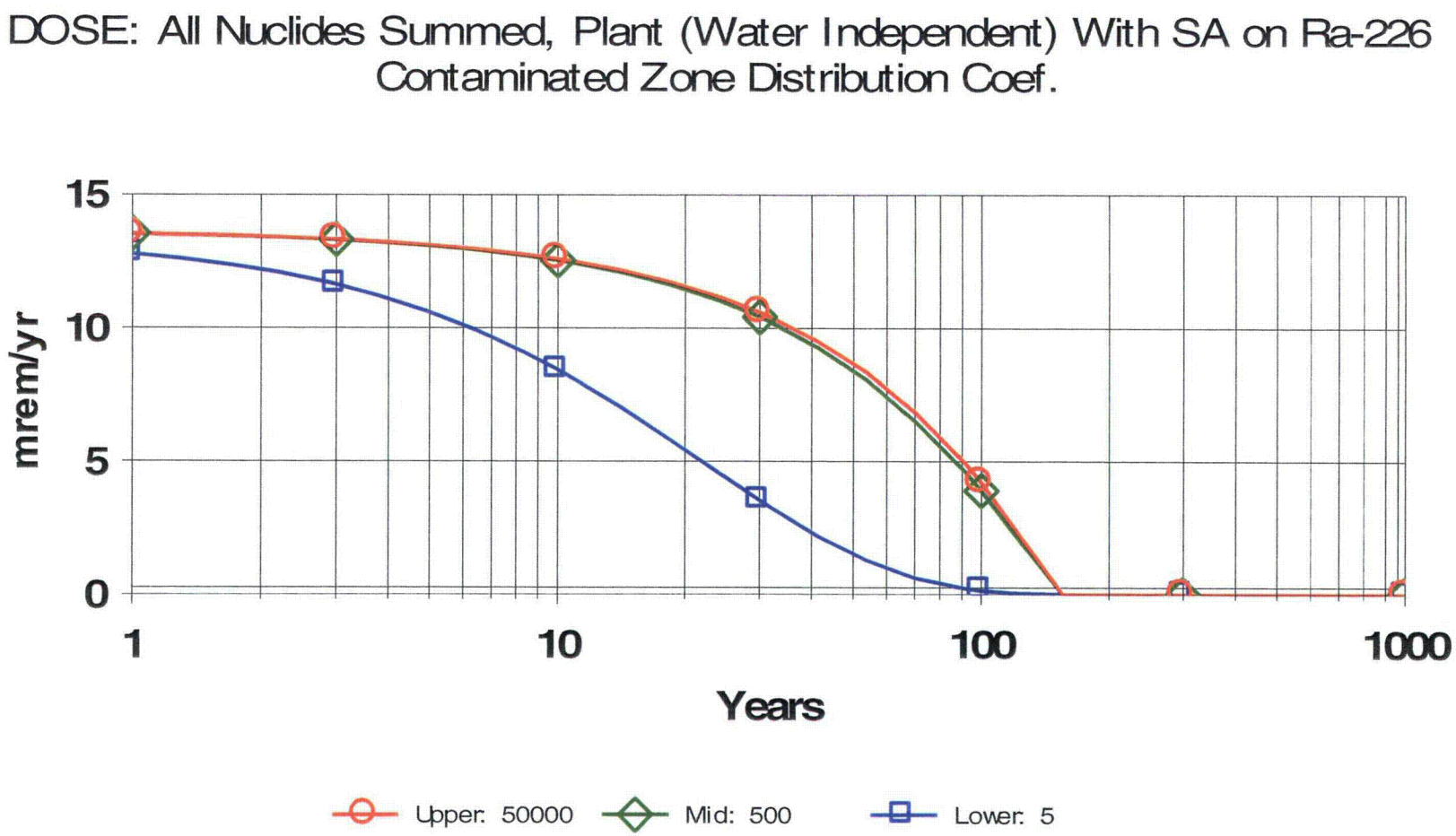


mranchRa1.RAD 09/05/2007 12:22 GRAPHICS.ASC Pathways: Plant (Water Independent)

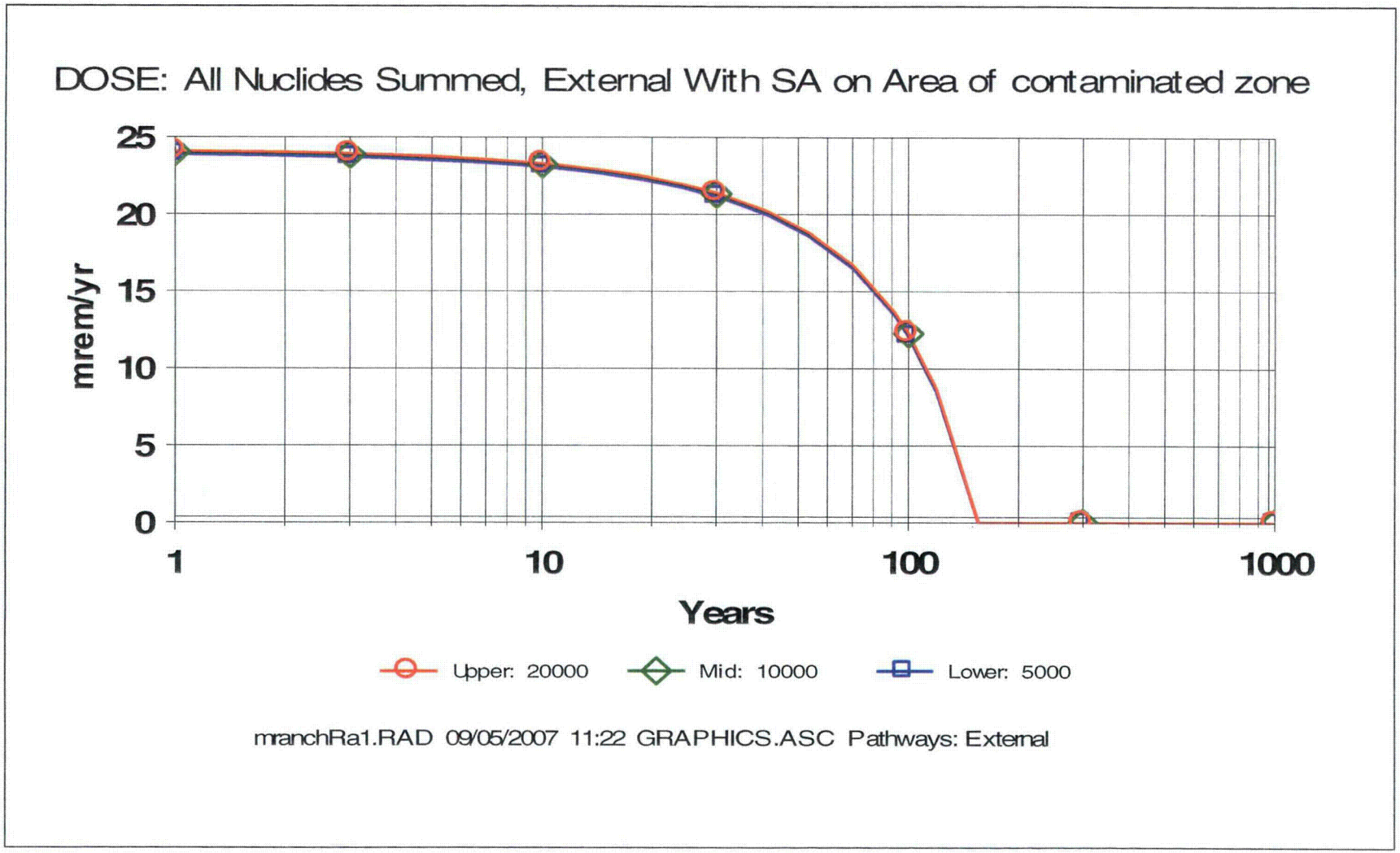
DOSE: All Nuclides Summed, External With SA on Ra-226 Contaminated Zone Distribution Coef.

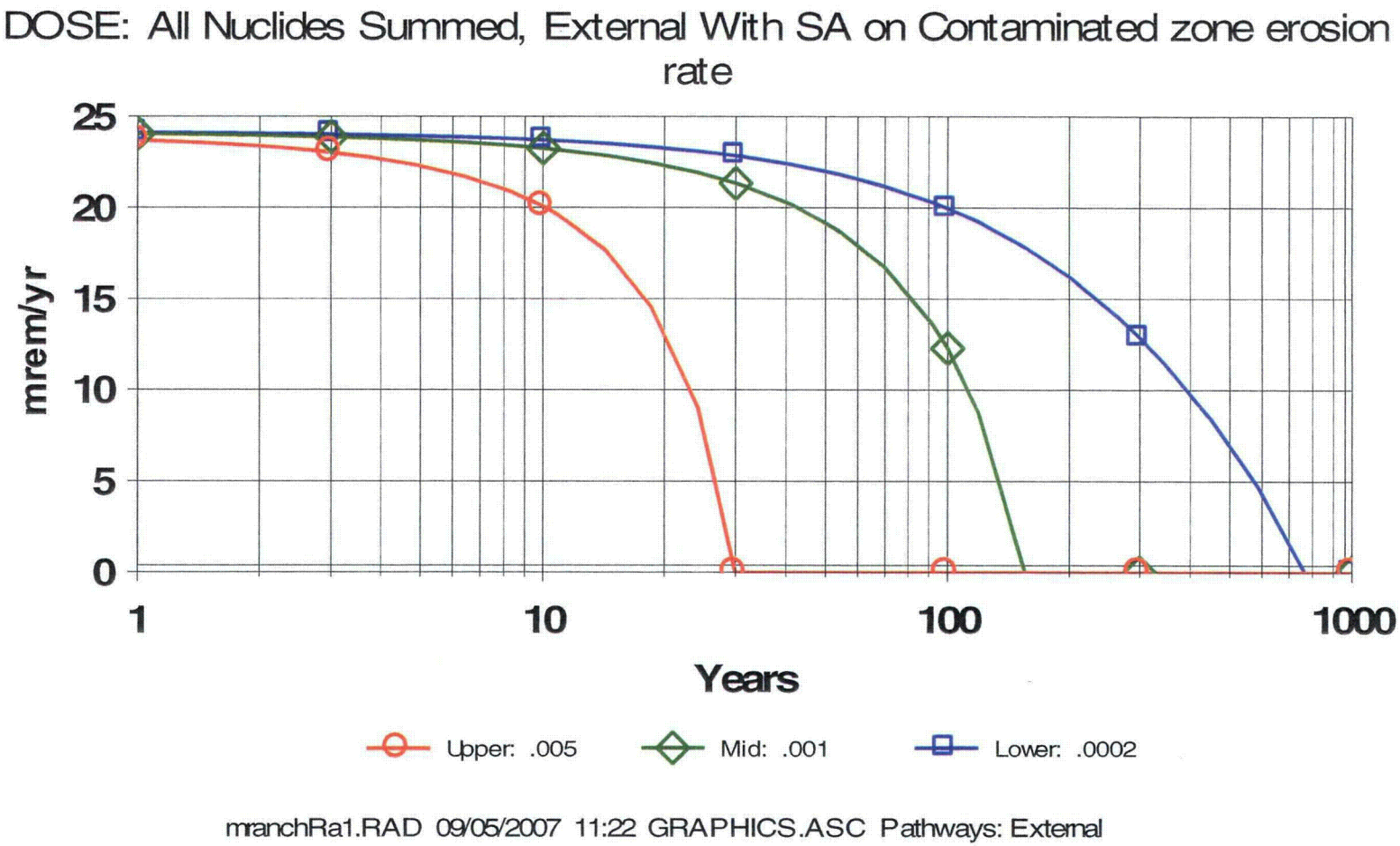


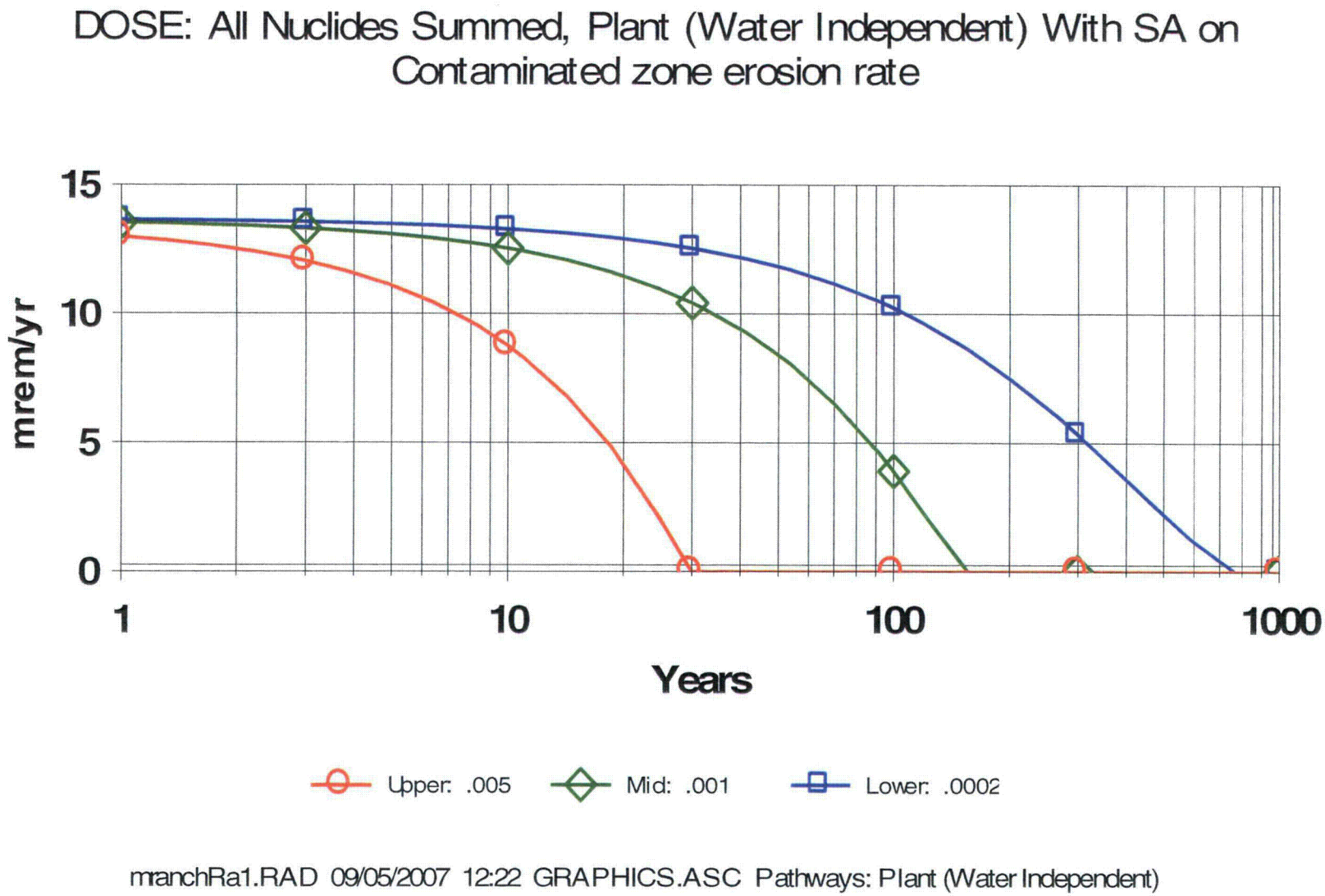
mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Pathways: External

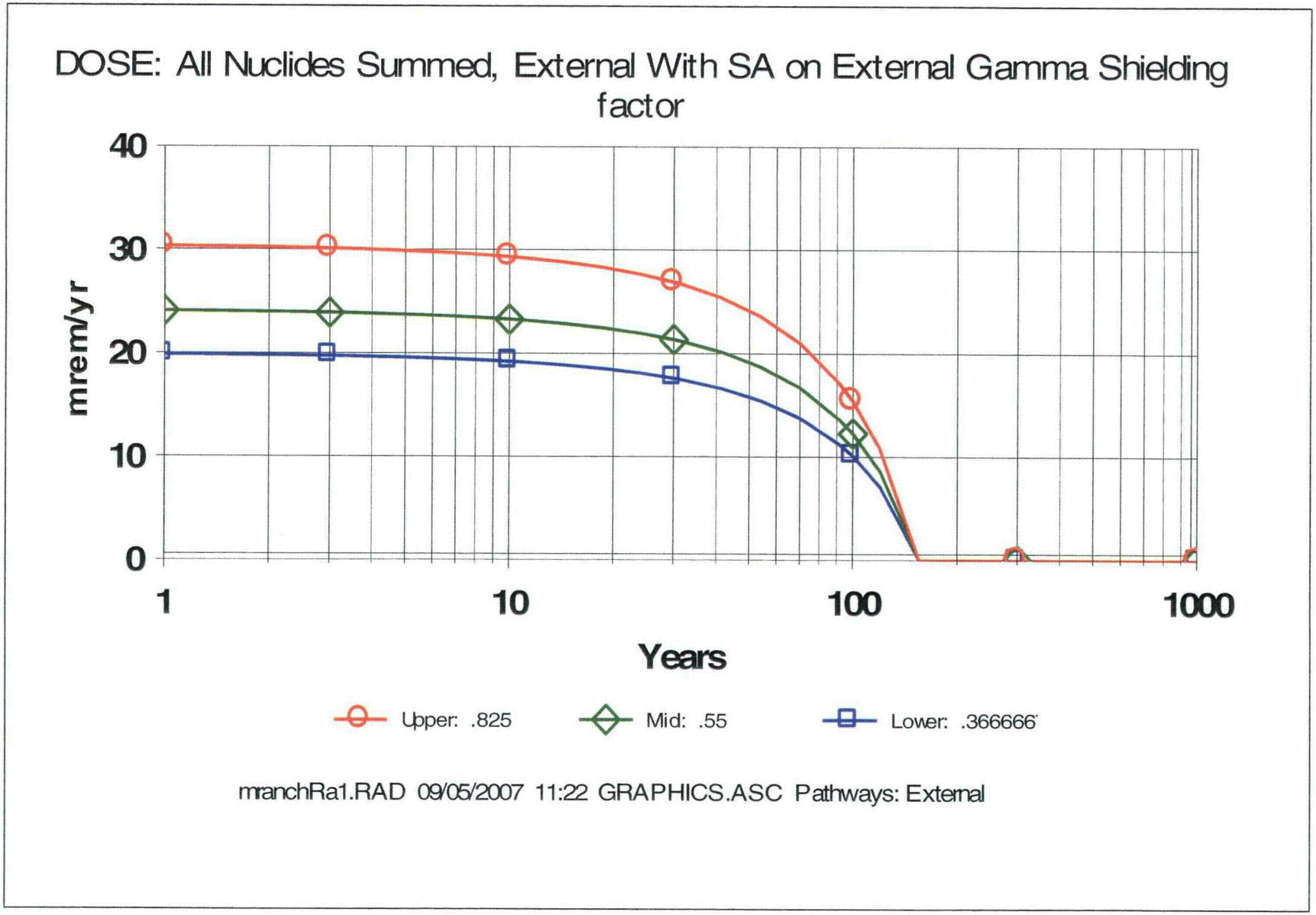


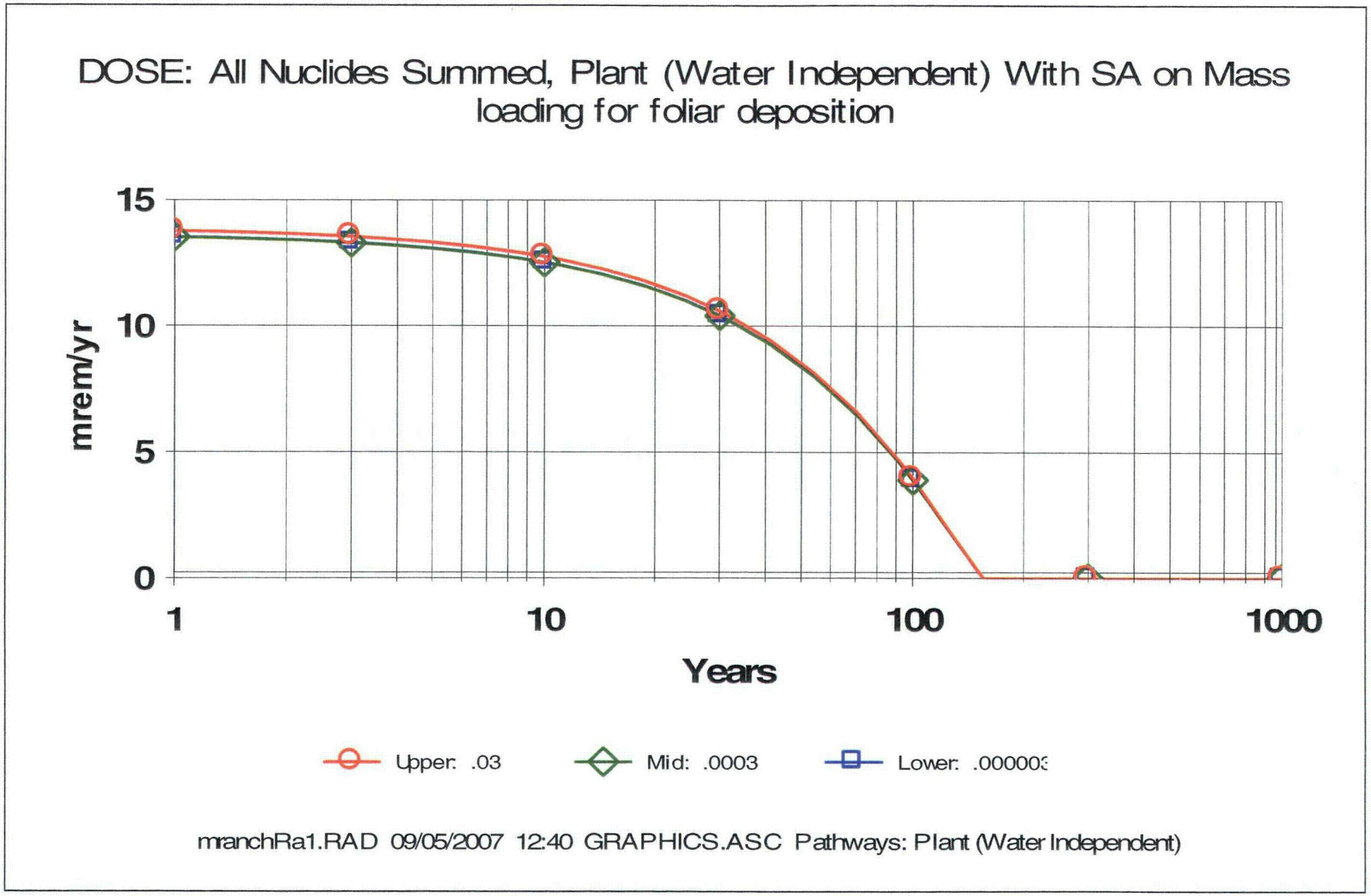
mranchRa1.RAD 09/05/2007 12:22 GRAPHICS.ASC Pathways: Plant (Water Independent)


DOSE: All Nuclides Summed, External With SA on Area of contaminated zone
25
20
15
10
5
0
mrem/yr
1
10
100
1000
Years
Upper: 20000
Mid: 10000
Lower: 5000
mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Pathways: External

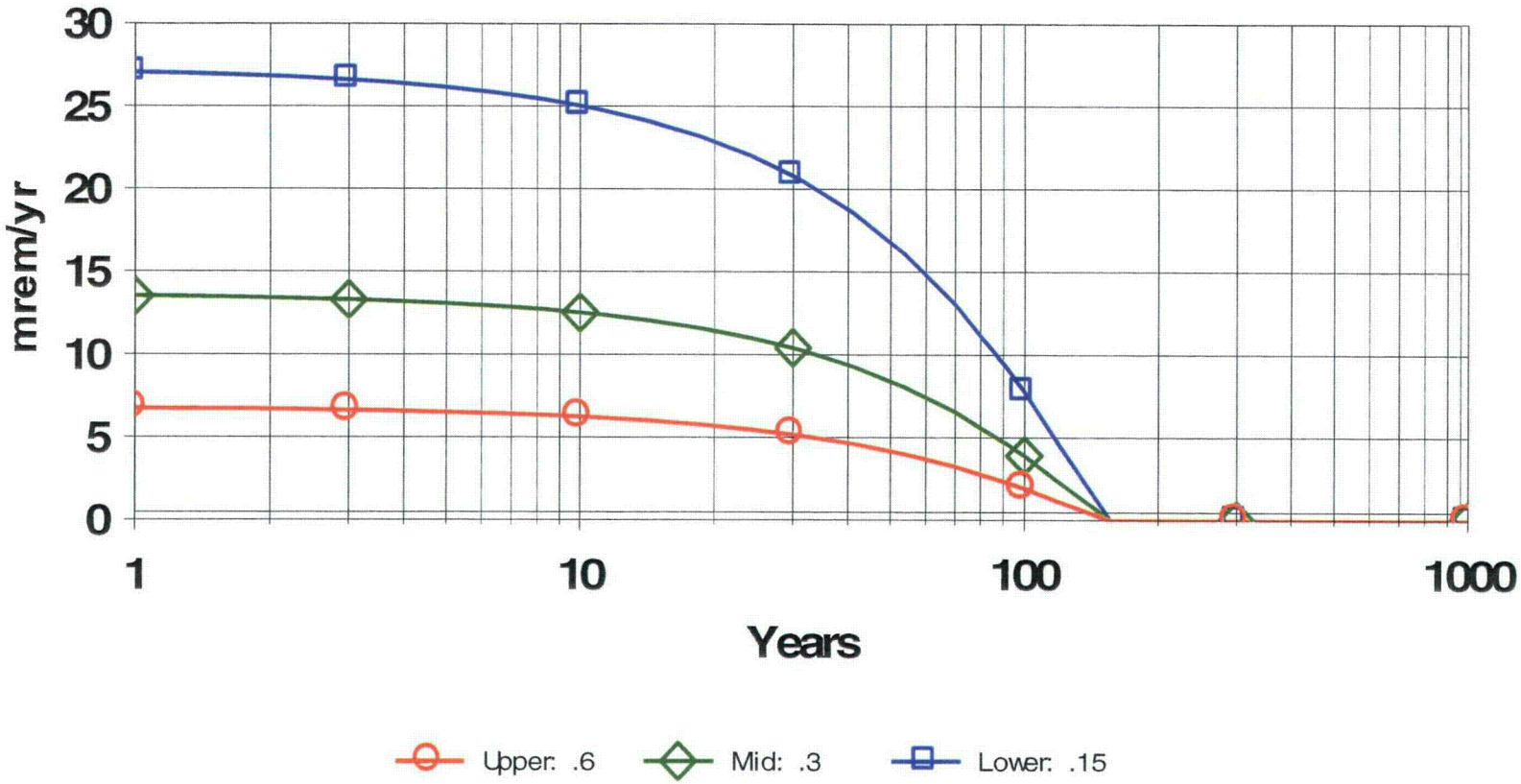

DOSE: All Nuclides Summed, External With SA on Contaminated zone erosion rate
25
20
15
10
5
0
mrem/yr
1
10
100
1000
Years
Upper: .005
Mid: .001
Lower: .0002
mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Pathways: External


DOSE: All Nuclides Summed, Plant (Water Independent) With SA on Contaminated zone erosion rate
15
10
5
0
mrem/yr
1
10
100
1000
Years
Upper: .005
Mid: .001
Lower: .0002
mranchRa1.RAD 09/05/2007 12:22 GRAPHICS.ASC Pathways: Plant (Water Independent)


DOSE: All Nuclides Summed, External With SA on External Gamma Shielding factor
40
30
20
10
0
mrem/yr
1
10
100
1000
Years
Upper: .825
Mid: .55
Lower: .366666
mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Pathways: External


DOSE: All Nuclides Summed, Plant (Water Independent) With SA on Mass loading for foliar deposition
15
10
5
0
mrem/yr
1
10
100
1000
Years
Upper: .03
Mid: .0003
Lower: .000003
mranchRa1.RAD 09/05/2007 12:40 GRAPHICS.ASC Pathways: Plant (Water Independent)

DOSE: All Nuclides Summed, Plant (Water Independent) With SA on Depth of roots



mranchRa1.RAD 09/05/2007 12:40 GRAPHICS.ASC Pathways: Plant (Water Independent)

APPENDIX C-3

RESRAD Model Output- Radium

Table of Contents

Part I: Mixture Sums and Single Radionuclide Guidelines

Dose Conversion Factor (and Related) Parameter Summary ... 2
Site-Specific Parameter Summary 3
Summary of Pathway Selections 7
Contaminated Zone and Total Dose Summary 8
Total Dose Components
Time = 0.000E+00 9
Time = 1.000E+00 10
Time = 3.000E+00 11
Time = 1.000E+01 12
Time = 3.000E+01 13
Time = 1.000E+02 14
Time = 3.000E+02 15
Time = 1.000E+03 16
Dose/Source Ratios Summed Over All Pathways 17
Single Radionuclide Soil Guidelines 17
Dose Per Nuclide Summed Over All Pathways 18
Soil Concentration Per Nuclide 18

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 MORBIDITY

Menu	Parameter	Current Value	Base Case*	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Pb-210+D	2.320E-02	1.360E-02	DCF2(1)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(2)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Pb-210+D	7.276E-03	5.370E-03	DCF3(1)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(2)
D-34	Food transfer factors:			
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(1,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(1,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(1,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(2,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(2,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(2,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(1,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(1,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(2,1)
D-	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(2,2)

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.000E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	1.000E+02	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Pb-210	5.000E+00	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Ra-226	5.000E+00	0.000E+00	---	S1(2)
R012	Concentration in groundwater (pCi/L): Pb-210	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Ra-226	not used	0.000E+00	---	W1(2)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	4.930E+03	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	5.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	7.500E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.000E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.300E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	3.300E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	5.550E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	1.000E-03	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.200E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	2.500E+02	2.500E+02	---	UW

Site-Specific Parameter Summary (continued)

Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R015 Number of unsaturated zone strata	1	1	---	NS
R015 Unsat. zone 1, thickness (m)	2.130E+01	4.000E+00	---	H(1)
R015 Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015 Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015 Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015 Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015 Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015 Unsat. zone 1, hydraulic conductivity (m/yr)	4.300E+03	1.000E+01	---	HCUZ(1)
R016 Distribution coefficients for Pb-210				
R016 Contaminated zone (cm**3/g)	2.700E+02	1.000E+02	---	DCNUCC(1)
R016 Unsaturated zone 1 (cm**3/g)	2.700E+02	1.000E+02	---	DCNUCU(1,1)
R016 Saturated zone (cm**3/g)	2.700E+02	1.000E+02	---	DCNUCS(1)
R016 Leach rate (/yr)	0.000E+00	0.000E+00	1.810E-03	ALEACH(1)
R016 Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016 Distribution coefficients for Ra-226				
R016 Contaminated zone (cm**3/g)	5.000E+02	7.000E+01	---	DCNUCC(2)
R016 Unsaturated zone 1 (cm**3/g)	5.000E+02	7.000E+01	---	DCNUCU(2,1)
R016 Saturated zone (cm**3/g)	5.000E+02	7.000E+01	---	DCNUCS(2)
R016 Leach rate (/yr)	0.000E+00	0.000E+00	9.775E-04	ALEACH(2)
R016 Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R017 Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017 Mass loading for inhalation (g/m**3)	3.000E-04	1.000E-04	---	MLINH
R017 Exposure duration	3.000E+01	3.000E+01	---	ED
R017 Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017 Shielding factor, external gamma	5.500E-01	7.000E-01	---	SHF1
R017 Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND
R017 Fraction of time spent outdoors (on site)	2.500E-01	2.500E-01	---	FOTD
R017 Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017 Radii of shape factor array (used if FS = -1):				
R017 Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017 Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017 Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017 Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017 Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017 Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017 Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017 Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017 Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017 Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017 Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017 Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)

Site-Specific Parameter Summary (continued)

	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R[illegible]	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R[illegible]	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	2.500E-01	-1	---	FPLANT
R018	Contamination fraction of meat	2.500E-01	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	3.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	3.000E-01	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19[illegible]	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R1[illegible]	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)

Site-Specific Parameter Summary (continued)

	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	not used	0.000E+00	---	CO2F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX

Site-Specific Parameter Summary (continued)

	Parameter	User Input	Default	Used by RESRAD (if different from user input)	Parameter Name
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

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

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	10000.00 square meters	Pb-210	5.000E+00
Thickness:	0.15 meters	Ra-226	5.000E+00
Cover Depth:	0.00 meters		

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 1.000E+02 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years):	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
TDOSE(t):	3.952E+01	3.931E+01	3.889E+01	3.738E+01	3.308E+01	1.666E+01	0.000E+00	0.000E+00
M(t):	3.952E-01	3.931E-01	3.889E-01	3.738E-01	3.308E-01	1.666E-01	0.000E+00	0.000E+00

Maximum TDOSE(t): 3.952E+01 mrem/yr at t = 0.000E+00 years

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	1.501E-02	0.0004	8.679E-03	0.0002	0.000E+00	0.0000	7.763E+00	0.1964	3.760E-01	0.0096	0.000E+00	0.0000	9.765E-01	0.02
Ra-226	2.411E+01	0.6101	3.402E-03	0.0001	0.000E+00	0.0000	5.868E+00	0.1485	2.013E-01	0.0051	0.000E+00	0.0000	1.953E-01	0.00
Total	2.413E+01	0.6105	1.208E-02	0.0003	0.000E+00	0.0000	1.363E+01	0.3449	5.793E-01	0.0147	0.000E+00	0.0000	1.172E+00	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.141E+00	0.23
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.038E+01	0.76
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.952E+01	1.00

* [illegible]f all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	1.452E-02	0.0004	8.342E-03	0.0002	0.000E+00	0.0000	7.462E+00	0.1898	3.634E-01	0.0092	0.000E+00	0.0000	9.386E-01	0.02
Ra-226	2.403E+01	0.6112	3.638E-03	0.0001	0.000E+00	0.0000	6.060E+00	0.1541	2.116E-01	0.0054	0.000E+00	0.0000	2.234E-01	0.0
Total	2.404E+01	0.6116	1.198E-02	0.0003	0.000E+00	0.0000	1.352E+01	0.3439	5.750E-01	0.0146	0.000E+00	0.0000	1.162E+00	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.787E+00	0.22
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.053E+01	0.77
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.931E+01	1.0

of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	1.358E-02	0.0003	7.706E-03	0.0002	0.000E+00	0.0000	6.893E+00	0.1773	3.357E-01	0.0096	0.000E+00	0.0000	8.670E-01	0.02
Ra-226	2.386E+01	0.6135	4.073E-03	0.0001	0.000E+00	0.0000	6.404E+00	0.1647	2.297E-01	0.0059	0.000E+00	0.0000	2.754E-01	0.0(
Total	2.387E+01	0.6138	1.178E-02	0.0003	0.000E+00	0.0000	1.330E+01	0.3419	5.654E-01	0.0145	0.000E+00	0.0000	1.142E+00	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.117E+00	0.2(
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.077E+01	0.75
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.989E+01	1.0(

f all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	1.075E-02	0.0003	5.829E-03	0.0002	0.000E+00	0.0000	5.213E+00	0.1395	2.539E-01	0.0068	0.000E+00	0.0000	6.558E-01	0.01
Ra-226	2.324E+01	0.6215	5.259E-03	0.0001	0.000E+00	0.0000	7.307E+00	0.1955	2.784E-01	0.0074	0.000E+00	0.0000	4.193E-01	0.01
Total	2.325E+01	0.6218	1.109E-02	0.0003	0.000E+00	0.0000	1.252E+01	0.3349	5.323E-01	0.0142	0.000E+00	0.0000	1.075E+00	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.140E+00	0.16
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.125E+01	0.83
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.738E+01	1.00

*[illegible]f all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	5.481E-03	0.0002	2.586E-03	0.0001	0.000E+00	0.0000	2.313E+00	0.0699	1.127E-01	0.0034	0.000E+00	0.0000	2.910E-01	0.00
Ra-226	2.132E+01	0.6447	6.619E-03	0.0002	0.000E+00	0.0000	8.088E+00	0.2445	3.295E-01	0.0100	0.000E+00	0.0000	6.011E-01	0.01
Total	2.133E+01	0.6449	9.205E-03	0.0003	0.000E+00	0.0000	1.040E+01	0.3145	4.421E-01	0.0134	0.000E+00	0.0000	8.921E-01	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.725E+00	0.08
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.035E+01	0.91
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.308E+01	1.00

f all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	4.612E-04	0.0000	1.071E-04	0.0000	0.000E+00	0.0000	9.588E-02	0.0058	4.674E-03	0.0003	0.000E+00	0.0000	1.205E-02	0.00
Ra-226	1.226E+01	0.7359	3.336E-03	0.0002	0.000E+00	0.0000	3.800E+00	0.2281	1.610E-01	0.0097	0.000E+00	0.0000	3.215E-01	0.01
Total	1.226E+01	0.7360	3.444E-03	0.0002	0.000E+00	0.0000	3.895E+00	0.2339	1.657E-01	0.0099	0.000E+00	0.0000	3.335E-01	0.02

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.132E-01	0.00
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.654E+01	0.99
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.666E+01	1.00

* [illegible] of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C

* [illegible] of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00

*[illegible] of all water independent and dependent pathways.

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

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g) 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pb-210+D	Pb-210+D	1.000E+00	1.828E+00	1.757E+00	1.623E+00	1.228E+00	5.450E-01	2.263E-02	0.000E+00	0.000E+00
Ra-226+D	Ra-226+D	1.000E+00	6.043E+00	6.016E+00	5.961E+00	5.769E+00	5.198E+00	2.801E+00	0.000E+00	0.000E+00
Ra-226+D	Pb-210+D	1.000E+00	3.347E-02	8.954E-02	1.922E-01	4.802E-01	8.719E-01	5.081E-01	0.000E+00	0.000E+00
Ra-226+D	∑DSR(j)		6.076E+00	6.105E+00	6.154E+00	6.249E+00	6.070E+00	3.309E+00	0.000E+00	0.000E+00

The DSR includes contributions from associated (half-life ≤ 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 1.000E+02 mrem/yr

Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pb-210	5.470E+01	5.691E+01	6.160E+01	8.144E+01	1.835E+02	4.418E+03	*7.634E+13	*7.634E+13
Ra-226	1.646E+01	1.638E+01	1.625E+01	1.600E+01	1.647E+01	3.022E+01	*9.885E+11	*9.885E+11

*At specific activity limit

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

Nuclide (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Pb-210	5.000E+00	0.000E+00	1.828E+00	5.470E+01	1.828E+00	5.470E+01
Ra-226	5.000E+00	13.52 ± 0.03	6.260E+00	1.597E+01	6.076E+00	1.646E+01

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

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pb-210	Pb-210	1.000E+00	9.141E+00	8.787E+00	8.117E+00	6.140E+00	2.725E+00	1.132E-01	0.000E+00	0.000E+00
Pb-210	Ra-226	1.000E+00	1.674E-01	4.477E-01	9.612E-01	2.401E+00	4.359E+00	2.540E+00	0.000E+00	0.000E+00
Pb-210	∑DOSE(j)		9.308E+00	9.234E+00	9.078E+00	8.541E+00	7.084E+00	2.654E+00	0.000E+00	0.000E+00
Ra-226	Ra-226	1.000E+00	3.022E+01	3.008E+01	2.981E+01	2.884E+01	2.599E+01	1.400E+01	0.000E+00	0.000E+00

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Pb-210	Pb-210	1.000E+00	5.000E+00	4.838E+00	4.530E+00	3.598E+00	1.864E+00	1.864E-01	2.591E-04	2.593E-14
Pb-210	Ra-226	1.000E+00	0.000E+00	1.528E-01	4.430E-01	1.315E+00	2.892E+00	4.103E+00	3.233E+00	1.204E+00
Pb-210	∑S(j):		5.000E+00	4.991E+00	4.973E+00	4.913E+00	4.756E+00	4.289E+00	3.233E+00	1.204E+00
Ra-226	Ra-226	1.000E+00	5.000E+00	4.993E+00	4.979E+00	4.930E+00	4.793E+00	4.342E+00	3.275E+00	1.220E+00

T is the thread fraction of the parent nuclide.

RESCALC.EXE execution time = 22.18 seconds

APPENDIX C-4

RESRAD Model Output- Uranium

Table of Contents

Part I: Mixture Sums and Single Radionuclide Guidelines

Dose Conversion Factor (and Related) Parameter Summary ... 2
Site-Specific Parameter Summary 4
Summary of Pathway Selections 9
Contaminated Zone and Total Dose Summary 10
Total Dose Components
Time = 0.000E+00 11
Time = 1.000E+00 12
Time = 3.000E+00 13
Time = 1.000E+01 14
Time = 3.000E+01 15
Time = 1.000E+02 16
Time = 3.000E+02 17
Time = 1.000E+03 18
Dose/Source Ratios Summed Over All Pathways 19
Single Radionuclide Soil Guidelines 19
Dose Per Nuclide Summed Over All Pathways 20
Soil Concentration Per Nuclide 21

Dose Conversion Factor (and Related) Parameter Summary
File: FGR 13 MORBIDITY

Menu	Parameter	Current Value	Base Case*	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.724E+00	6.700E+00	DCF2(1)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(2)
B-1	Pb-210+D	2.320E-02	1.360E-02	DCF2(3)
B-1	Ra-226+D	8.594E-03	8.580E-03	DCF2(4)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(5)
B-1	U-234	1.320E-01	1.320E-01	DCF2(6)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(7)
B-1	U-238	1.180E-01	1.180E-01	DCF2(8)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(9)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.410E-02	DCF3(1)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(2)
D-1	Pb-210+D	7.276E-03	5.370E-03	DCF3(3)
D-1	Ra-226+D	1.321E-03	1.320E-03	DCF3(4)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(5)
D-1	U-234	2.830E-04	2.830E-04	DCF3(6)
D-1	U-235+D	2.673E-04	2.660E-04	DCF3(7)
D-1	U-238	2.550E-04	2.550E-04	DCF3(8)
D-1	U-238+D	2.687E-04	2.550E-04	DCF3(9)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(2,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(2,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(2,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(3,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(3,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(3,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(4,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(4,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(5,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(5,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(5,3)
D-34				
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(6,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(6,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(6,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(7,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(7,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(7,3)
D-34				

Dose Conversion Factor (and Related) Parameter Summary (continued)

File: FGR 13 MORBIDITY

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

*Base Case means Default.Lib w/o Associate Nuclide contributions.

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	1.000E+04	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.500E-01	2.000E+00	---	THICK0
R011	Length parallel to aquifer flow (m)	1.000E+02	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	1.000E+02	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): U-234	4.890E+01	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): U-235	2.200E+00	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): U-238	4.890E+01	0.000E+00	---	S1(8)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(8)
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV
R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	1.000E-03	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	4.000E-01	4.000E-01	---	TPCZ
R013	Contaminated zone field capacity	2.000E-01	2.000E-01	---	FCCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	4.930E+03	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	5.300E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	5.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	not used	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	7.500E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	3.000E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	2.000E-01	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	4.300E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	3.300E-01	2.000E-01	---	EPSZ
R014	Saturated zone field capacity	2.000E-01	2.000E-01	---	FCSZ
R014	Saturated zone hydraulic conductivity (m/yr)	5.550E+03	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	2.000E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	1.000E-03	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	2.200E+01	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R014	Well pumping rate (m**3/yr)	2.500E+02	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS
R015	Unsat. zone 1, thickness (m)	2.130E+01	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	4.000E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	2.000E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, field capacity	2.000E-01	2.000E-01	---	FCUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	5.300E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	4.930E+03	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.752E-03	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(7,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.752E-03	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for U-238				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.752E-03	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for daughter Ac-227				
R016	Contaminated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	2.000E+01	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.428E-02	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for daughter Pa-231				
R016	Contaminated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	5.000E+01	5.000E+01	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	9.752E-03	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)
R016	Distribution coefficients for daughter Pb-210				
R016	Contaminated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCC(3)
R016	Unsaturated zone 1 (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCU(3,1)
R016	Saturated zone (cm**3/g)	1.000E+02	1.000E+02	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.882E-03	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for daughter Ra-226				
R016	Contaminated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	7.000E+01	7.000E+01	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	6.971E-03	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for daughter Th-230				
R016	Contaminated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	6.000E+04	6.000E+04	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.148E-06	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R017	Inhalation rate (m**3/yr)	8.400E+03	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	3.000E-04	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	5.500E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	5.000E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.500E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R[illegible]	Fruits, vegetables and grain consumption (kg/yr)	1.600E+02	1.600E+02	---	DIET(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Leafy vegetable consumption (kg/yr)	1.400E+01	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	6.300E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW
R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	2.500E-01	-1	---	FPLANT
R018	Contamination fraction of meat	2.500E-01	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	6.800E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	3.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	3.000E-01	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12C2
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
C14	DCF correction factor for gaseous forms of C14	not used	0.000E+00	---	CO2F
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)
STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR1
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)
TITL	Number of graphical time points	32	---	---	NPTS
TITL	Maximum number of integration points for dose	17	---	---	LYMAX
TITL	Maximum number of integration points for risk	257	---	---	KYMAX

Summary of Pathway Selections

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

Contaminated Zone Dimensions		Initial Soil Concentrations, pCi/g	
Area:	10000.00 square meters	U-234	4.890E+01
Thickness:	0.15 meters	U-235	2.200E+00
Cover Depth:	0.00 meters	U-238	4.890E+01

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 1.000E+02 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years):	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
TDOSE(t):	7.486E+00	7.386E+00	7.190E+00	6.537E+00	4.936E+00	1.461E+00	0.000E+00	0.000E+00
M(t):	7.486E-02	7.386E-02	7.190E-02	6.537E-02	4.936E-02	1.461E-02	0.000E+00	0.000E+00

Maximum TDOSE(t): 7.486E+00 mrem/yr at t = 0.000E+00 years

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	9.922E-03	0.0013	4.886E-01	0.0653	0.000E+00	0.0000	7.476E-01	0.0999	4.307E-02	0.0058	0.000E+00	0.0000	3.757E-01	0.05
U-235	8.142E-01	0.1088	2.049E-02	0.0027	0.000E+00	0.0000	3.182E-02	0.0043	1.844E-03	0.0002	0.000E+00	0.0000	1.598E-02	0.00
U-238	3.392E+00	0.4531	4.369E-01	0.0584	0.000E+00	0.0000	7.098E-01	0.0948	4.090E-02	0.0055	0.000E+00	0.0000	3.568E-01	0.04
Total	4.216E+00	0.5632	9.461E-01	0.1264	0.000E+00	0.0000	1.489E+00	0.1989	8.581E-02	0.0115	0.000E+00	0.0000	7.485E-01	0.10

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.665E+00	0.22
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.844E-01	0.11
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.937E+00	0.65
T	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.486E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	9.825E-03	0.0013	4.807E-01	0.0651	0.000E+00	0.0000	7.354E-01	0.0996	4.238E-02	0.0057	0.000E+00	0.0000	3.696E-01	0.05
U-235	8.057E-01	0.1091	2.016E-02	0.0027	0.000E+00	0.0000	3.141E-02	0.0043	1.846E-03	0.0002	0.000E+00	0.0000	1.573E-02	0.00
U-238	3.354E+00	0.4541	4.298E-01	0.0582	0.000E+00	0.0000	6.983E-01	0.0945	4.023E-02	0.0054	0.000E+00	0.0000	3.509E-01	0.04
Total	4.170E+00	0.5645	9.306E-01	0.1260	0.000E+00	0.0000	1.465E+00	0.1984	8.446E-02	0.0114	0.000E+00	0.0000	7.363E-01	0.09

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.638E+00	0.22
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.749E-01	0.11
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.873E+00	0.65
*	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.386E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	9.637E-03	0.0013	4.651E-01	0.0647	0.000E+00	0.0000	7.115E-01	0.0990	4.100E-02	0.0057	0.000E+00	0.0000	3.576E-01	0.04
U-235	7.889E-01	0.1097	1.951E-02	0.0027	0.000E+00	0.0000	3.060E-02	0.0043	1.848E-03	0.0003	0.000E+00	0.0000	1.525E-02	0.00
U-238	3.279E+00	0.4561	4.158E-01	0.0578	0.000E+00	0.0000	6.756E-01	0.0940	3.893E-02	0.0054	0.000E+00	0.0000	3.395E-01	0.04
Total	4.077E+00	0.5671	9.004E-01	0.1252	0.000E+00	0.0000	1.418E+00	0.1972	8.177E-02	0.0114	0.000E+00	0.0000	7.124E-01	0.09

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.585E+00	0.22
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.561E-01	0.11
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.749E+00	0.66
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.190E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	9.031E-03	0.0014	4.137E-01	0.0633	0.000E+00	0.0000	6.329E-01	0.0968	3.646E-02	0.0056	0.000E+00	0.0000	3.181E-01	0.04
U-235	7.323E-01	0.1120	1.741E-02	0.0027	0.000E+00	0.0000	2.789E-02	0.0043	1.836E-03	0.0003	0.000E+00	0.0000	1.366E-02	0.00
U-238	3.026E+00	0.4630	3.698E-01	0.0566	0.000E+00	0.0000	6.009E-01	0.0919	3.462E-02	0.0053	0.000E+00	0.0000	3.020E-01	0.04
Total	3.768E+00	0.5764	8.009E-01	0.1225	0.000E+00	0.0000	1.262E+00	0.1930	7.292E-02	0.0112	0.000E+00	0.0000	6.337E-01	0.09

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.410E+00	0.21
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.931E-01	0.12
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.334E+00	0.66
T	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.537E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	7.674E-03	0.0016	2.917E-01	0.0591	0.000E+00	0.0000	4.462E-01	0.0904	2.571E-02	0.0052	0.000E+00	0.0000	2.243E-01	0.04
U-235	5.877E-01	0.1191	1.244E-02	0.0025	0.000E+00	0.0000	2.111E-02	0.0043	1.683E-03	0.0003	0.000E+00	0.0000	9.879E-03	0.00
U-238	2.386E+00	0.4834	2.607E-01	0.0528	0.000E+00	0.0000	4.236E-01	0.0858	2.441E-02	0.0049	0.000E+00	0.0000	2.129E-01	0.04
Total	2.981E+00	0.6040	5.649E-01	0.1144	0.000E+00	0.0000	8.909E-01	0.1805	5.180E-02	0.0105	0.000E+00	0.0000	4.470E-01	0.09

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.956E-01	0.20
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.328E-01	0.12
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.307E+00	0.67
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.936E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	4.748E-03	0.0033	6.123E-02	0.0419	0.000E+00	0.0000	9.386E-02	0.0643	5.402E-03	0.0037	0.000E+00	0.0000	4.707E-02	0.03
U-235	2.180E-01	0.1493	2.775E-03	0.0019	0.000E+00	0.0000	5.559E-03	0.0038	6.376E-04	0.0004	0.000E+00	0.0000	2.289E-03	0.00
U-238	8.260E-01	0.5655	5.458E-02	0.0374	0.000E+00	0.0000	8.871E-02	0.0607	5.114E-03	0.0035	0.000E+00	0.0000	4.456E-02	0.03
Total	1.049E+00	0.7181	1.186E-01	0.0812	0.000E+00	0.0000	1.881E-01	0.1288	1.115E-02	0.0076	0.000E+00	0.0000	9.392E-02	0.06

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.123E-01	0.14
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.293E-01	0.15
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.019E+00	0.69
Total*	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.461E+00	1.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.00

*Sum of all water independent and dependent pathways.

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

Water Independent Pathways (Inhalation excludes radon)

Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C

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

Water Dependent Pathways

Radio-	Water		Fish		Radon		Plant		Meat		Milk		All Pathways	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	frac
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0C

*Sum of all water independent and dependent pathways.

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

Parent (i)	Product (j)	Thread Fraction	DSR(j,t) At Time in Years (mrem/yr)/(pCi/g) 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	U-234	1.000E+00	3.405E-02	3.349E-02	3.241E-02	2.883E-02	2.034E-02	4.291E-03	0.000E+00	0.000E+00
U-234	Th-230	1.000E+00	2.417E-07	7.080E-07	1.607E-06	4.429E-06	1.004E-05	1.023E-05	0.000E+00	0.000E+00
U-234	Ra-226+D	1.000E+00	3.830E-09	2.692E-08	1.406E-07	1.185E-06	8.280E-06	3.656E-05	0.000E+00	0.000E+00
U-234	Pb-210+D	1.000E+00	1.242E-11	1.608E-10	1.665E-09	3.650E-08	5.847E-07	3.936E-06	0.000E+00	0.000E+00
U-234	∑DSR(j)		3.405E-02	3.349E-02	3.241E-02	2.884E-02	2.036E-02	4.342E-03	0.000E+00	0.000E+00
U-235+D	U-235+D	1.000E+00	4.020E-01	3.976E-01	3.889E-01	3.598E-01	2.860E-01	1.028E-01	0.000E+00	0.000E+00
U-235+D	Pa-231	1.000E+00	3.429E-05	1.054E-04	2.414E-04	6.494E-04	1.337E-03	9.418E-04	0.000E+00	0.000E+00
U-235+D	Ac-227+D	1.000E+00	3.359E-07	2.145E-06	1.035E-05	7.409E-05	3.520E-04	5.221E-04	0.000E+00	0.000E+00
U-235+D	∑DSR(j)		4.020E-01	3.977E-01	3.891E-01	3.605E-01	2.876E-01	1.042E-01	0.000E+00	0.000E+00
U-238	U-238	5.400E-05	1.646E-06	1.619E-06	1.566E-06	1.393E-06	9.824E-07	2.063E-07	0.000E+00	0.000E+00
U-238+D	U-238+D	9.999E-01	1.009E-01	9.966E-02	9.711E-02	8.862E-02	6.763E-02	2.084E-02	0.000E+00	0.000E+00
U-238+D	U-234	9.999E-01	4.813E-08	1.423E-07	3.214E-07	8.581E-07	1.759E-06	1.223E-06	0.000E+00	0.000E+00
U-238+D	Th-230	9.999E-01	2.313E-13	1.568E-12	8.006E-12	6.491E-11	4.127E-10	1.223E-09	0.000E+00	0.000E+00
U-238+D	Ra-226+D	9.999E-01	2.693E-15	4.063E-14	4.685E-13	1.164E-11	2.313E-10	3.120E-09	0.000E+00	0.000E+00
U-238+D	Pb-210+D	9.999E-01	7.367E-18	1.955E-16	4.317E-15	2.765E-13	1.289E-11	2.862E-10	0.000E+00	0.000E+00
U-238+D	∑DSR(j)		1.009E-01	9.966E-02	9.711E-02	8.862E-02	6.764E-02	2.084E-02	0.000E+00	0.000E+00

The DSR includes contributions from associated (half-life ≤ 180 days) daughters.

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 1.000E+02 mrem/yr

Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	2.937E+03	2.986E+03	3.086E+03	3.468E+03	4.912E+03	2.303E+04	*6.247E+09	*6.247E+09
U-235	2.488E+02	2.515E+02	2.570E+02	2.774E+02	3.476E+02	9.594E+02	*2.161E+06	*2.161E+06
U-238	9.906E+02	1.003E+03	1.030E+03	1.128E+03	1.478E+03	4.799E+03	*3.361E+05	*3.361E+05

*At specific activity limit

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

Nuclide (i)	Initial (pCi/g)	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
U-234	4.890E+01	0.000E+00	3.405E-02	2.937E+03	3.405E-02	2.937E+03
U-235	2.200E+00	0.000E+00	4.020E-01	2.488E+02	4.020E-01	2.488E+02
U-238	4.890E+01	0.000E+00	1.010E-01	9.906E+02	1.010E-01	9.906E+02

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

Nuclide (j)	Parent (i)	THF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	U-234	1.000E+00	1.665E+00	1.638E+00	1.585E+00	1.410E+00	9.947E-01	2.098E-01	0.000E+00	0.000E+00
U-234	U-238	9.999E-01	2.353E-06	6.958E-06	1.572E-05	4.196E-05	8.600E-05	5.979E-05	0.000E+00	0.000E+00
U-234	∑DOSE(j)		1.665E+00	1.638E+00	1.585E+00	1.410E+00	9.948E-01	2.099E-01	0.000E+00	0.000E+00
Th-230	U-234	1.000E+00	1.182E-05	3.462E-05	7.856E-05	2.166E-04	4.909E-04	5.001E-04	0.000E+00	0.000E+00
Th-230	U-238	9.999E-01	1.131E-11	7.670E-11	3.915E-10	3.174E-09	2.016E-08	5.981E-08	0.000E+00	0.000E+00
Th-230	∑DOSE(j)		1.182E-05	3.462E-05	7.856E-05	2.166E-04	4.909E-04	5.001E-04	0.000E+00	0.000E+00
Ra-226	U-234	1.000E+00	1.873E-07	1.316E-06	6.874E-06	5.793E-05	4.049E-04	1.788E-03	0.000E+00	0.000E+00
Ra-226	U-238	9.999E-01	1.317E-13	1.987E-12	2.291E-11	5.691E-10	1.131E-08	1.526E-07	0.000E+00	0.000E+00
Ra-226	∑DOSE(j)		1.873E-07	1.316E-06	6.874E-06	5.793E-05	4.049E-04	1.788E-03	0.000E+00	0.000E+00
Pb-210	U-234	1.000E+00	6.071E-10	7.862E-09	8.140E-08	1.785E-06	2.859E-05	1.925E-04	0.000E+00	0.000E+00
Pb-210	U-238	9.999E-01	3.603E-16	9.562E-15	2.111E-13	1.352E-11	6.303E-10	1.399E-08	0.000E+00	0.000E+00
Pb-210	∑DOSE(j)		6.071E-10	7.862E-09	8.140E-08	1.785E-06	2.859E-05	1.925E-04	0.000E+00	0.000E+00
U-235	U-235	1.000E+00	8.843E-01	8.746E-01	8.555E-01	7.915E-01	6.291E-01	2.261E-01	0.000E+00	0.000E+00
Pa-231	U-235	1.000E+00	7.543E-05	2.319E-04	5.311E-04	1.429E-03	2.942E-03	2.072E-03	0.000E+00	0.000E+00
Ac-227	U-235	1.000E+00	7.390E-07	4.720E-06	2.277E-05	1.630E-04	7.744E-04	1.149E-03	0.000E+00	0.000E+00
U	U-238	5.400E-05	8.048E-05	7.917E-05	7.660E-05	6.813E-05	4.804E-05	1.009E-05	0.000E+00	0.000E+00
U	U-238	9.999E-01	4.936E+00	4.873E+00	4.749E+00	4.333E+00	3.307E+00	1.019E+00	0.000E+00	0.000E+00
U-238	∑DOSE(j)		4.937E+00	4.873E+00	4.749E+00	4.334E+00	3.307E+00	1.019E+00	0.000E+00	0.000E+00

THF(i) is the thread fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	THF(i)	S(j,t), pCi/g t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	U-234	1.000E+00	4.890E+01	4.843E+01	4.749E+01	4.436E+01	3.649E+01	1.844E+01	2.621E+00	2.838E-03
U-234	U-238	9.999E-01	0.000E+00	1.373E-04	4.039E-04	1.257E-03	3.104E-03	5.227E-03	2.230E-03	8.055E-06
U-234	∑S(j):		4.890E+01	4.843E+01	4.749E+01	4.436E+01	3.650E+01	1.844E+01	2.623E+00	2.846E-03
Th-230	U-234	1.000E+00	0.000E+00	4.380E-04	1.301E-03	4.194E-03	1.145E-02	2.809E-02	4.255E-02	4.443E-02
Th-230	U-238	9.999E-01	0.000E+00	6.199E-10	5.507E-09	5.848E-08	4.631E-07	3.345E-06	1.033E-05	1.293E-05
Th-230	∑S(j):		0.000E+00	4.381E-04	1.301E-03	4.194E-03	1.145E-02	2.809E-02	4.256E-02	4.445E-02
Ra-226	U-234	1.000E+00	0.000E+00	9.481E-08	8.435E-07	9.006E-06	7.241E-05	5.499E-04	1.893E-03	2.600E-03
Ra-226	U-238	9.999E-01	0.000E+00	8.949E-14	2.384E-12	8.425E-11	1.991E-09	4.673E-08	3.793E-07	7.529E-07
Ra-226	∑S(j):		0.000E+00	9.481E-08	8.436E-07	9.006E-06	7.241E-05	5.499E-04	1.893E-03	2.601E-03
Pb-210	U-234	1.000E+00	0.000E+00	9.749E-10	2.564E-08	8.666E-07	1.819E-05	3.071E-04	1.514E-03	2.247E-03
Pb-210	U-238	9.999E-01	0.000E+00	6.914E-16	5.462E-14	6.181E-12	3.931E-10	2.220E-08	2.861E-07	6.498E-07
Pb-210	∑S(j):		0.000E+00	9.749E-10	2.564E-08	8.666E-07	1.819E-05	3.071E-04	1.514E-03	2.247E-03
U-235	U-235	1.000E+00	2.200E+00	2.179E+00	2.137E+00	1.996E+00	1.642E+00	8.297E-01	1.180E-01	1.280E-04
Pa-231	U-235	1.000E+00	0.000E+00	4.610E-05	1.356E-04	4.222E-04	1.042E-03	1.754E-03	7.466E-04	2.680E-06
Ac-227	U-235	1.000E+00	0.000E+00	7.225E-07	6.186E-06	5.792E-05	3.291E-04	9.470E-04	4.759E-04	1.801E-06
U-238	U-238	5.400E-05	2.641E-03	2.615E-03	2.564E-03	2.395E-03	1.971E-03	9.958E-04	1.416E-04	1.537E-07
U-238	U-238	9.999E-01	4.890E+01	4.842E+01	4.749E+01	4.435E+01	3.649E+01	1.844E+01	2.623E+00	2.845E-03
U-238	∑S(j):		4.890E+01	4.843E+01	4.749E+01	4.436E+01	3.650E+01	1.844E+01	2.623E+00	2.846E-03

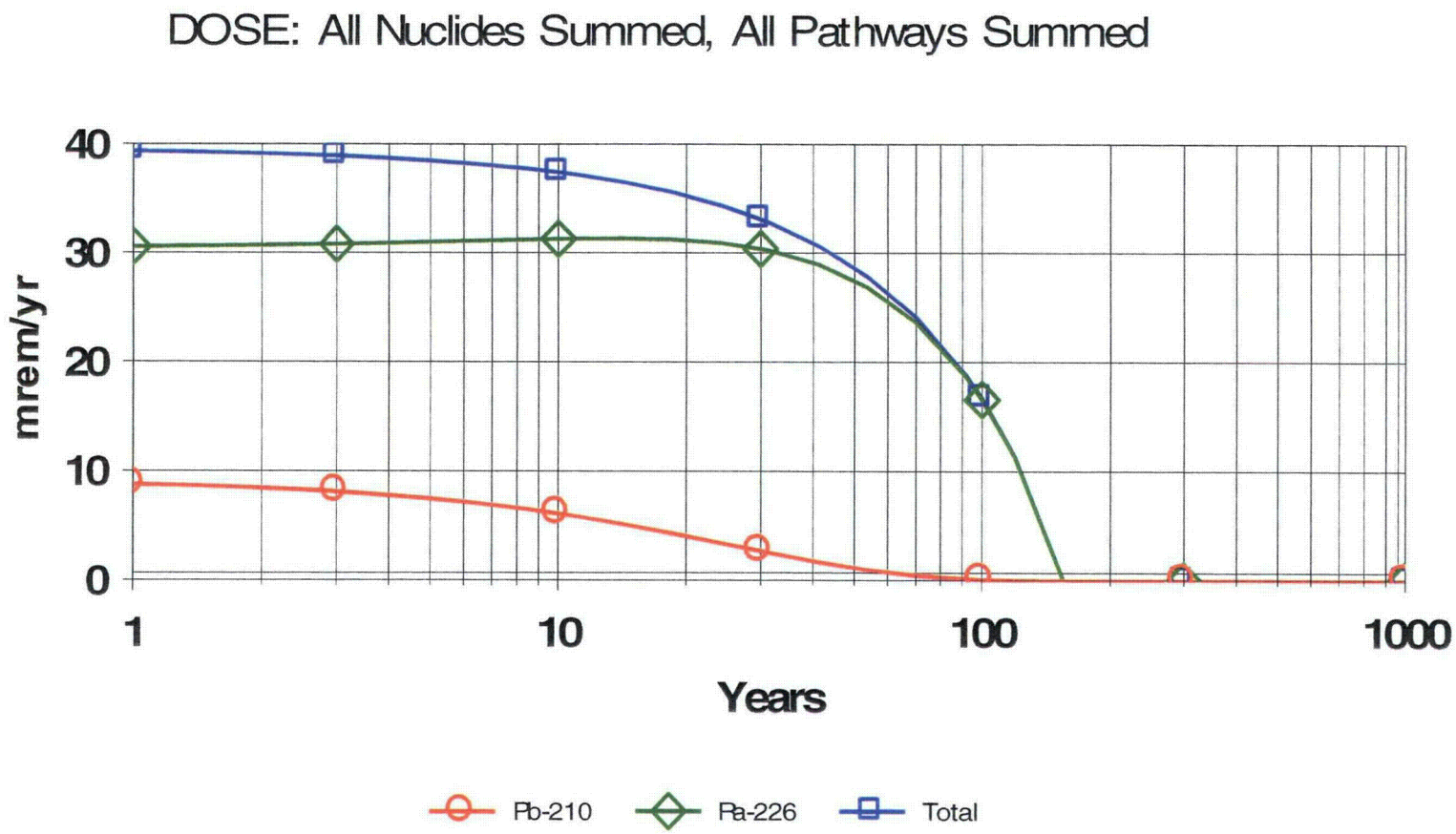
THF(i) is the thread fraction of the parent nuclide.

RESCALC.EXE execution time = 115.09 seconds

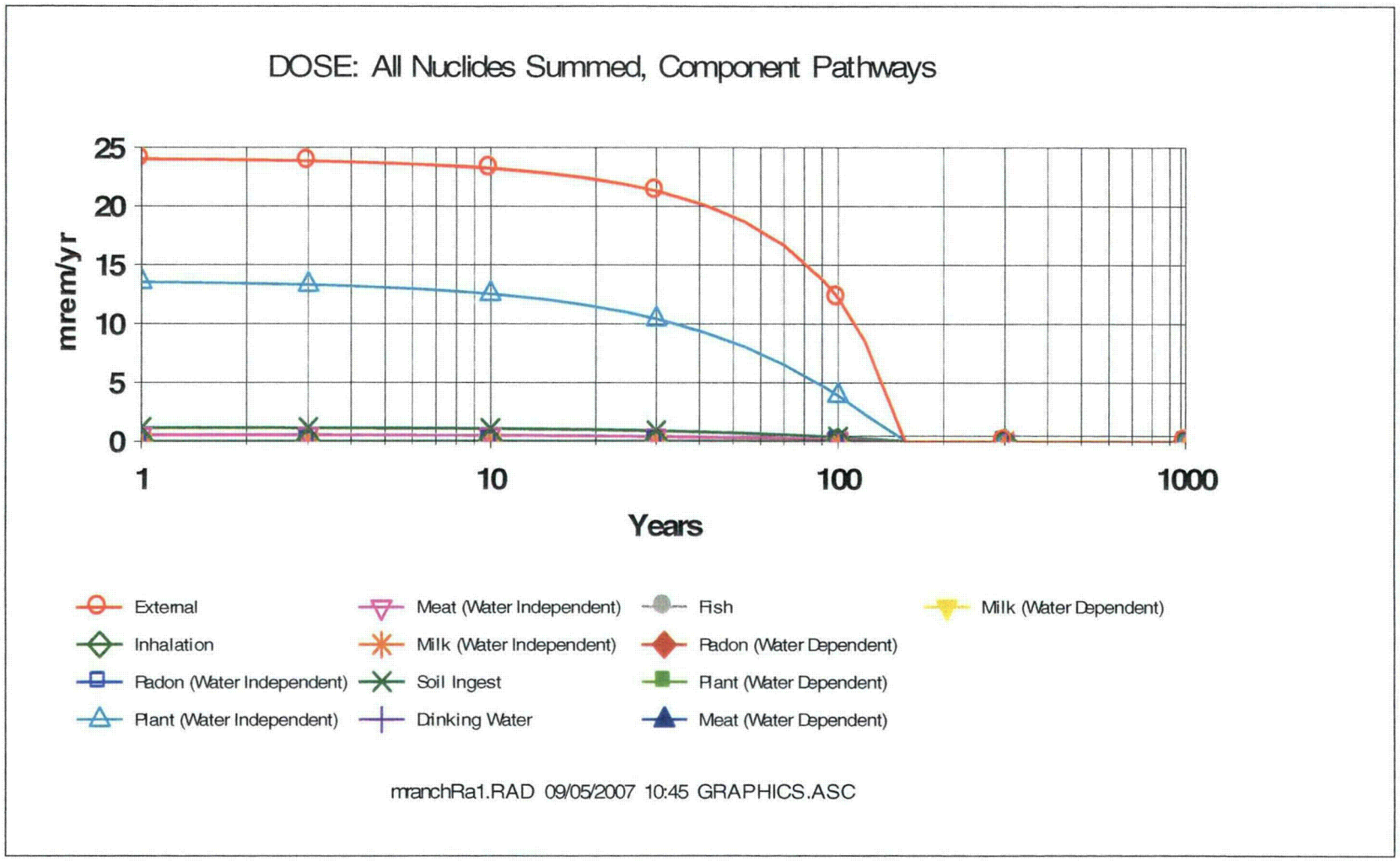
APPENDIX C-5

Standard Graphics for Radium and Uranium Dose Modeling

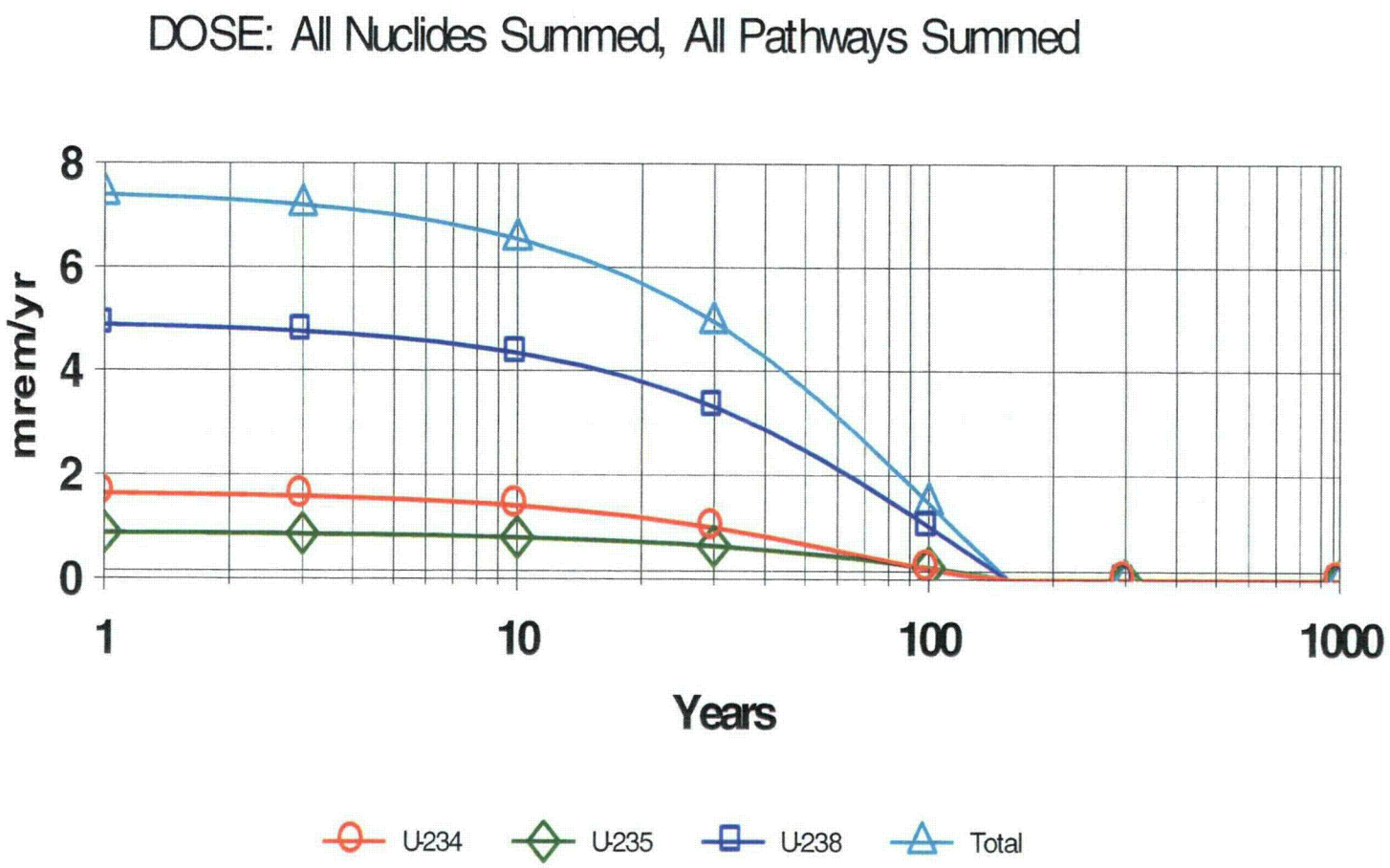
Radium Dose Graphics



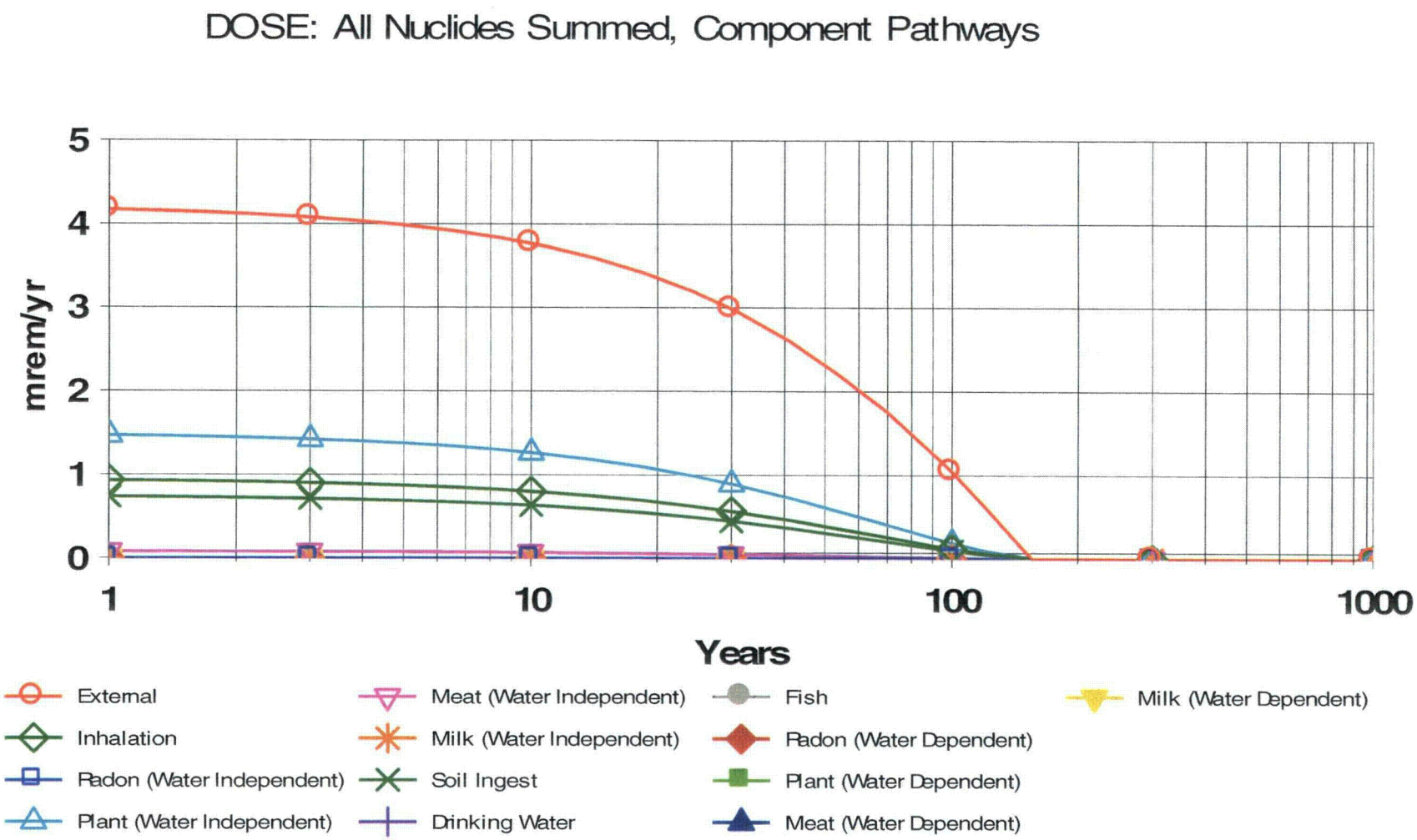
mranchRa1.RAD 09/05/2007 11:22 GRAPHICS.ASC Includes All Pathways


DOSE: All Nuclides Summed, Component Pathways
mrem/yr
25
20
15
10
5
0
1
10
100
1000
Years
External
Inhalation
Radon (Water Independent)
Plant (Water Independent)
Meat (Water Independent)
Milk (Water Independent)
Soil Ingest
Drinking Water
Fish
Radon (Water Dependent)
Plant (Water Dependent)
Meat (Water Dependent)
Milk (Water Dependent)
mranchRa1.RAD 09/05/2007 10:45 GRAPHICS.ASC

Natural Uranium Dose Graphics



mranchU1.RAD 09/05/2007 13:47 GRAPHICS.ASC Includes All Pathways



mranchU1.RAD 09/05/2007 13:47 GRAPHICS.ASC

APPENDIX D

Reclamation Cost Estimates

Energy Metals Corporation

Moore Ranch

Total Restoration and Reclamation Surety Estimate

I.	GROUNDWATER RESTORATION COST - TABLE 1	$2,639,199
II.	EQUIPMENT REMOVAL & DISPOSAL COST - TABLE 2	$176,776
III.	BUILDING DEMOLITION AND DISPOSAL COST - TABLE 3	$1,500,459
IV.	WELLFIELD BUILDINGS & EQUIPMENT REMOVAL & DISPOSAL COST - TABLE 4	$86,011
V.	WELL ABANDONMENT COST - TABLE 5	$228,197
VI.	WELLFIELD SURFACE RECLAMATION COST - TABLE 6	$24,779
VII.	TOTAL MISCELLANEOUS RECLAMATION COST - TABLE 7	$108,777
	SUBTOTAL RECLAMATION AND RESTORATION COST ESTIMATE	$4,764,199
	SUBTOTAL	$4,764,199
	CONTINGENCY (15%)	$714,630
	CONTRACT ADMINISTRATION (10%)	$476,420
	TOTAL	$5,478,829
	TOTAL CALCULATED SURETY (IN 2006 DOLLARS)	$5,478,800

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESIMATE
Recurring Costs Worksheet

RECURRING COST

	Item	Amount ($)	Units	Cost Basis
ELECTRICAL				
	Power Cost (actual costs)	$0.048	kw/hr	*Cost of electricity from operating ISR facility - Pacific Power and Light*
	Kilowatt to Horsepower	0.746	kw/hp	
	Horsepower per gpm	$0.167	hp/gpm	
	Per 1000 gallons pumped	$0.600	per 1000 gal	
	Cost per Month (Central Plant)	$8,500	unit	
	Cost per Month (Main Office)	$1,825	unit	
LABOR RATES				
	Operator	$136.34	day	*Labor costs from loaded current in-field charges paid by operating ISR facility*
	Environmental Manager	$80,000	year	
	Environmental Technician	$34,000	year	
	Maintenance Technician	$34,000	year	
CHEMICAL				
	Reductant	$0.30	per 1000 lb	*Chemical costs from operating ISR facility vendor purchase agreements*
	Cement	$7.62	sack	
	Plug Gel	$6.45	sack	
	Hydrochloric Acid	$0.1375	lb	
	Elution Unit Chemical Cost	$900	unit	
ANALYTICAL				
	Guideline 8	$200	batch	*Analytical costs from current contract with Energy Labs, Casper, Wyoming*
	6 Parameters	$70	batch	
	Other In-House (Radon, Biological, Soils, etc.)	$50	batch	*In-house cost estimate for material and labor at operating ISR facility*
SPARE PARTS				
	Restoration Spare Parts	$20,000	year	*Costs for spare parts from operator experience at ISR facility*
TRANSPORTATION AND DISPOSAL				
	11 (e)(2) Material Transport	$1.33	cubic foot	*Costs for Transportation to NRC Licensed Facility*
	11 (e)(2) Material Disposal	$11.00	cubic foot	*Cost for disposal at NRC Licensed Facility*
	Soil/Solid Waste Transport (11(e) (2)	$1.33	cubic foot	*Costs for Transportation and disposal from anticipated contracts with NRC Licensed Facility*
	Soil/Solid Waste Disposal (11(e) (2)	$3.70	cubic foot	*& contract trucker*
	Soil/Solid Waste (non-contam., on-site if used)	$20.00	cubic yard	*Estimate based on material cost and labor - ISR facility (COGEMA)*
VEHICLE OPERATION				
	Unit Cost	$20.21	unit	*Cost per WDEQ Guideline 12*
PLANT DISMANTLING				
	Concrete Footer Demolition	$5.10	cubic foot	*Costs per WDEQ Guideline 12, App. K, ajusted to 0.75 inch thick concrete*
	Concrete Floor Demolition	$5.10	cubic foot	*Costs per WDEQ Guideline 12, App. K, ajusted to 0.75 inch thick concrete*

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESIMATE
Recurring Costs Worksheet

RECURRING COST

	Item	Amount ($)	Units	Cost Basis
PLANT DECONTAMINATION AND DISPOSAL				
	Direct Disposal Plant Floor	$5.03	cubic yard	*Costs for Transportation and disposal from anticipated contracts with NRC Licensed Facility*
	Solution (HCL) Application Rate	$0.57	square foot	*& contract trucker*
PIPE REMOVAL				
	2-inch HDPE inj. & prod. Removal	$0.42	foot	*Costs for pipe removal from operating ISR facility*
	Trunkline Removal	$0.91	foot	*Includes loaded labor and equimpment*
EQUIPMENT				
	Cat Trackhoe	$1,125	week	*Costs for equipment rental from Wyoming Machinery, Casper, Wyoming. All inclusive (labor, repairs, fuel, and Mob)*
	Shredder	$50,000		*Equipment costs based on operating ISR facility*
	Cat Motor Grader	$814.22	acre	*Costs per WDEQ Guideline 12, App. 11*
	Hose Reel	$45.00	hour	*Costs for equipment from operating ISR facility*
	Cementer	$45.00	hour	*Costs for equipment from operating ISR facility*
	Dozer	$814.22	acre	*Costs per WDEQ Guideline 12, App. 11*
	Scraper	$814.22	acre	*Costs per WDEQ Guideline 12, App. 11*
	Pulling Reel	$45.00	hour	*Costs for equipment from operating ISR facility*
	Manlift	$8,900.00	month	*Costs for equipment from operating ISR facility*
	Belly Dump	$100.00	hour	*Costs for equipment from operating ISR facility*
RECLAMATION				
	Discing and Seeding	$280	acre	*Operator Experience based on Current Contractor Pricing*
	Top Soil Application	$0.71	acre	*Costs per WDEQ Guideline 12, App. 11*
WELL ABANDONMENT	Plug wells	$312.17	Well	*Costs per ISR Operating experience identified in Spreadsheet UC-WA (250 foot wells)*

References

Cost estimates were generated from a number of existing sources, primarily operating ISR facilities including:

Smith Ranch 2007-2008 Surety Estimate Revision dated 6/29/07 - Accession Number ML072210876 - 2007-06-29

Letter from Licensee Re: Annual Surety Update for COGEMA Mining, Inc. - Docket 40-8502. Accession Number ML052850206 - 2005-10-04.

Letter from Nebraska DEQ from Licensee Re: 2006 Surety Estimate Accession Number ML052850260 - 2005-09-21.

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 1

Groundwater Restoration

Ground Water Restoration	**Wellfield-1**
PV Assumptions	
Wellfield Area (ft2) (HH x 20 patterns x 10,000)	1,425,790
Wellfield Area (acres)	32.7
Affected Ore Zone Area (ft2)	1,425,790
Avg. Completed Thickness	20
Porosity	0.25
Flare Factor	1.5
Affected Volume (ft3)	42,773,700
Kgallons per Pore Volume	79,987
Number of Patterns in Wellfield	
Current	142
Estimated next report period	0
Total Estimated	142
Number of Wells in Wellfield	
Production Wells	
Current	142
Estimated next report period	0
Total Estimated	142
Injection Wells	
Current	284
Estimated next report period	0
Total Estimated	284
Monitoring Wells	
Current	60
Estimated next report period	0
Total Estimated	55
Number of Wells per Wellfield	481
Total Number of Wells	481
Average Well Depth (ft)	250

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 1

Groundwater Restoration

Ground Water Restoration					**Wellfield-1**			
I.	**Ground Water Sweep Costs**							
		PV's Required			1			
		Total Kgals for Treatment			79,987			
		Ground Water Sweep Unit Cost ($/Kgal)			$0.82			
	Subtotal Ground Water Sweep Costs per Wellfield				$65,637			
	Total Ground Water Sweep Costs				**$65,637**			
II.	**Reverse Osmosis Costs**							
		PV's Required			5			
		Total Kgals for Treatment			399,934			
		Reverse Osmosis Unit Cost ($/Kgal)			$0.94			
	Subtotal Reverse Osmosis Costs per Wellfield				$377,670			
	Total Reverse Osmosis Costs				**$377,670**			
III.	**Chemical Reductant Costs**							
		Total Kgals for Treatment (2 Pore Volumes)			159974			
		Chemical Reductant Unit Cost ($/Kgal)			$0.30			
		Subtotal Chemical Reductant Costs per Wellfield			$47,992			
	Total Chemical Reductant Costs				**$47,992**			
IV.	**Elution Costs**							
	A.	Elution Processing Costs						
			Kgals/Elution Required		35,000			
			Number of Elutions		14			
			Processing Unit Cost ($/Elution)		$900			
		Subtotal Processing Costs per Wellfield			$12,600			
				Total Elution Costs	**$12,600**			
	B.	Deep Well Injection Costs						
			Deep Well Injection Volume (Kgals/Elution)		12			
			Total Kgals for Injection		168			
			Deep Well Injection Unit Cost ($/Kgals)		$0.90			
		Subtotal Deep Well Injection Costs			$150			
	Subtotal Well Injection Costs per Wellfield				$12,750			
				Total Well Injection	$12,750			
				Total : Elution & Deep Well	**$25,350**			

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 1

Groundwater Restoration

Ground Water Restoration									**Wellfield-1**			
V.	**Monitoring and Sampling Costs**											
	A.	Active Restoration Period										
		Estimated Restoration Period (Years)							2.5			
		1.	UCL Sampling									
				# of Wells					55			
				$/sample					$50			
				Samples/Year					6			
		Sub-total Restoration Analyses							$41,250			
	B.	Stability Period										
		Estimated Stabilization Period (Years)							1			
		1.	Full Suite Analyses (Guideline 8)									
			# of Wells						11			
			Samples/Year						3			
			$/sample						$200			
		Sub-total Stability Analyses							$6,600			
	Total Monitoring and Sampling Costs								**$47,850**			
TOTAL RESTORATION COSTS PER WELLFIELD												
TOTAL WELLFIELD RESTORATION COST									**$577,099**			
VII.	**Building Utility Costs**								Central Plant			
		Electricity ($/Month)							$8,500			
		Number of Months							30			
	Subtotal Utility Costs per Building								$255,000			
	Total Building Utility Costs								**$101,050**			
VIII.	**Vehicle Operation Costs**											
		Number of Pickup Trucks/Pulling Units (Gas)							2			
		Unit Cost in $/hr (WDEQ Guideline No.12, Table D-1)							$20.21			
		Average Operating Time (Hrs/Year)							1000			
		Total Number of Years (Average)							2.5			
	Total Vehicle Operation Costs								**$101,050**			

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 1

Groundwater Restoration

Ground Water Restoration			**Wellfield-1**
IX.	**Labor Costs**		
		Number of Environmental Managers/RSOs	1
		$/Year MV	$80,000
		Number of Restoration Managers	1
		$/Year MV	$65,000
		Number of Environmental Technicians	1
		$/Year MV	$34,000
		Number of Operators/Laborers	2
		$/Year MV	$34,000
		Number of Maintenance Technicians	2
		$/Year MV	$34,000
		Number of Years	4
	Total Labor Costs		**$1,260,000**
X.	**Capital Costs**		
		Purchase RO Units (1X500 gpm Units)	$600,000
	Total Capital Costs		**$600,000**
TOTAL GROUND WATER RESTORATION COSTS			**$2,639,199**

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 2

Equipment Removal Disposal

Equipment Removal and Loading	CP Ion Ex. Plant	Central Plant	Dryer Building
I. Removal and Loading Costs			
A. Tankage			
Number of Tanks	14	28	0
Volume of Tank Construction Material (ft^3)	835	1340	300
1. Labor			
Number of Persons	3	3	3
Ft^3/Day	25	25	25
Number of Days	33	54	12
$/Day/Person	$136	$136	$136
Subtotal Labor Costs	$13,668	$21,923	$4,908
2. Equipment			
Number of Days	33	54	12
$/Day	$338	$338	$338
Subtotal Equipment Costs	$11,295	$18,117	$4,056
Subtotal Tankage Removal and Loading Costs	$24,963	$40,040	$8,964
B. PVC/Steel Pipe			
PVC Pipe Footage	2800	5000	
Average PVC Pipe Diameter (inches)	3	3	3
Shredded PVC Pipe Volume Reduction (ft3/ft)	0.016	0.016	0.016
Volume of Shredded PVC Pipe (ft3)	45	80	0
Steel Pipe Footage	1100	0	0
Average Steel Pipe Diameter (inches)	6	0	0
Volume (ft3)	216	0	0
1. Labor			
Number of Persons	2	2	2
Ft/Day	300	300	300
Number of Days	13	17	0
$/Day/Person	$136	$136	$136
Subtotal PVC/Steel Pipe Labor Costs	$3,545	$4,545	$0
Subtotal PVC/Steel Pipe Removal and Loading Costs	$3,545	$4,545	$0
C. Pumps			
Number of Pumps	21	43	0
Average Volume (ft^3/pump)	4.93	4.93	0
Volume of Pumps (ft^3)	103.53	211.99	0
1. Labor			
Number of Persons	1	1	1
Pumps/Day	2	2	2
Number of Days	10.5	21.5	0
$/Day/Person	$136	$136	$136
Subtotal Labor Costs	$1,432	$2,931	$0
Subtotal Pump Removal and Loading Costs	$1,432	$2,931	$0
D. Dryer			
Dryer Volume (ft^3)			400
1. Labor			
Number of Persons	0	0	5
Ft^3/Day	0	0	175
Number of Days	0	0	2
$/Day/Person	$136	$136	$136
Total Labor Cost	$0	$0	$1,363
Total Dryer Dismantling and Loading Cost	$0	$0	$1,363
Subtotal Equipment Removal and Loading Costs per Facility	$43,608	$69,439	$15,235
Total Equipment Removal and Loading Costs	**$128,282**		

TABLE 2

Equipment Removal Disposal

Equipment Removal and Loading	CP Ion Ex. Plant	Central Plant	Dryer Building
II. Anticipated Transportation and Disposal Costs (NRC-Licensed Facility)			
A. Tankage			
Volume of Tank Construction Material (ft^3)	835	1340	300
Volume for Disposal Assuming 10% Void Space (ft^3)	919	1474	330
Transportation and Disposal Unit Cost ($/$ft^3$)	$12.33	$12.33	$12.33
Subtotal Tankage Transportation and Disposal Costs	$11,331	$18,174	$4,069
B. PVC / Steel Pipe			
Volume of Shredded PVC Pipe (ft^3)	44.8	80	0
Volume for Disposal Assuming 10% Void Space (ft^3)	49	88	0
Volume of Steel Pipe (ft^3)	296	0	0
Volume for Disposal Assuming 10% Void Space (ft^3)	326	0	0
Transportation and Disposal Unit Cost ($/$ft^3$)	$12.33	$12.33	$12.33
Subtotal PVC Pipe Transportation and Disposal Costs	$4,624	$1,085	$0
C. Pumps			
Volume of Pumps (ft^3)	103.53	211.99	0
Volume for Disposal Assuming 10% Void Space (ft^3)	114	233	0
Transportation and Disposal Unit Cost ($/$ft^3$)	$12.33	$12.33	$12.33
Subtotal Pump Transportation and Disposal Costs	$1,406	$2,873	$0
D. Dryer			
Dryer Volume (ft^3)	0	0	400
Volume for Disposal Assuming Dryer Remains Intact (ft^3)	0	0	400
Transportation and Disposal Unit Cost ($/$ft^3$)	$12.33	$12.33	$12.33
Total Dryer Transportation and Disposal Costs	$0	$0	$4,932
Subtotal Equipment Transportation and Disposal Costs per Facility	$17,361	$22,132	$9,001
Total Equipment Transportation and Disposal Costs	**$48,494**		
III. Health and Safety Costs			
Radiation Safety Equipment — Accounted for on BLDGS workbook, Section IV	$0	$0	$0
Total Health and Safety Costs	$0		
SUBTOTAL EQUIPMENT REMOVAL AND DISPOSAL COSTS PER FACILITY	$60,969	$91,571	$24,236
TOTAL EQUIPMENT REMOVAL AND DISPOSAL COSTS	**$176,776**		

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 3

Building Demolition Disposal

Building Demolition and Disposal	CP Ion Ex. Plant	Central Plant	Dryer Building	Office Building	Storage Building	Shop Building	DDW Buildings	Yellowcake Warehouse
I. Decontamination Costs								
A. Wall Decontamination								
Area to be Decontaminated (ft^2)	10,810	15,900	0	0	1,152	4,826	0	3100
HCl Acid Wash, including labor ($/$ft^2$)	$0.59	$0.59	$0.59	$0.59	$0.59	$0.59	$0.59	$0.59
Subtotal Wall Decontamination Costs	$6,382	$9,387	$0	$0	$680	$2,849	$0	$1,830
B. Concrete Floor Decontamination								
Area to be Decontaminated (ft^2)	11,550	16,500	3,500	0	1,678	7,028	0	2750
HCl Acid Wash, including labor ($/$ft^2$)	$0.21	$0.21	$0.21	$0.21	$0.21	$0.21	$0.21	$0.21
Subtotal Concrete Floor Decontamination Costs	$2,403	$3,433	$728	$0	$349	$1,462	$0	$572
C. Deep Well Injection Costs								
Total Kgals for Injection	22.36	32.4	3.5	0	2.83	11.854	0	5.85
Deep Well Injection Unit Cost ($/Kgals)	$0.90	$0.90	$0.90	$0.90	$0.90	$0.90	$0.90	$0.90
Subtotal Deep Well Injection Costs	$20	$29	$3	$0	$3	$11	$0	$5
Subtotal Decontamination Costs per Building	$8,805	$12,849	$731	$0	$1,032	$4,322	$0	$2,407
Total Decontamination Costs	**$30,146**							
II. Demolition Costs								
A. Building								
Assumptions:								
Dryer bldg. demolition unit cost of $0.73/$ft^3$ for additional								
radiation safety equipment								
Volume of Building (ft^3)	346,500	577,500	122,500	0	16,780	175,700	660.3	55,000
Demolition Unit Cost per WDEQ Guideline No.12,App.K ($/$ft^3$)	$0.178	$0.178	$0.178	$0.178	$0.178	$0.178	$0.178	$0.178
Subtotal Building Demolition Costs	$61,677	$102,795	$21,805	$0	$2,987	$31,275	$118	$9,790
B. Concrete Floor								
Area of Concrete Floor (ft^2)	11,550	16,500	3500	0	1678	7028	0	2750
Demolition Unit Cost per WDEQ Guideline No.12,App.K ($/$ft^3$)	$3.40	$3.40	$3.40	$3.40	$3.17	$3.17	$3.17	$3.05
Subtotal Concrete Floor Demolition Costs	$39,270	$56,100	$11,900	$0	$5,319	$22,279	$0	$8,388
C. Concrete Footing								
Length of Concrete Footing (ft)	430	514	237	0	164	335	0	210
Demolition Unit Cost per WDEQ Guideline No.12,App.K ($/$ft^3$)	$12.22	$12.22	$12.22	$12.22	$12.22	$12.22	$12.22	$12.22
Subtotal Concrete Footing Demolition Costs	$5,253	$6,279	$2,892	$0	$2,002	$4,098	$0	$2,563
Subtotal Demolition Costs per Building	$106,200	$165,174	$36,597	$0	$10,308	$57,652	$118	$20,741
Total Demolition Costs	**$396,790**							

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 3

Building Demolition Disposal

Building Demolition and Disposal	CP Ion Ex. Plant	Central Plant	Dryer Building	Office Building	Storage Building	Shop Building	DDW Buildings	Yellowcake Warehouse
III. Disposal Costs								
A. Building								
Volume of Building (cy)	12833	21389	4537	0	621	6507	24	2037
1. Off-Site non 11e(2)								
Percentage (%)	100	100	100	100	100	100	100	100
Volume for Disposal (cubic yards)	12833	21389	4537	0	621	6507	24	2037
Disposal Unit Cost per recurring costs work sheet ($/cy)	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
Subtotal On-Site Disposal Costs	$256,667	$427,778	$90,741	$0	$12,430	$130,148	$489	$40,741
2. NRC-Licensed Facility								
Percentage (%)	0	0	0	0	0	0	0	0
Volume for Disposal (ft^3)	0	0	0	0	0	0	0	0
Volume for Disposal Assuming 10% Void Space (ft^3)	0	0	0	0	0	0	0	0
Transportation and Disposal Unit Cost ($/$ft^3$)	$12 33	$12.33	$12.33	$12.33	$12.33	$12.33	$12.33	$12.33
Subtotal NRC-Licensed Facility Disposal Costs	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Building Disposal Costs	$256,667	$427,778	$90,741	$0	$12,430	$130,148	$489	$40,741
B. Concrete Floor								
Area of Concrete Floor (ft^2)	11550	16500	3500	0	1678	7028	0	2750
Average Thickness of Concrete Floor (ft)	0.75	0.75	0 75	0.75	0.75	0.75	0.75	0.75
Volume of Concrete Floor (ft^3)	8662.5	12375	2625	0	1258.5	5271	0	2062.5
Volume of Concrete Floor (cy)	321	458	97	0	47	195	0	76
1. Off-Site non 11e(2)								
Percentage (%)	75	75	75	100	100	100	0	75
Volume for Disposal (cy)	241	344	73	0	47	195	0	57
Disposal Unit Cost per WDEQ Guideline No.12,App.K ($/cy)	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39
Subtotal On-Site Disposal Costs	$1,538	$2,197	$466	$0	$298	$1,247	$0	$366
2. NRC-Licensed Facility								
Assumptions:								
Additional $2.60/cy for segregation of concrete								
Percentage (%)	25	25	25	0	0	0	0	25
Volume for Disposal (ft^3)	2166	3094	656	0	0	0	0	516
Segregation and Loading Unit Cost ($/$ft^3$)	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60	$2.60
Transportation and Disposal Unit Cost ($/$ft^3$)	$12.33	$12.33	$12.33	$12.33	$12.33	$12.33	$12.33	$12.33
Subtotal NRC-Licensed Facility Disposal Costs	$32,333	$46,190	$9,798	$0	$0	$0	$0	$7,698
Subtotal Concrete Floor Disposal Costs	$33,871	$48,387	$10,264	$0	$298	$1,247	$0	$8,064
C. Concrete Footing								
Length of Concrete Footing (ft)	430	514	237	0	164	335	0	210
Average Depth of Concrete Footing (ft)	4	4	4	4	4	4	4	4
Average Width of Concrete Footing (ft)	1	1	1	1	1	1	1	1
Volume of Concrete Footing (ft^3)	1720	2055	947	0	655	1341	0	839
Volume of Concrete Footing (cy)	64	76	35	0	24	50	0	31
Disposal Unit Cost per WDEQ Guideline No.12,App.K ($/cy)	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39	$6.39
Subtotal Concrete Footing Disposal Costs	$407	$486	$224	$0	$155	$317	$0	$199
Subtotal Disposal Costs per Building	$290,945	$476,651	$101,229	$0	$12,883	$131,712	$489	$49,004
Total Disposal Costs	**$1,062,913**							
IV. Health and Safety Costs								
Radiation Safety Equipment RSO removed per item cost and generated	$0	$0	$0	$0	$0	$0	$0	$0
one lump sum cost!								
Total Health and Safety Costs	**$10,610**							
SUBTOTAL BUILDING DEMOLITION AND DISPOSAL COSTS	$405,950	$654,674	$138,557	$0	$24,223	$193,686	$607	$72,152
TOTAL BUILDING DEMOLITION AND DISPOSAL COSTS	**$1,500,459**							

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 4

Wellfield Buildings Equipment Removal Disposal

Wellfield Buildings and Equipment Removal and Disposal									**Wellfield-1**	
I.	**Wellfield Piping**									
		Assumptions:								
			Number of Header Houses per Wellfield						7	
			Length of Piping per Header House (ft)						2000	
			Total Length of Piping (ft)						14000	
	A.	Removal and Loading								
			Wellfield Piping Removal Unit Cost ($/ft of pipe)						$0.42	
		Subtotal Wellfield Piping Removal and Loading Costs							$5,880	
	B.	Transport and Disposal Costs (NRC-Licensed Facility)								
			Average Diameter of Piping (inches)						2	
			Chipped Volume Reduction (ft^3/ft)						0.005	
			Chipped Volume per Wellfield (ft^3)						70	
			Volume for Disposal Assuming 10% Void Space (ft^3)						77	
			Transportation and Disposal Unit Cost ($/$ft^3$)						$12.33	
		Subtotal Wellfield Piping Transport and Disposal Costs							$949	
	Wellfield Piping Costs per Wellfield								$6,829	
	C.	Capitol Costs								
			Fiberglass/ poly / PVC Pipe Shredder (Operator Owned)						$50,000	
			BFI Containers (2@$7,800.00 each) (Operator Owned)						$15,600	
	Total Wellfield Piping Costs								**$72,429**	
II.	**Well Pumps and Tubing**									
		Assumptions:								
			Pump and tubing removal costs included under ground water restoration labor costs							
			60% of production/injection wells contain pumps and/or tubing							
	A.	Pump and Tubing Transportation and Disposal								
				Number of Production Wells					142	
				Number of Injection Wells					284	
		1.	Pump Volume							
				Number of Production Wells with Pumps					85	
				Average Pump Volume (ft^3)					1	
				Pump Volume per Wellfield (ft^3)					85	
		2.	Tubing Volume							
				Assumptions:						
					Average tubing length/wellfield based on average well depth minus 25 ft					
				Number of Production Wells with Tubing					85	
				Number of Injection Wells with Tubing					170	
				Average Tubing Length per Well (ft)					225	
				Tubing Length per Wellfield (ft)					57375	
				Diameter of Production Well Fiberglass Tubing (inches)					2	
				Diameter of Injection Well HDPE Tubing (inches)					1.25	
				Chipped Volume Reduction (ft^3/ft)					0.005	
				Chipped Volume per Wellfield (ft^3)					287	
			Volume of Pump and Tubing (ft^3)						372	
			Volume for Disposal Assuming 10% Void Space (ft^3)						409	
			Transportation and Disposal Unit Cost ($/$ft^3$)						$12.33	
		Subtotal Pump and Tubing Transport and Disposal Costs							$5,043	
	Pump and Tubing Costs per Wellfield								$5,043	
	Total Pump and Tubing Costs								**$5,043**	

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 4

Wellfield Buildings Equipment Removal Disposal

Wellfield Buildings and Equipment Removal and Disposal										**Wellfield-1**	
III.	**Buried Trunkline**										
		Assumptions:									
		Length of Trunkline Trench (ft)								3750	
	A.	Removal and Loading									
			Main Pipeline Removal Unit Cost ($/ft of trench)							$0.84	
		Subtotal Trunkline Removal and Loading Costs								$3,150	
	B.	Transport and Disposal Costs (NRC-Licensed Facility)									
		1.	1" Carbon Steel Trunkline								
				Piping Length (ft)							
				Volume (ft^3)							
		2.	1" HDPE Trunkline								
				Piping Length (ft)							
				Chipped Volume Reduction (ft^3/ft)							
				Chipped Volume (ft^3)							
		3.	3" HDPE Trunkline								
				Piping Length (ft)						1000	
				Chipped Volume Reduction (ft^3/ft)						0.022	
				Chipped Volume (ft^3)						22	
		4.	6" HDPE Trunkline								
				Piping Length (ft)						1000	
				Chipped Volume Reduction (ft^3/ft)						0.078	
				Chipped Volume (ft^3)						78	
		5.	8" HDPE Trunkline								
				Piping Length (ft)						0	
				Chipped Volume Reduction (ft^3/ft)						0.15	
				Chipped Volume (ft^3)						0	
		6.	10" HDPE Trunkline								
				Piping Length (ft)						0	
				Chipped Volume Reduction (ft^3/ft)						0.277	
				Chipped Volume (ft^3)						0	
		7.	12" HDPE Trunkline								
				Piping Length (ft)						0	
				Chipped Volume Reduction (ft^3/ft)						0.293	
				Chipped Volume (ft^3)						0	
		8.	14" HDPE Trunkline								
				Piping Length (ft)						0	
				Chipped Volume Reduction (ft^3/ft)						0.359	
				Chipped Volume (ft^3)						0	
		9.	16" HDPE Trunkline								
				Piping Length (ft)						0	
				Chipped Volume Reduction (ft^3/ft)						0.4	
				Chipped Volume (ft^3)						0	
		10.	18" HDPE Trunkline								
				Piping Length (ft)							
				Chipped Volume Reduction (ft^3/ft)						0.62	
				Chipped Volume (ft^3)						0	
			Total Trunkline Chipped Volume (ft^3)							100	
			Volume for Disposal Assuming 10% Void Space (ft^3)							110	
			Transportation and Disposal Unit Cost ($/$ft^3$)							$12.33	
		Subtotal Trunkline Transport and Disposal Costs								$1,356	
	Trunkline Decommissioning Costs per Wellfield									$4,506	
	Total Trunkline Decommissioning Costs									**$4,506**	

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 4

Wellfield Buildings Equipment Removal Disposal

| | | |

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 5

Well Abandinment

Well Abandonment									**Wellfield-1**	
I.	**Well Abandonment (Wellfield)**									
		# of Production Wells							142	
		# of Injection Wells							284	
		# of Monitoring Wells							55	
		Total Number of Wells							481	
		Average Diameter of Casing (inches)							5	
		Average Depth (ft)							250	
		Well Abandonment Unit Cost ($/well)							312	
	Subtotal Abandonment Cost per Wellfield									
	Total Wellfield Abandonment Costs								**$150,154**	
II.	**Waste Disposal Well Abandonment**								DDW#1	
	A.	Well Plugging								
			All lump sum costs							
		Subtotal Well Plugging Costs per Well							$71,342	
	B.	Pump Dismantling and Decontamination								
			Number of Persons						2	
			Number of Pumps						2	
			Pumps/Day						0.5	
			Number of Days						4	
			$/Day/Person						$136	
		Subtotal Dismantling and Decon Costs per Well							$1,091	
	C.	Tubing String Disposal (NRC-Licensed Facility)								
			Length of Tubing String (ft)						10100	
			Diameter of Tubing String (inches)						2.875	
			Volume of Tubing String (ft^3)						455	
			Transportation and Disposal Unit Cost ($/$ft^3$)						$12.33	
		Subtotal Tubing String Disposal Costs per Well							$5,611	
	Subtotal Waste Disposal Well Abandonment Costs per Well								$78,044	
	Total Waste Disposal Well Abandonment Costs								**$78,044**	
TOTAL WELL ABANDONMENT COSTS									**$228,197**	

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

TABLE 6

Wellfield Surface Reclamation

Wellfield Surface Reclamation										**Wellfield-1**	
I.	**Wellfield Pattern Area, Laydown Area, and Road Reclamation**										
		Area (acres)								32.7	
		Disking/Seeding Unit Cost ($/acre)								$280	
	Subtotal Pattern Area, Laydown Area, and Road Reclamation Costs									$9,156	
	Total Wellfield Area Reclamation Costs									**$9,156**	
II	**Surface Reclamation**									**Wellfield-1**	
	A.	Removal and disposal of contaminated soil around wells									
			Volume of contaminated soil (0.37 yd3 per injection and production well - estimate)							157.62	
			Disposal of contaminated soil ($/yd3) (As per anticipated byproduct material contract)							$5.03	
			Equipment (Backhoe $65/hr)							$5,122.65	
			Labor (1 man-hour ($17.hr) per 2 Yd3 - estimate)							$1,339.77	
		Subtotal removal and disposal of contaminated soil							Total	$6,467.45	
	B.	Disc and seeding									
			Disc and seeding (est. $280/acre)							$280.00	
		Subtotal Recontour and Seeding							Total	$9,156.00	
								Total Surface Reclamation		**$15,623**	
								Total		**$24,779**	

TABLE 7

Miscellaneous Reclamation

Miscellaneous Reclamation			
I.	**CP/Office Area/Maint. Shop/Chem. Storage/Yard Reclamation**		
	Assumptions		
	Concrete Pad= 0.3 acres		
	Total Area = 11 acres		
A.	Concrete Pad		
	Area of Concrete Pad (ft^2)	13068	
	Demolition Unit Cost per WDEQ Guideline No.12,App.K ($/$ft^2$)	$3.40	
	Average Thickness of Concrete Floor (ft)	0.50	
	Volume of Concrete Floor (ft^3)	6,534	
	Volume of Concrete Floor (cy)	242	
	Off-Site Non 11e(2) Disposal Unit Cost ($/cy)	$20.00	
	Subtotal Concrete Pad Demolition and Disposal Costs	$49,271	
B.	Gravel Road Base Removal		
	Assumptions		
	Average haul distance (ft)	250	
	Gravel Road Base Width (ft)	30	
	Gravel Road Base Area (acres)	0.2	
	Average Road Base Depth (ft)	0.5	
	Volume of Road Base (cy)	139	
	Removal Unit Cost per WDEQ Guideline No.12, App.C ($/cy)	$0.87	
	Subtotal Gravel Road Base Removal Costs	$120	
C.	Ripping Overburden with Dozer		
	Overburden Surface Area (acres)	11.0	
	Ripping Unit Cost per WDEQ Guideline No.12, App.II ($/acre)	$814.22	
	Subtotal Ripping Overburden Costs	$8,956	
D.	Topsoil Application		
	Assumptions:		
	Area of surface disturbance (ft^2)	479160	
	Average thickness of topsoil (ft)	1	
	Average haul distance (ft)	1000	
	Surface grade (%)	0%	
	Volume of Topsoil (cy)	17,747	
	Topsoil Unit Cost per WDEQ Guideline No.12, App.C ($/cy)	$1.12	
	Subtotal Topsoil Application Costs	$19,930	
E.	Discing/Seeding		
	Assumptions		
	Surface Area (acres)	11	
	Discing/Seeding Unit Cost ($/acre)	$280	
	Total Discing/Seeding Costs	$3,080	
	Total CP/Office/Yard Area Reclamation	**$81,237**	
II.	**Access Road Reclamation**	**CP Access Rd.**	
A.	Assumptions		
	Surface grade	1%	
	Length of Road (ft)	2250	
	Width of Road (ft)	40	
	Area of road (acres)	2.1	
B.	Gravel Road Base Removal		
	Assumptions		
	Average haul distance (ft)	1000	
	Gravel Road Base Width (ft)	30	
	Gravel Road Base Area (acres)	1.55	
	Average Road Base Depth (ft)	0.5	
	Volume of Road Base (cy)	1250	
	Removal Unit Cost per WDEQ Guideline No.12, App.C ($/cy)	$0.87	
	Subtotal Gravel Road Base Removal Costs	$1,083	
C.	Ripping Overburden with Dozer		
	Overburden Surface Area (acres)	2.1	
	Ripping Unit Cost per WDEQ Guideline No.12, App.II ($/acre)	$814.22	
	Subtotal Ripping Overburden Costs	$1,682	
D.	Topsoil Application		
	Assumptions		
	Average haul distance (ft)	1000	
	Topsoil Surface Area (ft^2)	90000	
	Depth of Topsoil (ft)	0.5	
	Volume of Topsoil (cy)	1667	
	Topsoil Unit Cost per WDEQ Guideline No.12, App.C ($/cy)	$1.50	
	Subtotal Topsoil Application Costs	$2,500	
E.	Discing/Seeding		
	Assumptions		
	Surface Area (acres)	2.1	
	Discing/Seeding Unit Cost ($/acre)	$280	
	Subtotal Discing/Seeding Costs	$579	
	Subtotal Reclamation Costs per Access Road	$5,844	
	Total Access Road Reclamation Costs	**$5,844**	

Miscellaneous Reclamation	
III. Trunk Lines	**Trunk Line To WF-1**
Length of Trench (ft)	2750
A. Removal and Loading	
Main Pipeline Removal Unit Cost ($/ft of trench)	$0.91
Subtotal Trunkline Removal and Loading Costs	$2,503
B. Transport and Disposal Costs (NRC-Licensed Facility)	
1 2" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.005
Chipped Volume (ft^3)	0
1. 3" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.022
Chipped Volume (ft^3)	0
2. 6" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.078
Chipped Volume (ft^3)	0
3. 8" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.15
Chipped Volume (ft^3)	0
3. 10" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.277
Chipped Volume (ft^3)	0
4. 12" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.293
Chipped Volume (ft^3)	0
5. 14" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.359
Chipped Volume (ft^3)	0
5. 16" HDPE Trunkline	
Piping Length (ft)	2750
Chipped Volume Reduction (ft^3/ft)	0.4
Chipped Volume (ft^3)	1100
6 18" HDPE Trunkline	
Piping Length (ft)	0
Chipped Volume Reduction (ft^3/ft)	0.47
Chipped Volume (ft^3)	0
Total Pipeline Disposal Volume	1100
Volume for Disposal Assuming 10% Void Space (ft^3)	1210
Transportation and Disposal Unit Cost (NRC-Licensed Facility) ($/$ft^3$)	$12.33
	$14,919
C. Discing/Seeding	
Assumptions:	
Width of Pipeline Trench (ft)	4
Area of Pipeline Trench (acres)	0.3
Discing/Seeding Unit Cost ($/acre)	$280
Subtotal Discing/Seeding Costs	$71
Subtotal Reclamation Costs per Pipeline	$17,493
Total Pipeline Reclamation Costs	**$17,493**

TABLE 7

Miscellaneous Reclamation										
IV.	**Miscellaneous Structures**									
	A.	Potable Water Wells								
			Total Depth (ft) (2- 5-inch Diameter Wells, @ 750 ft)						1,500	
			Well Abandonment Unit Cost ($/100 ft) - per State Engineers Office						$63.10	
		Subtotal Potable Water Wells Abandonment Costs							$946.50	
	B.	Fuel Area								
			Concrete Floor							
				Area of Concrete Floor (ft²)					400	
				Demolition Unit Cost per WDEQ Guideline No.12,App.K ($/ft²)					$3.40	
			Subtotal Concrete Floor Demolition Costs						$1,360	
			Concrete Footing							
				Length of Concrete Footing (ft)					80	
				Demolition Unit Cost per WDEQ Guide. No.12,App.K ($/lin. ft)					$12.22	
			Subtotal Concrete Footing Demolition Costs						$978	
		Subtotal Fuel Area Costs							$2,338	
	Total Miscellaneous Structures Reclamation Costs								**$3,284.50**	
V.	**Utilities**									
		Fence removal								
			Wellfield (approx 11,000 ft @ $ 0.068/foot) (based on COGEMA 2005 Surety)						$748.00	
			CP Area 2500 feet @ $0.068/foot)						$170.00	
								Total	**$918.00**	
TOTAL MISCELLANEOUS RECLAMATION COSTS									**$108,777**	

Support Worksheets for Tables 1-7

1 Groundwater Sweep Costs
2 Reverse Osmosos Costs
3 Chemical Reductant Costs
4 Elution Processing Costs
5 Deep Well Disposal Costs
6 Acid Wash Costs
7 Wellfield Piping Removal Costs
8 Main Pipeline Removal Costs
9 Wellfield Building Removal & Deco Costs
10 Well Abandonment Costs
11 Disking & Seeding Costs
12 Definitions

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Groundwater Sweep Costs

GROUNDWATER SWEEP (GWS)

Assumptions:

1. All pumps are 5 hp pumping at 5.0 gpm
2. Cost of electricity from Recurring Cost Sheet
3. All water pumped is disposed at WDW with a 20 hp pump
4. Process sampling and analysis costs estimated at $0.03/1000 gallons, Operator Experience
5. Labor costs are not included

Wellfield Pumping Costs per 1000 Gallons

$$\frac{1000\ \text{gal}}{} \times \frac{5\ \text{hp}}{5\ \text{gpm}} \times \frac{1\ \text{hr}}{60\ \text{min}} \times \frac{0.746\ \text{kwh}}{\text{hp}} \times \frac{\$\ 0.048}{\text{kwh}} = \$\ 0.60$$

Pumping to WDW Costs per 1000 Gallons

$$\frac{1000\ \text{gal}}{} \times \frac{75\ \text{hp}}{200\ \text{gpm}} \times \frac{1\ \text{hr}}{60\ \text{min}} \times \frac{0.746\ \text{kwh}}{\text{hp}} \times \frac{\$\ 0.048}{\text{kwh}} = \$\ 0.22$$

TOTAL GWS COSTS PER 1000 GALLONS = $ 0.82

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Reverse Osmosis Costs

REVERSE OSMOSIS (RO)											
Assumptions:											
1.	Cost of electricity from Recurring Cost Sheet										
2.	75% permeate/25% reject split										
3.	Membrane life of 5 years with a cost of $700 per membrane element										
4.	Includes cost of pumping from wellfield to RO Unit										
5.	Process sampling and analysis costs estimated at $0.03/1000 gallons - Operator Experience										
6.	Labor costs are not included										
Reverse Osmosis Costs per 1000 Gallons									**Chemical Costs**		
	Electricity							= $	0.48		
	Chemicals							= $	$0.13	Scale Inhibitor	$2.00 $/lb
	Membrane Replacement							= $	$0.05	Dose Rate	6.75 ppm
	Repair and Maintenance							= $	0.26	RO Flow	500 gpm
	Process Sampling and Analysis							= $	0.03		
										lbs scale/1000gal	0.056330727
TOTAL RO COSTS PER 1000 GALLONS								**= $**	**0.94**		
										Cost per 1000 gal	$0.11
										Cleaning Chemicals	0.02
										Total Chemical Cost	$0.13
										Membrane Replacement	
										For 500gpm RO	500 gpm
										Number of membranes	96
										Cost per Membrane	$600.00
										Years of Life	5
										Labor to Change Membrane	$480.00
										Cost per 1000 gal	$0.05

Reverse Osmosis Costs

REVERSE OSMOSIS (RO) pg2				
	Electrical Costs			
	for 500gpm RO			
	Mine Unit			
	Charge Pumps			
	Mine Unit Feed	Motor HP	Motor Quantity	KW
	Deep Disposal Charge Pump	3	40	89.52
		50	2	74.6
		60	1	44.76
		60	1	44.76
			Total Installed KW	253.64
			Cost per Hour	$11.41
			Cost per 1000gal	$0.48

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Chemical Reluctant Costs

CHEMICAL REDUCTANT			
Assumptions:			
1.	Chemical of biological reductant		
2.	Based on actual costs at Crow Butte Resources ISR facility		
ESTIMATED TOTAL BIOLOGICAL REDUCTANT COSTS PER Kgal		**= $**	**0.30**
ESTIMATED TOTAL CHEMICAL REDUCTANT COSTS PER Kgal		**= $**	**0.17**
Biological costs estimation was used for this surety as it represents the more conservative value			

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Elution Processing Costs

ELUTION PROCESSING		
Assumptions:		
1.	Based on actual costs at operaing ISR facility	
TOTAL PROCESSING COSTS PER ELUTION	**= $**	**900**

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Waste Dsiposal Well

DEEP WELL INJECTION

Assumptions:

1. Pump 150 hp pumping at 100 gpm
2. Cost of electricity from Recurring Cost Sheet
3. Repair and maintenance costs based on average injection volume of 8,000,000 gallons per year
4. Chemical costs based on average injection volume of 8,000,000 gallons per year
5. Labor costs are not included

Waste Disposal Pumping Costs per 1000 Gallons

$$\frac{1000\ \text{gal}}{} \times \frac{150\ \text{hp}}{100\ \text{gpm}} \times \frac{1\ \text{hr}}{60\ \text{min}} \times \frac{0.746\ \text{kwh}}{\text{hp}} \times \frac{\$\ 0.048}{\text{kwh}} = \$\ 0.90$$

TOTAL DEEP WELL INJECTION COSTS PER 1000 GALLONS = $ 0.90

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Acid Wash Costs

ACID WASH							
Based on acid cost of $275/ ton or .1375per lb. (Operating costs at ISR facility)							
Commercial Concentrated acid is 37%							
Assume a 10% wash solution the price of the wash solution is $.012 per gallon							
Assume that .25 gallon of acid wash is used per sq ft. to clean walls.							
Assume that 1 gallon of acid wash is used per sq ft. to clean floors.							
Using the square footage supplied in the bond the following assumptions were used to							
generate the cost per square ft multiplier.							
Using the CP IX and Plant square footages the assumption is as follows							
Acid Wash (Walls)							
Labor	2	Men		Bond CP IX and CP sq. footage			
Rate	$17	hr.					
Time	20	8hr. Days					
Man Lift Rental	$8,900.00	Month					
Labor Cost per sq. ft.	$0.54						
Acid	$0.003						
Consumables	$0.05						
Total	$0.59						
Acid Wash (Floors)							
Labor	2	Men		Bond CP IX and CP sq. footage			
Rate	$17	hr.					
Time	15	8hr. Days					
Labor Cost per sq. ft.	$0.15						
Acid	$0.01						
Consumables	$0.05						
Total	$0.21						

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Wellfield Piping Removal Costs

WELLFIELD PIPING REMOVAL													
Assumptions:													
1.	Trenching with backhoe at 1500 ft/day												
2.	Pipeline extraction and backfilling with backhoe at 1500/day												
3.	Backhoe rental: $1,125/week, all inclusive fuel, maintenance, mob												
4.	Backhoe operation requires 1 worker at $17/hour												
5.	Pipeline extraction requires 2 workers at $17/hour (in addition to trackhoe operator)												
6.	Operating schedule: 8 hrs/day, 5 days/week												
Main Pipeline Removal Costs per ft of Pipe													
Equipment													
	Backhoe												
		$	1125	X	1	week	X	1	days	=$	0.15		
		week			5	days		1500	ft				
Labor													
	Backhoe Operation												
		$	17	X	8	man hrs	X	1	days	=$	0.09		
		man hr			1	day		1500	ft				
	Pipeline Extraction												
		$	17	X	16	man hrs	X	1	day	=$	0.18		
		man hr			1	day		1500	ft				
	MAIN PIPELINE REMOVAL COST PER FT OF PIPE									**=$**	**0.420**		

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Mian Pipline Removal Costs

MAIN PIPELINE REMOVAL

Assumptions:

1. Trenching with trackhoe at 750 ft/day
2. Pipeline extraction and backfilling with trackhoe at 750 ft/day
3. Trackhoe rental: $1,125/week all inclusive fuel, maintenance, mob
5. Trackhoe operation requires 1 worker at $17/hour
6. Pipeline extraction requires 2 workers at $17/hour (in addition to trackhoe operator)
7. Pipelines removed simutaneously
8. Includes removal of manholes
9. Operating schedule: 8 hrs/day, 5 days/week

Main Pipeline Removal Costs per ft of Trench

Equipment

Trackhoe

$ 1125 / week	X	1 week / 5 days	X	1 days / 750 ft	=$	0.30		

Labor

Trackhoe Operation

$ 17 / man hr	X	8 man hrs / 1 day	X	1 days / 750 ft	=$	0.18		

Pipeline Extraction

$ 17 / man hr	X	16 man hrs / 1 day	X	2 day / 750 ft	=$	0.36		

MAIN PIPELINE REMOVAL COST PER FT OF TRENCH =$ 0.84

Wellfierld Building Removal and Demo

WELLFIELD BUILDING REMOVAL AND DEMO

Cost per Well Head Cover

Env. Scanner =		17	per hour	Based on current labor rates
Operator =		17	per hour	Based on current labor rates
Total Wellhead Covers =		346		
HCl 35% Cost =	$	0.137	per pound	Based on current Univar costs for bulk HCl - April 2007
Acid Usage Rate =		4.1	pounds per wellhead cover	Estimate based on experience
Acid Unit Cost =	$	0.56	per wellhead cover	
Total Labor Rate =	$	39.70	per hour	
Cleaning Rate		10	wellheads per hour	Estimate based on experience
Survey / Decon.	**$**	**3.97**	**per wellhead cover**	

Cost per Header House

Env. Scanner =		17	per hour	Based on current labor rates
Operator =		17	per hour	Based on current labor rates
Number of Operators =		2		Based on experience
HCl 35% Cost =	$	0.137	per pound	Based on current Univar costs for bulk HCl - April 2007 operating ISR facility
Acid Usage Rate =		20	pounds per header house	Estimate
Acid Unit Cost =	$	2.74	per headerhouse	
Total Labor Rate =	$	311.64	per hour	
Cleaning Rate		1	header house per day	Estimate based on experience at operating ISR facility
Survey / Decon.	**$**	**311.64**	**per headerhouse**	

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Well Abandonment Costs

WELL ABANDONMENT														
Assumptions:														
1	Typical 8 hour working day													
2	Trackhoe for 8.0 hr/day to dig and reclaim pit													
3	Use hose reel for 8 hr/day to pull equipment from well													
4	Use cementer for 8.0 hr/day to pump cement/plug gel													
5	Use tow vehicle for 8.0 hr/day to tow hose reel and cementer													
6	Labor for backhoe, hose reel, cementer will require 3 workers at 8.0 hr/day													
	Materials include 7.5 sacks of cement/100 ft and 1 sack of plug gel/100 ft of 5" well casing.													
	Cost of cement is $7.62 and plug gel cost is $6.45/sack.													
	Cement costs for 2007 = GCC Dakota Cement; Plug gel costs for 2007 = Casper Well Products													
	Cement costs from operating ISR facility.													
	Fixed Costs													
	Trackhoe													
		8	hours	X	$	28.1	per hour			=$	225.00			
	Hose Reel/Tow Vehicle													
		8	hours	X	$	45	per hour			=$	360.00			
	Cementer													
		8	hours	X	$	45	per hour			=$	360.00			
	Tow Vehicle													
		8	hours	X	$	45	per hour			=$	360.00			
	Labor													
3	men=	24	man	X	$	17	per man			=$	409.02			
			hours				hour							
			Total Fixed Costs per 8.0 hr/day							=$	1714.02			
	Variable Costs				(per 100 ft of well depth)									
	Materials													
		7.5	sack cement			X	$	7.62	per	=$	57.15			
			per 100 feet						sack					
		1	sack plug gel			X	$	6.45	per ho	=$	6.45			
			per 100 feet						plug					

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Well Abandonment Costs

WELL ABANDONMENT Page 2														
	Total materials Cost (per 100 ft of well depth)									$	63.60			
	Total number of wells completed per/day													
			6											
	Cost per Well per Unit of Average Depth													
					Well Depth (ft)									
						200				**=$**	**307**			
						250				**=$**	**312**			
						350				**=$**	**323**			
						450				**=$**	**333**			
						500				**=$**	**339**			
						550				**=$**	**344**			
						600				**=$**	**349**			
						650				**=$**	**355**			
						700				**=$**	**360**			
						750				**=$**	**365**			
						800				**=$**	**370**			
						850				**=$**	**376**			
						900				**=$**	**381**			
						950				**=$**	**386**			

ENERGY METALS CORPORATION
MOORE RANCH PROJECT
SURETY ESTIMATE

Disking and Seeding Costs

DISKING/SEEDING									
Assumptions:									
1.	Based on actual contractor costs in 2007								
2.	Drill Seeding $250/Acre - based on contractor estamate 6/2007								
3.	Seed cost $30/Acre - Based on 5/07 seed costs at Operating ISR facility								
TOTAL DISKING/SEEDING COSTS PER ACRE					**= $**	**280.00**			

Abbrevations and Acronyms

Abbreviations/Acronyms						
$	Dollars					
$/Kgal	Dollars per 1000 gallons					
avg	average					
ft	feet					
ft2	square feet					
ft3	cubic feet					
gal	gallon					
gpm	gallons per minute					
H2SO4	Sulfuric Acid					
HCl	Hydrochloric Acid					
Hp	Horsepower					
Kgal	1000 gallons					
Kwh	Kilowatt-hours					
OD	Outside Diameter					
PPE	personal protective equipment					
PV	Pore Volume Estimate					
reqm't	requirement					
RO	Reverse Osmosis					
WDW	Waste Disposal Well					
yd3	cubic yards					
yr	year					

APPENDIX E

MILDOS Modeling Output

TABLE OF CONTENTS

METEOROLOGICAL DATA 2
INDIVIDUAL RECEPTORS & MISCELLANEOUS INPUT DATA 3
POPULATION DISTRIBUTION 4
SOURCE PARAMETERS 5

TIME STEP 1,
CONCENTRATION DATA FOR SPATIAL INTERVALS 6
100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR
INHALATION PATHWAY 10
GROUND PATHWAY 14
CLOUD PATHWAY 15
VEGETATION INGESTION PATHWAY 16
MEAT INGESTION PATHWAY 18
MILK INGESTION PATHWAY 20
POPULATION DOSE SUMMARY 22
ENVIRONMENTAL DOSE COMMITMENTS, INTEGRATED OVER ALL TIME STEPS 23
INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS 24
INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS 27
INDIVIDUAL RECEPTOR ALC CHECK AND/OR ANNUAL DOSE COMMITMENTS 28

REGION: Moore Ranch CODE: MILDOS-AREA (02/97) PAGE 2
METSET: DATA: MRANCH.RAD 07/10/07

JOINT FREQUENCY IN PERCENT, DIRECTION INDICATES WHERE WIND IS FROM FREQWS=0.18990,0.25630,0.24520,0.10040,0.05560,0.00000

MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTALS
STABILITY CLASS 1																	
1.5	0.2200	0.2600	0.1900	0.2300	0.1800	0.2100	0.2800	0.2400	0.2800	0.2300	0.2100	0.2700	0.2700	0.3500	0.2700	0.2600	3.9500
5.5	0.1700	0.1200	0.0800	0.0500	0.0600	0.0800	0.1100	0.1200	0.1500	0.1200	0.1500	0.1700	0.2200	0.2300	0.2300	0.1700	2.2300
10.0	0.0100	0.0000	0.0100	0.0000	0.0000	0.0100	0.0100	0.0100	0.0100	0.0100	0.0300	0.0400	0.0400	0.0500	0.0300	0.0200	0.2800
15.5	0.0100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0200	0.0200	0.0000	0.0000	0.0000	0.0000	0.0500
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0200
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.4100	0.3800	0.2800	0.2800	0.2400	0.3000	0.4000	0.3700	0.4400	0.3600	0.4300	0.5000	0.5300	0.6300	0.5300	0.4500	6.5300
STABILITY CLASS 2																	
1.5	0.0500	0.0600	0.0200	0.0200	0.0500	0.0400	0.0700	0.0800	0.0800	0.0400	0.0400	0.0600	0.1100	0.0800	0.0800	0.0600	0.9400
5.5	0.1500	0.0900	0.0600	0.0300	0.0300	0.0900	0.1100	0.1200	0.1000	0.0800	0.0600	0.1100	0.1900	0.1600	0.1500	0.1100	1.6400
10.0	0.0800	0.0300	0.0100	0.0000	0.0000	0.0200	0.0300	0.0200	0.0200	0.0100	0.0500	0.1500	0.1100	0.1200	0.0900	0.0800	0.8200
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0100	0.0300	0.0100	0.0100	0.0000	0.0000	0.0600
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0100	0.0200	0.0000	0.0000	0.0000	0.0100	0.0400
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.2800	0.1800	0.0900	0.0500	0.0800	0.1500	0.2100	0.2200	0.2000	0.1300	0.1700	0.3700	0.4200	0.3700	0.3200	0.2600	3.5000
STABILITY CLASS 3																	
1.5	0.0400	0.0600	0.0400	0.0400	0.0500	0.0900	0.0800	0.1200	0.0900	0.0300	0.0300	0.0700	0.2400	0.1800	0.1200	0.0600	1.3400
5.5	0.2200	0.1500	0.0500	0.0400	0.0400	0.1400	0.1800	0.1800	0.1600	0.0800	0.0800	0.1100	0.3100	0.2300	0.2300	0.2100	2.4100
10.0	0.5000	0.1300	0.0300	0.0100	0.0200	0.0800	0.1700	0.1600	0.1000	0.1100	0.1500	0.4200	0.4000	0.3100	0.3200	0.4600	3.3700
15.5	0.1700	0.0100	0.0000	0.0000	0.0000	0.0000	0.0100	0.0100	0.0100	0.0100	0.0700	0.2000	0.1000	0.0500	0.1000	0.1200	0.8600
21.5	0.1200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0900	0.1400	0.0200	0.0100	0.0200	0.0600	0.4600
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	1.0500	0.3500	0.1200	0.0900	0.1100	0.3100	0.4400	0.4700	0.3600	0.2300	0.4200	0.9400	1.0700	0.7800	0.7900	0.9100	8.4400
STABILITY CLASS 4																	
1.5	0.4000	0.2900	0.2300	0.3100	0.5100	0.6800	0.5200	0.3800	0.2900	0.1900	0.1300	0.3100	1.0500	0.8400	0.4500	0.3700	6.9500
5.5	1.0200	0.6300	0.3900	0.2400	0.4900	1.0500	0.8500	0.6100	0.5000	0.3700	0.4300	1.2800	3.4600	1.7900	1.1500	0.9200	15.1800
10.0	1.9100	1.0000	0.2400	0.1000	0.3700	1.4000	1.0500	0.8100	0.6300	0.4800	0.9600	2.8800	3.7500	1.1400	1.4100	1.9200	20.0500
15.5	1.0500	0.3700	0.0600	0.0000	0.0300	0.2800	0.2900	0.1800	0.1600	0.1500	0.7900	2.5100	1.0200	0.2800	0.6500	1.2500	9.0700
21.5	0.4800	0.1900	0.0200	0.0000	0.0000	0.0300	0.1200	0.0500	0.0400	0.0400	0.5200	2.0000	0.2800	0.0700	0.3700	0.8300	5.0400
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	4.8600	2.4800	0.9400	0.6500	1.4000	3.4400	2.8300	2.0300	1.6200	1.2300	2.8300	8.9800	9.5600	4.1200	4.0300	5.2900	56.2900
STABILITY CLASS 5																	
1.5	0.1300	0.1000	0.1000	0.1400	0.2200	0.3000	0.2600	0.3000	0.1800	0.1500	0.0900	0.1900	0.4900	0.3700	0.1600	0.1100	3.2900
5.5	0.1100	0.1300	0.0400	0.0400	0.1600	0.4900	0.3700	0.3400	0.2500	0.1500	0.0700	0.2300	1.1400	0.3800	0.1600	0.1100	4.1700
10.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.2400	0.2300	0.1400	0.1800	0.3800	0.7900	0.6300	0.6400	0.4300	0.3000	0.1600	0.4200	1.6300	0.7500	0.3200	0.2200	7.4600
STABILITY CLASS 6																	
1.5	0.0900	0.0700	0.0900	0.0800	0.1200	0.1400	0.1300	0.1600	0.1500	0.1600	0.1800	0.2300	0.3400	0.3100	0.1500	0.1200	2.5200
5.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21.5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ALL	0.0900	0.0700	0.0900	0.0800	0.1200	0.1400	0.1300	0.1600	0.1500	0.1600	0.1800	0.2300	0.3400	0.3100	0.1500	0.1200	2.5200
ALL	6.9300	3.6900	1.6600	1.3300	2.3300	5.1300	4.6400	3.8900	3.2000	2.4100	4.1900	11.4400	13.5500	6.9600	6.1400	7.2500	84.7400

INDIVIDUAL RECEPTOR LOCATION DATA, 19 LOCATIONS INPUT THIS RUN

I	LOCATION NAMES	X(KM)	Y(KM)	Z(M)	DIST(KM)	TYPE	I	LOCATION NAMES	X(KM)	Y(KM)	Z(M)	DIST(KM)	TYPE
1	N PB	0.00	2.60	0.00	2.60	10	11	SW PB	-2.85	-2.85	0.00	4.03	10
2	NNE PB	1.09	2.63	0.00	2.85	10	12	WSW PB	-3.02	-1.25	0.00	3.27	10
3	NE PB	1.96	1.96	0.00	2.77	10	13	W PB	-2.77	0.00	0.00	2.77	10
4	ENE PB	3.64	1.50	0.00	3.94	10	14	WNW PB	-2.17	0.90	0.00	2.35	10
5	E PB	6.71	0.00	0.00	6.71	10	15	NW PB	-1.42	1.42	0.00	2.01	10
6	ESE PB	4.72	-1.96	0.00	5.11	10	16	NNW PB	-1.09	2.63	0.00	2.85	10
7	SE PB	2.31	-2.31	0.00	3.27	10	17	Nearest Resident Eas	4.50	0.00	0.00	4.50	10
8	SSE PB	1.19	-2.87	0.00	3.11	10	18	Nearest Resident Sou	0.00	-13.40	0.00	13.40	10
9	S PB	0.00	-2.85	0.00	2.85	10	19	Wright	26.05	18.93	0.00	32.20	10
10	SSW PB	-1.51	-3.64	0.00	3.94	10							

MISCELLANEOUS INPUTABLE PARAMETER VALUES

DMM	DMA	TSTART	FFORI	FHAYI	FFORP	FHAYP	FPR(1)	FPR(2)	FPR(3)	ACTRAT
100.0	100.0	2007.00	0.50	0.50	0.50	0.50	0.00	0.00	0.00	2.50

IPACT EQUALS 0, 0, 0, 0, 0,

JC EQUALS 1, 1, 1, 1, 0, 0, 1, 0, 1, 0

TIME STEP DATA....	STEP NAMES	LENGTH, YRS	IFTODO
1		100.00	1

XRHO EQUALS 1.5, 2.5, 3.5, 4.5, 7.5, 15.0, 25.0, 35.0, 45.0, 55.0, 65.0, 75.0,

HDP EQUALS 50.0

POPULATION DISTRIBUTION

KILOMETERS	N 0.0	NNE 22.5	NE 45.0	ENE 67.5	E 90.0	ESE 112.5	SE 135.0	SSE 157.5	S 180.0	SSW 202.5	SW 225.0	WSW 247.5	W 270.0	WNW 292.5	NW 315.0	NNW 337.5
1.0- 2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0- 3.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.0- 4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.0- 5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.0-10.0	0	0	0	0	5	0	3	0	0	0	0	2	9	0	0	0
10.0-20.0	8	11	3	0	0	3	3	0	5	3	0	3	8	0	0	0
20.0-30.0	33	5	3	3	0	0	5	0	5	0	0	0	3	3	0	0
30.0-40.0	88	88	1408	503	1007	69	68	125	136	30	29	599	29	29	30	0
40.0-50.0	112	112	109	113	113	91	146	242	190	38	38	38	0	38	71	112
50.0-60.0	137	147	116	132	587	117	263	273	188	67	46	53	33	38	110	136
60.0-70.0	161	205	624	224	435	131	303	194	164	115	177	83	39	269	113	148
70.0-80.0	3682	1901	679	3139	1207	107	153	1701	2763	133	341	98	49	37	78	164
1.0-80.0	4221	2469	2942	4114	3354	518	944	2535	3451	386	631	876	170	414	402	560

TOTAL 1-80 KM POPULATION IS 27987 PERSONS

NUMBER OF SOURCES= 5

NO.	KM X	KM Y	M Z	KM2 AREA	U-238	Th-230	CI/YEAR Ra-226	Pb-210	Rn-222	ID	PSIZE SET	M/SEC EXIT VEL	SOURCE NAME
1	0.00	0.00	16.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E+02	1001	1	3.30E-01	Main Plant
2	0.00	0.00	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.37E-01	1002	1	0.00E+00	New Well
3	-0.42	0.07	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E+02	1003	1	0.00E+00	MU1
4	0.89	-0.53	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E+02	1004	1	0.00E+00	MU2
5	0.47	-0.64	0.00	0.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E+02	1005	1	0.00E+00	MU3

INPUT TAILS ACTIVITIES, PCI/G

SET	URANIUM	THORIUM	RADIUM	LEAD
1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AMAD AND FRACTIONAL DISTRIBUTION

SET	1.5	3.0	7.7	54.0
1	0.000	1.000	0.000	0.000
2	1.000	0.000	0.000	0.000
3	0.000	0.000	0.300	0.700

PARTICULATE SOURCE STRENGTH MULTIPLIERS BY TIME STEP, 1 TIME STEP(S) USED FOR THIS RUN

SOURCE NUMBER	TSTEP 1 100.00YRS	TSTEP 2 5.00YRS	TSTEP 3 5.00YRS	TSTEP 4 5.00YRS	TSTEP 5 5.00YRS	TSTEP 6 5.00YRS	TSTEP 7 5.00YRS	TSTEP 8 5.00YRS	TSTEP 9 5.00YRS	TSTEP10 5.00YRS
1	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

RADON SOURCE STRENGTH MULTIPLIERS BY TIME STEP, 1 TIME STEP(S) USED FOR THIS RUN

SOURCE NUMBER	TSTEP 1 100.00YRS	TSTEP 2 5.00YRS	TSTEP 3 5.00YRS	TSTEP 4 5.00YRS	TSTEP 5 5.00YRS	TSTEP 6 5.00YRS	TSTEP 7 5.00YRS	TSTEP 8 5.00YRS	TSTEP 9 5.00YRS	TSTEP10 5.00YRS
1	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
2	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
4	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
5	1.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

CONCENTRATION DATA FOR THE N DIRECTION, THETA EQUALS 0.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.080E+01	1.037E+01	5.179E+00	2.462E+00	2.369E-06	4.612E-
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.619E+00	5.544E+00	3.628E+00	2.327E+00	3.834E-06	3.279E-
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.600E+00	3.582E+00	2.685E+00	2.010E+00	4.965E-06	2.480E-
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.635E+00	2.630E+00	2.125E+00	1.731E+00	5.888E-06	1.994E-
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.461E+00	1.461E+00	1.300E+00	1.162E+00	7.633E-06	1.243E-
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.578E-01	6.581E-01	6.319E-01	5.978E-01	8.860E-06	6.112E-
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.661E-01	3.663E-01	3.624E-01	3.546E-01	9.109E-06	3.537E-
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.494E-01	2.495E-01	2.492E-01	2.472E-01	9.115E-06	2.443E-
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.864E-01	1.865E-01	1.869E-01	1.865E-01	9.024E-06	1.835E-
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.474E-01	1.475E-01	1.480E-01	1.481E-01	8.914E-06	1.455E-
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.209E-01	1.210E-01	1.215E-01	1.217E-01	8.792E-06	1.195E-
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.017E-01	1.018E-01	1.022E-01	1.025E-01	8.661E-06	1.006E-

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.213E+00	8.213E+00	8.213E+00	4.935E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.391E+00	4.391E+00	4.391E+00	7.986E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.837E+00	2.837E+00	2.837E+00	1.034E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.083E+00	2.083E+00	2.083E+00	1.226E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.157E+00	1.157E+00	1.157E+00	1.590E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.213E-01	5.213E-01	5.213E-01	1.846E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.901E-01	2.901E-01	2.901E-01	1.897E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.976E-01	1.976E-01	1.976E-01	1.899E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.477E-01	1.477E-01	1.477E-01	1.880E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.168E-01	1.168E-01	1.168E-01	1.857E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.581E-02	9.581E-02	9.581E-02	1.831E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.061E-02	8.061E-02	8.061E-02	1.804E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.108E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.150E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.490E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.766E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.290E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.658E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.733E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.734E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.707E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.674E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.637E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.598E-08

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

CONCENTRATION DATA FOR THE E DIRECTION, THETA EQUALS 90.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.576E+01	3.184E+01	1.186E+01	4.698E+00	3.658E-06	1.105E-
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.880E+01	1.785E+01	9.128E+00	5.069E+00	7.036E-06	8.358E-
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.191E+01	1.169E+01	7.226E+00	4.801E+00	1.012E-05	6.658E-
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.520E+00	8.452E+00	5.859E+00	4.309E+00	1.267E-05	5.448E-
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.728E+00	4.725E+00	3.827E+00	3.151E+00	1.788E-05	3.602E-
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.166E+00	2.167E+00	2.006E+00	1.812E+00	2.221E-05	1.916E-
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.221E+00	1.221E+00	1.193E+00	1.144E+00	2.359E-05	1.157E-
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.357E-01	8.362E-01	8.304E-01	8.162E-01	2.390E-05	8.116E-
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.291E-01	6.295E-01	6.292E-01	6.250E-01	2.389E-05	6.170E-
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.000E-01	5.003E-01	5.015E-01	5.006E-01	2.372E-05	4.925E-
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.120E-01	4.122E-01	4.137E-01	4.140E-01	2.347E-05	4.066E-
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.483E-01	3.485E-01	3.499E-01	3.507E-01	2.319E-05	3.441E-

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.522E+01	2.522E+01	2.522E+01	7.619E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.414E+01	1.414E+01	1.414E+01	1.466E+01
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.255E+00	9.255E+00	9.255E+00	2.108E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.694E+00	6.694E+00	6.694E+00	2.638E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.743E+00	3.743E+00	3.743E+00	3.725E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.716E+00	1.716E+00	1.716E+00	4.626E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.674E-01	9.674E-01	9.674E-01	4.913E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.623E-01	6.623E-01	6.623E-01	4.978E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.986E-01	4.986E-01	4.986E-01	4.976E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.963E-01	3.963E-01	3.963E-01	4.940E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.265E-01	3.265E-01	3.265E-01	4.889E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.760E-01	2.760E-01	2.760E-01	4.831E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	1.097E-08
2.5	0.000E+00	0.000E+00	0.000E+00	2.111E-08
3.5	0.000E+00	0.000E+00	0.000E+00	3.036E-08
4.5	0.000E+00	0.000E+00	0.000E+00	3.800E-08
7.5	0.000E+00	0.000E+00	0.000E+00	5.365E-08
15.0	0.000E+00	0.000E+00	0.000E+00	6.663E-08
25.0	0.000E+00	0.000E+00	0.000E+00	7.076E-08
35.0	0.000E+00	0.000E+00	0.000E+00	7.170E-08
45.0	0.000E+00	0.000E+00	0.000E+00	7.167E-08
55.0	0.000E+00	0.000E+00	0.000E+00	7.115E-08
65.0	0.000E+00	0.000E+00	0.000E+00	7.042E-08
75.0	0.000E+00	0.000E+00	0.000E+00	6.958E-08

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

CONCENTRATION DATA FOR THE S DIRECTION, THETA EQUALS 180.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.501E+01	1.337E+01	4.932E+00	1.892E+00	1.346E-06	4.584E-
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.315E+00	6.931E+00	3.491E+00	1.932E+00	2.581E-06	3.204E-
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.540E+00	4.422E+00	2.629E+00	1.740E+00	3.612E-06	2.437E-
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.247E+00	3.204E+00	2.103E+00	1.530E+00	4.448E-06	1.967E-
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.839E+00	1.835E+00	1.395E+00	1.117E+00	6.271E-06	1.313E-
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.622E-01	8.626E-01	7.638E-01	6.638E-01	7.841E-06	7.237E-
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.947E-01	4.950E-01	4.718E-01	4.393E-01	8.426E-06	4.541E-
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.437E-01	3.439E-01	3.372E-01	3.250E-01	8.653E-06	3.276E-
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.610E-01	2.612E-01	2.592E-01	2.544E-01	8.722E-06	2.532E-
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.091E-01	2.092E-01	2.089E-01	2.070E-01	8.726E-06	2.046E-
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.735E-01	1.736E-01	1.738E-01	1.732E-01	8.692E-06	1.706E-
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.476E-01	1.477E-01	1.481E-01	1.479E-01	8.633E-06	1.455E-

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.059E+01	1.059E+01	1.059E+01	2.804E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.489E+00	5.489E+00	5.489E+00	5.376E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.503E+00	3.503E+00	3.503E+00	7.524E+00
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.537E+00	2.537E+00	2.537E+00	9.266E+00
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.454E+00	1.454E+00	1.454E+00	1.306E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.832E-01	6.832E-01	6.832E-01	1.633E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.920E-01	3.920E-01	3.920E-01	1.755E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.724E-01	2.724E-01	2.724E-01	1.802E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.069E-01	2.069E-01	2.069E-01	1.817E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.657E-01	1.657E-01	1.657E-01	1.818E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.375E-01	1.375E-01	1.375E-01	1.811E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.170E-01	1.170E-01	1.170E-01	1.798E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	4.039E-09
2.5	0.000E+00	0.000E+00	0.000E+00	7.743E-09
3.5	0.000E+00	0.000E+00	0.000E+00	1.084E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.335E-08
7.5	0.000E+00	0.000E+00	0.000E+00	1.881E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.352E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.528E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.596E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.617E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.618E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.608E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.590E-08

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

CONCENTRATION DATA FOR THE W DIRECTION, THETA EQUALS 270.0 DEGREES

TOTAL AIR CONCENTRATIONS, PCI/M3, AND WL

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	WL
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.300E+01	1.260E+01	6.171E+00	2.804E+00	2.611E-06	5.473E-
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.938E+00	5.886E+00	3.987E+00	2.555E+00	4.140E-06	3.581E-
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.607E+00	3.598E+00	2.819E+00	2.142E+00	5.265E-06	2.599E-
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.582E+00	2.580E+00	2.182E+00	1.819E+00	6.224E-06	2.050E-
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.405E+00	1.406E+00	1.301E+00	1.199E+00	8.111E-06	1.251E-
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.236E-01	6.240E-01	6.106E-01	5.909E-01	9.419E-06	5.943E-
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.439E-01	3.441E-01	3.431E-01	3.397E-01	9.645E-06	3.361E-
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.325E-01	2.326E-01	2.332E-01	2.328E-01	9.606E-06	2.290E-
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.736E-01	1.737E-01	1.743E-01	1.746E-01	9.516E-06	1.714E-
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.368E-01	1.369E-01	1.375E-01	1.379E-01	9.388E-06	1.352E-
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.118E-01	1.118E-01	1.124E-01	1.127E-01	9.246E-06	1.105E-
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.372E-02	9.377E-02	9.422E-02	9.454E-02	9.100E-06	9.269E-

GROUND SURFACE CONCENTRATIONS, PCI/M2

XRHO, KM	U-238	Th-230	Ra-226	Pb-210	Rn-222	Po-218	Pb-214	Bi-214	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.982E+00	9.982E+00	9.982E+00	5.439E+00
2.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.662E+00	4.662E+00	4.662E+00	8.624E+00
3.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.850E+00	2.850E+00	2.850E+00	1.097E+01
4.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.044E+00	2.044E+00	2.044E+00	1.297E+01
7.5	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.113E+00	1.113E+00	1.113E+00	1.690E+01
15.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.942E-01	4.942E-01	4.942E-01	1.962E+01
25.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.725E-01	2.725E-01	2.725E-01	2.009E+01
35.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.843E-01	1.843E-01	1.843E-01	2.001E+01
45.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.376E-01	1.376E-01	1.376E-01	1.982E+01
55.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.084E-01	1.084E-01	1.084E-01	1.956E+01
65.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.859E-02	8.859E-02	8.859E-02	1.926E+01
75.0	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.427E-02	7.427E-02	7.427E-02	1.895E+01

TOTAL DEPOSITION RATES, PCI/M2-SEC

XRHO, KM	U-238	Th-230	Ra-226	Pb-210
1.5	0.000E+00	0.000E+00	0.000E+00	7.833E-09
2.5	0.000E+00	0.000E+00	0.000E+00	1.242E-08
3.5	0.000E+00	0.000E+00	0.000E+00	1.580E-08
4.5	0.000E+00	0.000E+00	0.000E+00	1.867E-08
7.5	0.000E+00	0.000E+00	0.000E+00	2.433E-08
15.0	0.000E+00	0.000E+00	0.000E+00	2.826E-08
25.0	0.000E+00	0.000E+00	0.000E+00	2.893E-08
35.0	0.000E+00	0.000E+00	0.000E+00	2.882E-08
45.0	0.000E+00	0.000E+00	0.000E+00	2.855E-08
55.0	0.000E+00	0.000E+00	0.000E+00	2.816E-08
65.0	0.000E+00	0.000E+00	0.000E+00	2.774E-08
75.0	0.000E+00	0.000E+00	0.000E+00	2.730E-08

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.177E-06	2.197E-05	5.863E-05	7.392E-05	8.935E-05	1.036E-04	2.335
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.437E-06	2.491E-06	4.324E-05	5.412E-05	6.973E-05	9.560E-05	8.712
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.307E-06	1.329E-06	6.195E-04	4.732E-05	4.965E-05	2.633E-04	2.823
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.281E-06	3.874E-04	8.702E-05	1.012E-04	1.704E-04	2.365
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.529E-06	0.000E+00	0.000E+00	1.759E-03	1.974E-04	1.018E-03	7.473E-04	2.049
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.032E-06	0.000E+00	9.711E-05	1.271E-04	1.615E-04	1.784E-04	1.436
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.853E-06	2.291E-06	4.083E-06	5.648E-05	1.214E-04	2.175E-04	2.483E-04	1.241
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.277E-05	1.614E-04	1.819E-04	1.286E-04	1.119
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.863E-06	3.078E-06	8.601E-05	1.212E-04	1.200E-04	1.043E-04	1.746
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.472E-06	0.000E+00	1.601E-05	2.036E-05	3.578E-05	6.105E-05	7.002
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.198E-05	1.553E-05	1.858E-05	7.061E-05	1.342
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.278E-07	1.432E-06	0.000E+00	2.901E-04	1.816E-05	2.503E-05	3.867E-05	4.498
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.330E-06	5.504E-06	2.114E-06	2.036E-05	0.000E+00	2.267E-05	2.640E-05	3.265
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.838E-06	2.761E-05	3.596E-05	3.558E-05	2.486E-04	3.373
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.566E-05	6.037E-05	9.254E-05	9.386E-05	6.390
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.840E-05	1.058E-04	1.134E-04	1.236

TOTAL DOSE COMMITMENT IS 2.147E-02 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.200E-05	1.781E-04	4.752E-04	5.988E-04	7.236E-04	8.386E-04	1.889
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.411E-05	2.020E-05	3.504E-04	4.384E-04	5.647E-04	7.738E-04	7.049
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.060E-05	1.078E-05	5.021E-03	3.834E-04	4.021E-04	2.132E-03	2.284
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.850E-05	3.140E-03	7.051E-04	8.198E-04	1.380E-03	1.914
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.298E-05	0.000E+00	0.000E+00	1.426E-02	1.599E-03	8.249E-03	6.050E-03	1.659
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.270E-05	0.000E+00	7.871E-04	1.030E-03	1.308E-03	1.444E-03	1.162
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.503E-05	1.859E-05	3.311E-05	4.578E-04	9.835E-04	1.761E-03	2.010E-03	1.004
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.709E-04	1.308E-03	1.474E-03	1.041E-03	9.055
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.323E-05	2.496E-05	6.972E-04	9.819E-04	9.719E-04	8.446E-04	1.413
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.194E-05	0.000E+00	1.297E-04	1.649E-04	2.898E-04	4.942E-04	5.665
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.706E-05	1.258E-04	1.504E-04	5.715E-04	1.086
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.717E-06	1.161E-05	0.000E+00	2.351E-03	1.471E-04	2.027E-04	3.129E-04	3.639
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.325E-05	4.465E-05	1.714E-05	1.650E-04	0.000E+00	1.836E-04	2.137E-04	2.642
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.301E-05	2.237E-04	2.913E-04	2.881E-04	2.013E-03	2.729
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.079E-04	4.891E-04	7.494E-04	7.597E-04	5.170
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.162E-04	8.569E-04	9.175E-04	9.998

TOTAL DOSE COMMITMENT IS 1.738E-01 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS AVG.LUNG

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.112E-07	2.660E-06	7.282E-06	9.410E-06	1.166E-05	1.384E-05	3.195
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.418E-07	3.017E-07	5.370E-06	6.889E-06	9.096E-06	1.277E-05	1.192
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.542E-07	1.608E-07	7.678E-05	6.006E-06	6.449E-06	3.500E-05	3.837
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.753E-07	4.785E-05	1.099E-05	1.306E-05	2.247E-05	3.184
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.555E-07	0.000E+00	0.000E+00	2.174E-04	2.496E-05	1.317E-04	9.884E-05	2.771
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.754E-07	0.000E+00	1.204E-05	1.615E-05	2.102E-05	2.377E-05	1.958
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.144E-07	2.701E-07	4.933E-07	6.989E-06	1.538E-05	2.820E-05	3.295E-05	1.684
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.023E-05	2.042E-05	2.354E-05	1.701E-05	1.513
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.374E-07	3.715E-07	1.062E-05	1.531E-05	1.550E-05	1.377E-05	2.356
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.736E-07	0.000E+00	1.983E-06	2.583E-06	4.648E-06	8.117E-06	9.524
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.487E-06	1.978E-06	2.425E-06	9.442E-06	1.838
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	9.587E-08	1.691E-07	0.000E+00	3.611E-05	2.320E-06	3.280E-06	5.195E-06	6.195
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.174E-07	6.500E-07	2.563E-07	2.534E-06	0.000E+00	2.967E-06	3.541E-06	4.488
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.435E-07	3.426E-06	4.573E-06	4.634E-06	3.316E-05	4.604
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.185E-06	7.678E-06	1.206E-05	1.252E-05	8.726
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.126E-05	1.380E-05	1.514E-05	1.690

TOTAL DOSE COMMITMENT IS 2.835E-03 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS INHAL. EXPOSED ORGAN IS BRONCHI

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.578E-03	1.510E-02	2.743E-02	2.609E-02	2.524E-02	2.433E-02	4.682
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	6.908E-03	1.715E-03	2.030E-02	1.921E-02	1.983E-02	2.263E-02	1.763
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.054E-03	1.149E-03	3.680E-01	2.138E-02	1.808E-02	8.021E-02	7.384
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.524E-03	2.930E-01	4.989E-02	4.668E-02	6.571E-02	7.833
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.955E-02	0.000E+00	0.000E+00	1.052E+00	8.887E-02	3.669E-01	2.240E-01	5.255
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.496E-03	0.000E+00	4.776E-02	4.708E-02	4.783E-02	4.389E-02	3.015
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.996E-03	3.634E-03	3.449E-03	3.228E-02	5.224E-02	7.487E-02	7.113E-02	3.038
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.518E-02	8.108E-02	7.317E-02	4.308E-02	3.209
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.389E-03	3.092E-03	5.844E-02	6.200E-02	4.915E-02	3.557E-02	5.097
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.219E-03	0.000E+00	8.734E-03	8.365E-03	1.176E-02	1.668E-02	1.634
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.339E-03	5.222E-03	4.995E-03	1.576E-02	2.555
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.323E-03	1.530E-03	0.000E+00	1.132E-01	5.326E-03	5.856E-03	7.490E-03	7.409
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.581E-02	6.236E-03	1.290E-03	8.428E-03	0.000E+00	5.643E-03	5.450E-03	5.740
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.067E-03	1.367E-02	1.343E-02	1.064E-02	6.181E-02	7.160
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.263E-02	2.244E-02	2.754E-02	2.323E-02	1.351
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.139E-02	3.010E-02	2.681E-02	2.497

TOTAL DOSE COMMITMENT IS 7.381E+00 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS GROUND EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.022E-06	2.884E-06	6.237E-06	6.899E-06	7.624E-06	8.278E-06	1.774
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.073E-06	3.273E-07	4.608E-06	5.063E-06	5.965E-06	7.659E-06	6.638
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.025E-07	2.011E-07	7.476E-05	4.947E-06	4.695E-06	2.312E-05	2.341
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.077E-07	5.386E-05	1.030E-05	1.069E-05	1.653E-05	2.147
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.693E-06	0.000E+00	0.000E+00	2.131E-04	2.060E-05	9.588E-05	6.521E-05	1.687
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.380E-07	0.000E+00	1.059E-05	1.212E-05	1.403E-05	1.448E-05	1.107
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.003E-06	5.341E-07	6.088E-07	6.671E-06	1.239E-05	2.008E-05	2.130E-05	1.005
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.067E-05	1.780E-05	1.799E-05	1.174E-05	9.597
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	7.634E-07	5.146E-07	1.121E-05	1.349E-05	1.197E-05	9.591E-06	1.508
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.300E-07	0.000E+00	1.844E-06	2.034E-06	3.240E-06	5.143E-06	5.581
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.244E-06	1.420E-06	1.556E-06	5.549E-06	1.004
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.074E-07	2.499E-07	0.000E+00	2.830E-05	1.572E-06	1.998E-06	2.909E-06	3.235
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.075E-06	1.000E-06	2.590E-07	2.042E-06	0.000E+00	1.848E-06	2.024E-06	2.390
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.857E-07	3.022E-06	3.440E-06	3.102E-06	2.025E-05	2.608
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.800E-06	5.762E-06	8.054E-06	7.634E-06	4.934
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	8.272E-06	9.052E-06	9.079E-06	9.411

TOTAL DOSE COMMITMENT IS 1.981E-03 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS CLOUD EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.275E-05	1.285E-04	2.385E-04	2.288E-04	2.222E-04	2.146E-04	4.133
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	5.521E-05	1.455E-05	1.761E-04	1.682E-04	1.745E-04	1.995E-04	1.556
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.463E-05	9.038E-06	3.046E-03	1.819E-04	1.561E-04	6.989E-04	6.469
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.883E-05	2.354E-03	4.171E-04	3.990E-04	5.690E-04	6.835
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.772E-04	0.000E+00	0.000E+00	9.020E-03	7.740E-04	3.219E-03	1.972E-03	4.634
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.362E-05	0.000E+00	4.151E-04	4.129E-04	4.210E-04	3.871E-04	2.662
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.913E-05	2.694E-05	2.822E-05	2.747E-04	4.525E-04	6.544E-04	6.246E-04	2.675
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.560E-04	6.902E-04	6.328E-04	3.759E-04	2.814
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	3.703E-05	2.428E-05	4.863E-04	5.305E-04	4.266E-04	3.111E-04	4.477
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.671E-05	0.000E+00	7.465E-05	7.266E-05	1.029E-04	1.466E-04	1.439
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	4.665E-05	4.591E-05	4.402E-05	1.391E-04	2.256
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.834E-05	1.304E-05	0.000E+00	9.965E-04	4.701E-05	5.172E-05	6.617E-05	6.546
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.194E-04	5.198E-05	1.117E-05	7.393E-05	0.000E+00	4.980E-05	4.813E-05	5.071
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.745E-05	1.185E-04	1.177E-04	9.360E-05	5.450E-04	6.320
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	1.093E-04	1.962E-04	2.420E-04	2.047E-04	1.192
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	2.752E-04	2.649E-04	2.365E-04	2.204

TOTAL DOSE COMMITMENT IS 6.384E-02 PERSON-REM/YR

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS VEG. ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS MEAT ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS EFFECTIV

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

EXPOSURE PATHWAY IS MILK ING EXPOSED ORGAN IS BONE

DOSES SHOWN BELOW ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEAR

DIRECTION	XRHO 1.5	XRHO 2.5	XRHO 3.5	XRHO 4.5	XRHO 7.5	XRHO 15.0	XRHO 25.0	XRHO 35.0	XRHO 45.0	XRHO 55.0	XRHO 65.0	XRH 75.
N	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ENE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
E	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
ESE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSE	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
S	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
SW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WSW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
W	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
WNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
NNW	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TOTAL DOSE COMMITMENT IS 0.000E+00 PERSON-REM/YR

WARNING--POPULATION FOOD INGESTION DOSES SHOWN ABOVE HAVE NOT BEEN CORRECTED TO REFLECT POTENTIAL FOOD EXPORT AND MAY EXCEED DOSES ACTUALLY RECEIVED BY THE POPULATION OF THIS REGION. SEE SUMMARY TABLE FOR THIS INFORMATION.

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

SUMMARY PRINT OF POPULATION DOSES COMPUTED FOR TSTEP 1--DOSES SHOWN ARE 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS, PERSON-REM/YEA

DOSES RECEIVED BY PEOPLE WITHIN 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	2.147E-02	1.738E-01	2.835E-03	1.304E-01	6.270E-02	7.381E+00
GROUND	1.981E-03	1.981E-03	1.981E-03	1.981E-03	1.981E-03	1.981E-03
CLOUD	6.384E-02	6.384E-02	6.384E-02	6.384E-02	6.384E-02	6.384E-02
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTALS	8.729E-02	2.397E-01	6.865E-02	1.962E-01	1.285E-01	7.447E+00

DOSES RECEIVED BY PEOPLE BEYOND 80 KILOMETERS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
GROUND	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CLOUD	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.321E+00	7.256E+01	1.209E+00	5.321E+00	5.321E+00	3.386E+01
TOTALS	5.321E+00	7.256E+01	1.209E+00	5.321E+00	5.321E+00	3.386E+01

TOTAL DOSES COMPUTED OVER ALL POPULATIONS

PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INHAL.	2.147E-02	1.738E-01	2.835E-03	1.304E-01	6.270E-02	7.381E+00
GROUND	1.981E-03	1.981E-03	1.981E-03	1.981E-03	1.981E-03	1.981E-03
CLOUD	6.384E-02	6.384E-02	6.384E-02	6.384E-02	6.384E-02	6.384E-02
VEG. ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MEAT ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MILK ING	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RNPLUS50	5.321E+00	7.256E+01	1.209E+00	5.321E+00	5.321E+00	3.386E+01
TOTALS	5.408E+00	7.280E+01	1.278E+00	5.517E+00	5.449E+00	4.131E+01

COMPLETE SUMMARY OF COMPUTED ENVIRONMENTAL DOSE COMMITMENTS, INTEGRATED OVER ALL TIME STEPS

100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED BY PEOPLE WITHIN 80 KILOMETERS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONC
1	2007.00	2107.00	100.00	TOTALS	8.729E+00	2.397E+01	6.865E+00	1.962E+01	1.285E+01	7.447E
TOTALS OVER ALL 1 TIME STEPS					8.729E+00	2.397E+01	6.865E+00	1.962E+01	1.285E+01	7.447E

100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED BY PEOPLE BEYOND 80 KILOMETERS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONC
1	2007.00	2107.00	100.00	TOTALS	5.321E+02	7.256E+03	1.209E+02	5.321E+02	5.321E+02	3.386E
TOTALS OVER ALL 1 TIME STEPS					5.321E+02	7.256E+03	1.209E+02	5.321E+02	5.321E+02	3.386E

GRAND TOTAL 100-YEAR ENVIRONMENTAL DOSE COMMITMENTS RECEIVED OVER ALL POPULATIONS, PERSON-REM

NO.	T-START	T-END	T-LONG	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONC
1	2007.00	2107.00	100.00	TOTALS	5.408E+02	7.280E+03	1.278E+02	5.517E+02	5.449E+02	4.131E
TOTALS OVER ALL 1 TIME STEPS					5.408E+02	7.280E+03	1.278E+02	5.517E+02	5.449E+02	4.131E

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-
1	N PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
1	N PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
1	N PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
1	N PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
2	NNE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
2	NNE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
2	NNE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
2	NNE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
3	NE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
3	NE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
3	NE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
3	NE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
4	ENE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
4	ENE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
4	ENE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
4	ENE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
5	E PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
5	E PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
5	E PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
5	E PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
6	ESE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
6	ESE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
6	ESE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
6	ESE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
7	SE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
7	SE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
7	SE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
7	SE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
8	SSE PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
8	SSE PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
8	SSE PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
8	SSE PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-
9	S PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
9	S PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
9	S PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
9	S PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
10	SSW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
10	SSW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
10	SSW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
10	SSW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
11	SW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
11	SW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
11	SW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
11	SW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
12	WSW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
12	WSW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
12	WSW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
12	WSW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
13	W PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
13	W PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
13	W PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
13	W PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
14	WNW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
14	WNW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
14	WNW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
14	WNW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
15	NW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
15	NW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
15	NW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
15	NW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
16	NNW PB	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
16	NNW PB	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
16	NNW PB	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
16	NNW PB	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

INDIVIDUAL RECEPTOR PARTICULATE CONCENTRATIONS

NO.	NAME	PTSZ	AIRBORNE CONCENTRATIONS, PCI/M3 U-238	Th-230	Ra-226	Pb-210	GROUND CONCENTRATIONS, PCI/M2 U-238	Th-230	Ra-226	Pb-
17	Nearest Resident Eas	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
17	Nearest Resident Eas	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
17	Nearest Resident Eas	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
17	Nearest Resident Eas	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
18	Nearest Resident Sou	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
18	Nearest Resident Sou	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
18	Nearest Resident Sou	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
18	Nearest Resident Sou	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
19	Wright	1	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
19	Wright	2	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
19	Wright	3	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
19	Wright	4	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000
	CONCENTRATION TOTALS		0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

INDIVIDUAL RECEPTOR RADON AND RADON DAUGHTER CONCENTRATIONS

NO.	AIRBORNE CONCENTRATIONS, PCI/M3								GROUND CONCENTRATIONS, PCI/M2			
	Rn-222	Po-218	Pb-214	Bi-214	Pb-210	Bi-210	Po-210	WL	Po-218	Pb-214	Bi-214	Pb-210
1	5.337E+00	5.272E+00	3.512E+00	2.299E+00	3.963E-06	7.626E-09	4.100E-13	3.181E-05	4.176E+00	4.176E+00	4.176E+00	8.254E+00
2	3.911E+00	3.866E+00	2.677E+00	1.830E+00	3.430E-06	7.018E-09	3.952E-13	2.438E-05	3.062E+00	3.062E+00	3.062E+00	7.145E+00
3	4.295E+00	4.157E+00	2.579E+00	1.681E+00	2.912E-06	5.550E-09	2.915E-13	2.363E-05	3.293E+00	3.293E+00	3.293E+00	6.066E+00
4	5.098E+00	4.955E+00	3.013E+00	2.118E+00	5.421E-06	1.513E-08	1.152E-12	2.828E-05	3.925E+00	3.925E+00	3.925E+00	1.129E+01
5	5.364E+00	5.356E+00	4.216E+00	3.411E+00	1.686E-05	8.867E-08	1.239E-11	3.962E-05	4.242E+00	4.242E+00	4.242E+00	3.512E+01
6	5.402E+00	5.391E+00	4.294E+00	3.469E+00	1.224E-05	4.543E-08	4.556E-12	4.026E-05	4.270E+00	4.270E+00	4.270E+00	2.550E+01
7	6.760E+00	6.579E+00	3.983E+00	2.551E+00	4.682E-06	9.861E-09	5.866E-13	3.649E-05	5.211E+00	5.211E+00	5.211E+00	9.753E+00
8	6.347E+00	6.057E+00	3.285E+00	2.012E+00	3.458E-06	6.822E-09	3.790E-13	3.040E-05	4.798E+00	4.798E+00	4.798E+00	7.203E+00
9	6.040E+00	5.795E+00	3.130E+00	1.872E+00	2.966E-06	5.350E-09	2.696E-13	2.882E-05	4.590E+00	4.590E+00	4.590E+00	6.179E+00
10	2.657E+00	2.631E+00	1.847E+00	1.359E+00	3.472E-06	9.505E-09	7.060E-13	1.714E-05	2.084E+00	2.084E+00	2.084E+00	7.231E+00
11	1.844E+00	1.840E+00	1.484E+00	1.177E+00	3.286E-06	9.569E-09	7.515E-13	1.381E-05	1.457E+00	1.457E+00	1.457E+00	6.845E+00
12	2.689E+00	2.685E+00	2.139E+00	1.603E+00	3.568E-06	8.507E-09	5.571E-13	1.959E-05	2.127E+00	2.127E+00	2.127E+00	7.432E+00
13	5.096E+00	5.065E+00	3.605E+00	2.446E+00	4.484E-06	9.189E-09	5.295E-13	3.262E-05	4.011E+00	4.011E+00	4.011E+00	9.340E+00
14	9.309E+00	9.102E+00	5.392E+00	3.210E+00	4.818E-06	8.499E-09	4.336E-13	4.869E-05	7.209E+00	7.209E+00	7.209E+00	1.004E+01
15	1.009E+01	9.783E+00	5.402E+00	2.960E+00	3.789E-06	5.845E-09	2.650E-13	4.850E-05	7.749E+00	7.749E+00	7.749E+00	7.892E+00
16	5.691E+00	5.634E+00	3.873E+00	2.638E+00	5.086E-06	1.094E-08	6.598E-13	3.528E-05	4.462E+00	4.462E+00	4.462E+00	1.059E+01
17	8.520E+00	8.452E+00	5.859E+00	4.309E+00	1.267E-05	4.078E-08	3.582E-12	5.448E-05	6.694E+00	6.694E+00	6.694E+00	2.638E+01
18	9.749E-01	9.753E-01	8.454E-01	7.235E-01	7.657E-06	9.188E-08	2.875E-11	7.989E-06	7.725E-01	7.725E-01	7.725E-01	1.595E+01
19	3.445E-01	3.446E-01	3.313E-01	3.118E-01	7.745E-06	2.406E-07	1.995E-10	3.198E-06	2.730E-01	2.730E-01	2.730E-01	1.613E+01

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 1 NAME=N PB X= 0.0KM, Y= 2.6KM, Z= 0.0M, DIST= 2.6KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 1 NAME=N PB X= 0.0KM, Y= 2.6KM, Z= 0.0M, DIST= 2.6KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.01E-01	2.14E-03	1.99E-04	1.11E-02	4.31E-03	6.67E+00
INFANT	GROUND	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04
INFANT	CLOUD	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.29E-01	2.98E-02	2.78E-02	3.87E-02	3.19E-02	6.70E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.01E-01	1.62E-03	9.28E-05	4.93E-03	2.03E-03	6.67E+00
CHILD	GROUND	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04
CHILD	CLOUD	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02
CHILD	VEG. ING	1.64E-04	1.89E-03	5.62E-04	5.62E-04	4.58E-04	0.00E+00
CHILD	MEAT ING	2.92E-05	3.37E-04	1.00E-04	1.00E-04	8.16E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.28E-01	3.15E-02	2.84E-02	3.32E-02	3.02E-02	6.70E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.01E-01	3.99E-03	3.98E-05	2.11E-03	1.01E-03	6.67E+00
TEENAGE	GROUND	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04
TEENAGE	CLOUD	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02
TEENAGE	VEG. ING	2.70E-04	3.12E-03	9.26E-04	9.26E-04	7.54E-04	0.00E+00
TEENAGE	MEAT ING	4.73E-05	5.47E-04	1.63E-04	1.63E-04	1.32E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.29E-01	3.53E-02	2.87E-02	3.08E-02	2.95E-02	6.70E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.01E-01	2.35E-03	3.32E-05	1.76E-03	8.46E-04	6.67E+00
ADULT	GROUND	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04	7.62E-04
ADULT	CLOUD	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02	2.69E-02
ADULT	VEG. ING	3.72E-04	4.30E-03	1.28E-03	1.28E-03	1.04E-03	0.00E+00
ADULT	MEAT ING	8.27E-05	9.56E-04	2.84E-04	2.84E-04	2.31E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.29E-01	3.52E-02	2.92E-02	3.09E-02	2.97E-02	6.70E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 2 NAME=NNE PB X= 1.1KM, Y= 2.6KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 2 NAME=NNE PB X= 1.1KM, Y= 2.6KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	2.94E-01	1.85E-03	1.72E-04	9.60E-03	3.73E-03	4.89E+00
INFANT	GROUND	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04
INFANT	CLOUD	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	3.16E-01	2.36E-02	2.19E-02	3.14E-02	2.55E-02	4.91E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	2.94E-01	1.40E-03	8.04E-05	4.27E-03	1.76E-03	4.89E+00
CHILD	GROUND	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04
CHILD	CLOUD	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02
CHILD	VEG. ING	1.42E-04	1.64E-03	4.87E-04	4.87E-04	3.96E-04	0.00E+00
CHILD	MEAT ING	2.52E-05	2.92E-04	8.67E-05	8.67E-05	7.06E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	3.16E-01	2.51E-02	2.24E-02	2.66E-02	2.40E-02	4.91E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	2.94E-01	3.45E-03	3.44E-05	1.83E-03	8.78E-04	4.89E+00
TEENAGE	GROUND	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04
TEENAGE	CLOUD	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02
TEENAGE	VEG. ING	2.33E-04	2.70E-03	8.02E-04	8.02E-04	6.53E-04	0.00E+00
TEENAGE	MEAT ING	4.10E-05	4.73E-04	1.41E-04	1.41E-04	1.15E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	3.16E-01	2.84E-02	2.28E-02	2.45E-02	2.34E-02	4.91E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	2.94E-01	2.03E-03	2.87E-05	1.52E-03	7.32E-04	4.89E+00
ADULT	GROUND	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04	5.61E-04
ADULT	CLOUD	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02	2.12E-02
ADULT	VEG. ING	3.22E-04	3.73E-03	1.11E-03	1.11E-03	9.02E-04	0.00E+00
ADULT	MEAT ING	7.16E-05	8.28E-04	2.46E-04	2.46E-04	2.00E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	3.16E-01	2.84E-02	2.32E-02	2.47E-02	2.36E-02	4.91E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 3 NAME=NE PB X= 2.0KM, Y= 2.0KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 3 NAME=NE PB X= 2.0KM, Y= 2.0KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	3.23E-01	1.57E-03	1.46E-04	8.15E-03	3.17E-03	5.37E+00
INFANT	GROUND	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04
INFANT	CLOUD	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	3.43E-01	2.18E-02	2.04E-02	2.84E-02	2.34E-02	5.39E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	3.22E-01	1.19E-03	6.82E-05	3.62E-03	1.49E-03	5.37E+00
CHILD	GROUND	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04
CHILD	CLOUD	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02
CHILD	VEG. ING	1.20E-04	1.39E-03	4.13E-04	4.13E-04	3.37E-04	0.00E+00
CHILD	MEAT ING	2.14E-05	2.48E-04	7.36E-05	7.36E-05	6.00E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	3.43E-01	2.31E-02	2.08E-02	2.44E-02	2.21E-02	5.39E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	3.22E-01	2.93E-03	2.92E-05	1.55E-03	7.46E-04	5.37E+00
TEENAGE	GROUND	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04
TEENAGE	CLOUD	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02
TEENAGE	VEG. ING	1.98E-04	2.29E-03	6.81E-04	6.81E-04	5.54E-04	0.00E+00
TEENAGE	MEAT ING	3.48E-05	4.02E-04	1.19E-04	1.19E-04	9.73E-05	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	3.43E-01	2.59E-02	2.11E-02	2.26E-02	2.17E-02	5.39E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	3.22E-01	1.73E-03	2.44E-05	1.29E-03	6.21E-04	5.37E+00
ADULT	GROUND	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04	6.00E-04
ADULT	CLOUD	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02	1.97E-02
ADULT	VEG. ING	2.74E-04	3.16E-03	9.40E-04	9.40E-04	7.66E-04	0.00E+00
ADULT	MEAT ING	6.08E-05	7.03E-04	2.09E-04	2.09E-04	1.70E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	3.43E-01	2.58E-02	2.14E-02	2.27E-02	2.18E-02	5.39E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 4 NAME=ENE PB X= 3.6KM, Y= 1.5KM, Z= 0.0M, DIST= 3.9KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 4 NAME=ENE PB X= 3.6KM, Y= 1.5KM, Z= 0.0M, DIST= 3.9KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	3.83E-01	2.92E-03	2.73E-04	1.52E-02	5.90E-03	6.37E+00
INFANT	GROUND	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04
INFANT	CLOUD	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.08E-01	2.81E-02	2.54E-02	4.03E-02	3.11E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	3.83E-01	2.22E-03	1.27E-04	6.74E-03	2.78E-03	6.37E+00
CHILD	GROUND	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04
CHILD	CLOUD	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02
CHILD	VEG. ING	2.24E-04	2.59E-03	7.69E-04	7.69E-04	6.27E-04	0.00E+00
CHILD	MEAT ING	3.99E-05	4.61E-04	1.37E-04	1.37E-04	1.12E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.08E-01	3.04E-02	2.62E-02	3.28E-02	2.87E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	3.83E-01	5.46E-03	5.45E-05	2.89E-03	1.39E-03	6.37E+00
TEENAGE	GROUND	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04
TEENAGE	CLOUD	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02
TEENAGE	VEG. ING	3.69E-04	4.26E-03	1.27E-03	1.27E-03	1.03E-03	0.00E+00
TEENAGE	MEAT ING	6.48E-05	7.48E-04	2.22E-04	2.22E-04	1.81E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.08E-01	3.56E-02	2.67E-02	2.95E-02	2.78E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	3.83E-01	3.21E-03	4.54E-05	2.41E-03	1.16E-03	6.37E+00
ADULT	GROUND	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04	7.22E-04
ADULT	CLOUD	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02
ADULT	VEG. ING	5.10E-04	5.89E-03	1.75E-03	1.75E-03	1.43E-03	0.00E+00
ADULT	MEAT ING	1.13E-04	1.31E-03	3.89E-04	3.89E-04	3.17E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.09E-01	3.56E-02	2.73E-02	2.97E-02	2.81E-02	6.40E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 5 NAME=E PB X= 6.7KM, Y= 0.0KM, Z= 0.0M, DIST= 6.7KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 5 NAME=E PB X= 6.7KM, Y= 0.0KM, Z= 0.0M, DIST= 6.7KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.05E-01	9.09E-03	8.53E-04	4.72E-02	1.83E-02	6.70E+00
INFANT	GROUND	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04
INFANT	CLOUD	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.45E-01	4.84E-02	4.01E-02	8.65E-02	5.76E-02	6.74E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.04E-01	6.89E-03	3.98E-04	2.10E-02	8.63E-03	6.70E+00
CHILD	GROUND	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04
CHILD	CLOUD	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02
CHILD	VEG. ING	6.96E-04	8.05E-03	2.39E-03	2.39E-03	1.95E-03	0.00E+00
CHILD	MEAT ING	1.24E-04	1.43E-03	4.26E-04	4.26E-04	3.47E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.44E-01	5.57E-02	4.25E-02	6.31E-02	5.02E-02	6.74E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.04E-01	1.70E-02	1.71E-04	8.99E-03	4.32E-03	6.70E+00
TEENAGE	GROUND	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04
TEENAGE	CLOUD	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02
TEENAGE	VEG. ING	1.15E-03	1.33E-02	3.94E-03	3.94E-03	3.21E-03	0.00E+00
TEENAGE	MEAT ING	2.01E-04	2.33E-03	6.92E-04	6.92E-04	5.63E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.44E-01	7.19E-02	4.41E-02	5.29E-02	4.74E-02	6.74E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.04E-01	9.99E-03	1.42E-04	7.49E-03	3.60E-03	6.70E+00
ADULT	GROUND	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04	8.24E-04
ADULT	CLOUD	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02	3.85E-02
ADULT	VEG. ING	1.58E-03	1.83E-02	5.44E-03	5.44E-03	4.43E-03	0.00E+00
ADULT	MEAT ING	3.52E-04	4.07E-03	1.21E-03	1.21E-03	9.85E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.45E-01	7.17E-02	4.61E-02	5.34E-02	4.83E-02	6.74E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 6 NAME=ESE PB X= 4.7KM, Y= -2.0KM, Z= 0.0M, DIST= 5.1KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 6 NAME=ESE PB X= 4.7KM, Y= -2.0KM, Z= 0.0M, DIST= 5.1KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.07E-01	6.60E-03	6.17E-04	3.43E-02	1.33E-02	6.75E+00
INFANT	GROUND	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04
INFANT	CLOUD	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.47E-01	4.65E-02	4.06E-02	7.42E-02	5.33E-02	6.79E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.06E-01	5.00E-03	2.88E-04	1.52E-02	6.27E-03	6.75E+00
CHILD	GROUND	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04
CHILD	CLOUD	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02
CHILD	VEG. ING	5.06E-04	5.84E-03	1.74E-03	1.74E-03	1.41E-03	0.00E+00
CHILD	MEAT ING	9.01E-05	1.04E-03	3.09E-04	3.09E-04	2.52E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.47E-01	5.18E-02	4.23E-02	5.72E-02	4.79E-02	6.79E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.06E-01	1.23E-02	1.23E-04	6.53E-03	3.13E-03	6.75E+00
TEENAGE	GROUND	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04
TEENAGE	CLOUD	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02
TEENAGE	VEG. ING	8.33E-04	9.63E-03	2.86E-03	2.86E-03	2.33E-03	0.00E+00
TEENAGE	MEAT ING	1.46E-04	1.69E-03	5.02E-04	5.02E-04	4.09E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.47E-01	6.36E-02	4.34E-02	4.98E-02	4.58E-02	6.79E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.06E-01	7.25E-03	1.03E-04	5.44E-03	2.61E-03	6.75E+00
ADULT	GROUND	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04	8.11E-04
ADULT	CLOUD	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02	3.91E-02
ADULT	VEG. ING	1.15E-03	1.33E-02	3.95E-03	3.95E-03	3.22E-03	0.00E+00
ADULT	MEAT ING	2.56E-04	2.95E-03	8.78E-04	8.78E-04	7.15E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.47E-01	6.34E-02	4.49E-02	5.02E-02	4.65E-02	6.79E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 7 NAME=SE PB X= 2.3KM, Y= -2.3KM, Z= 0.0M, DIST= 3.3KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 7 NAME=SE PB X= 2.3KM, Y= -2.3KM, Z= 0.0M, DIST= 3.3KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	5.08E-01	2.52E-03	2.35E-04	1.31E-02	5.10E-03	8.45E+00
INFANT	GROUND	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04
INFANT	CLOUD	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	5.39E-01	3.34E-02	3.11E-02	4.40E-02	3.60E-02	8.48E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	5.07E-01	1.91E-03	1.10E-04	5.83E-03	2.40E-03	8.45E+00
CHILD	GROUND	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04
CHILD	CLOUD	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02
CHILD	VEG. ING	1.93E-04	2.24E-03	6.64E-04	6.64E-04	5.41E-04	0.00E+00
CHILD	MEAT ING	3.45E-05	3.98E-04	1.18E-04	1.18E-04	9.64E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	5.38E-01	3.54E-02	3.18E-02	3.75E-02	3.39E-02	8.48E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	5.07E-01	4.72E-03	4.70E-05	2.50E-03	1.20E-03	8.45E+00
TEENAGE	GROUND	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04
TEENAGE	CLOUD	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02
TEENAGE	VEG. ING	3.19E-04	3.68E-03	1.09E-03	1.09E-03	8.91E-04	0.00E+00
TEENAGE	MEAT ING	5.59E-05	6.46E-04	1.92E-04	1.92E-04	1.56E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	5.39E-01	3.99E-02	3.22E-02	3.47E-02	3.31E-02	8.48E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	5.07E-01	2.77E-03	3.92E-05	2.08E-03	9.99E-04	8.45E+00
ADULT	GROUND	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04	9.49E-04
ADULT	CLOUD	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02	2.99E-02
ADULT	VEG. ING	4.40E-04	5.09E-03	1.51E-03	1.51E-03	1.23E-03	0.00E+00
ADULT	MEAT ING	9.78E-05	1.13E-03	3.36E-04	3.36E-04	2.74E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	5.39E-01	3.99E-02	3.28E-02	3.48E-02	3.34E-02	8.48E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 8 NAME=SSE PB X= 1.2KM, Y= -2.9KM, Z= 0.0M, DIST= 3.1KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 8 NAME=SSE PB X= 1.2KM, Y= -2.9KM, Z= 0.0M, DIST= 3.1KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.77E-01	1.86E-03	1.74E-04	9.68E-03	3.76E-03	7.93E+00
INFANT	GROUND	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04
INFANT	CLOUD	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	5.01E-01	2.65E-02	2.48E-02	3.44E-02	2.84E-02	7.96E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.76E-01	1.41E-03	8.10E-05	4.30E-03	1.77E-03	7.93E+00
CHILD	GROUND	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04
CHILD	CLOUD	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02
CHILD	VEG. ING	1.43E-04	1.65E-03	4.91E-04	4.91E-04	4.00E-04	0.00E+00
CHILD	MEAT ING	2.55E-05	2.94E-04	8.74E-05	8.74E-05	7.12E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	5.01E-01	2.80E-02	2.53E-02	2.96E-02	2.69E-02	7.96E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.76E-01	3.48E-03	3.47E-05	1.84E-03	8.85E-04	7.93E+00
TEENAGE	GROUND	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04
TEENAGE	CLOUD	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02
TEENAGE	VEG. ING	2.35E-04	2.72E-03	8.08E-04	8.08E-04	6.58E-04	0.00E+00
TEENAGE	MEAT ING	4.13E-05	4.77E-04	1.42E-04	1.42E-04	1.16E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	5.01E-01	3.14E-02	2.57E-02	2.75E-02	2.63E-02	7.96E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.76E-01	2.05E-03	2.89E-05	1.54E-03	7.38E-04	7.93E+00
ADULT	GROUND	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04	8.71E-04
ADULT	CLOUD	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02	2.38E-02
ADULT	VEG. ING	3.25E-04	3.76E-03	1.12E-03	1.12E-03	9.09E-04	0.00E+00
ADULT	MEAT ING	7.22E-05	8.34E-04	2.48E-04	2.48E-04	2.02E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	5.01E-01	3.13E-02	2.61E-02	2.76E-02	2.65E-02	7.96E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 9 NAME=S PB X= 0.0KM, Y= -2.8KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 9 NAME=S PB X= 0.0KM, Y= -2.8KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.54E-01	1.60E-03	1.49E-04	8.30E-03	3.23E-03	7.55E+00
INFANT	GROUND	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04
INFANT	CLOUD	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.77E-01	2.47E-02	2.32E-02	3.14E-02	2.63E-02	7.57E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.53E-01	1.21E-03	6.95E-05	3.69E-03	1.52E-03	7.55E+00
CHILD	GROUND	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04
CHILD	CLOUD	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02
CHILD	VEG. ING	1.23E-04	1.42E-03	4.21E-04	4.21E-04	3.43E-04	0.00E+00
CHILD	MEAT ING	2.18E-05	2.52E-04	7.50E-05	7.50E-05	6.11E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.76E-01	2.60E-02	2.36E-02	2.73E-02	2.50E-02	7.57E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.53E-01	2.99E-03	2.98E-05	1.58E-03	7.60E-04	7.55E+00
TEENAGE	GROUND	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04
TEENAGE	CLOUD	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02
TEENAGE	VEG. ING	2.02E-04	2.33E-03	6.93E-04	6.93E-04	5.65E-04	0.00E+00
TEENAGE	MEAT ING	3.54E-05	4.10E-04	1.22E-04	1.22E-04	9.91E-05	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.77E-01	2.88E-02	2.39E-02	2.55E-02	2.45E-02	7.57E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.53E-01	1.76E-03	2.48E-05	1.32E-03	6.33E-04	7.55E+00
ADULT	GROUND	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04	8.32E-04
ADULT	CLOUD	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02
ADULT	VEG. ING	2.79E-04	3.22E-03	9.58E-04	9.58E-04	7.80E-04	0.00E+00
ADULT	MEAT ING	6.19E-05	7.16E-04	2.13E-04	2.13E-04	1.73E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.77E-01	2.88E-02	2.43E-02	2.56E-02	2.47E-02	7.57E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 10 NAME=SSW PB X= -1.5KM, Y= -3.6KM, Z= 0.0M, DIST= 3.9KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 10 NAME=SSW PB X= -1.5KM, Y= -3.6KM, Z= 0.0M, DIST= 3.9KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	2.00E-01	1.87E-03	1.75E-04	9.72E-03	3.78E-03	3.32E+00
INFANT	GROUND	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04
INFANT	CLOUD	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	2.16E-01	1.78E-02	1.61E-02	2.57E-02	1.97E-02	3.34E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	2.00E-01	1.42E-03	8.15E-05	4.32E-03	1.78E-03	3.32E+00
CHILD	GROUND	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04
CHILD	CLOUD	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02
CHILD	VEG. ING	1.43E-04	1.66E-03	4.93E-04	4.93E-04	4.01E-04	0.00E+00
CHILD	MEAT ING	2.56E-05	2.95E-04	8.78E-05	8.78E-05	7.15E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	2.16E-01	1.93E-02	1.66E-02	2.08E-02	1.82E-02	3.34E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	2.00E-01	3.50E-03	3.49E-05	1.85E-03	8.89E-04	3.32E+00
TEENAGE	GROUND	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04
TEENAGE	CLOUD	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02
TEENAGE	VEG. ING	2.36E-04	2.73E-03	8.11E-04	8.11E-04	6.61E-04	0.00E+00
TEENAGE	MEAT ING	4.15E-05	4.79E-04	1.42E-04	1.42E-04	1.16E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	2.16E-01	2.27E-02	1.69E-02	1.88E-02	1.76E-02	3.34E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	2.00E-01	2.06E-03	2.91E-05	1.54E-03	7.41E-04	3.32E+00
ADULT	GROUND	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04	3.86E-04
ADULT	CLOUD	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02	1.56E-02
ADULT	VEG. ING	3.26E-04	3.77E-03	1.12E-03	1.12E-03	9.13E-04	0.00E+00
ADULT	MEAT ING	7.25E-05	8.38E-04	2.49E-04	2.49E-04	2.03E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	2.16E-01	2.26E-02	1.73E-02	1.89E-02	1.78E-02	3.34E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 11 NAME=SW PB X= -2.8KM, Y= -2.8KM, Z= 0.0M, DIST= 4.0KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 11 NAME=SW PB X= -2.8KM, Y= -2.8KM, Z= 0.0M, DIST= 4.0KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	1.39E-01	1.77E-03	1.65E-04	9.20E-03	3.58E-03	2.31E+00
INFANT	GROUND	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04
INFANT	CLOUD	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	1.52E-01	1.54E-02	1.37E-02	2.28E-02	1.72E-02	2.32E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	1.39E-01	1.34E-03	7.72E-05	4.09E-03	1.68E-03	2.31E+00
CHILD	GROUND	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04
CHILD	CLOUD	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02
CHILD	VEG. ING	1.36E-04	1.57E-03	4.66E-04	4.66E-04	3.80E-04	0.00E+00
CHILD	MEAT ING	2.42E-05	2.79E-04	8.31E-05	8.31E-05	6.77E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	1.52E-01	1.68E-02	1.42E-02	1.82E-02	1.57E-02	2.32E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	1.39E-01	3.31E-03	3.31E-05	1.75E-03	8.41E-04	2.31E+00
TEENAGE	GROUND	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04
TEENAGE	CLOUD	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02
TEENAGE	VEG. ING	2.24E-04	2.58E-03	7.68E-04	7.68E-04	6.26E-04	0.00E+00
TEENAGE	MEAT ING	3.93E-05	4.54E-04	1.35E-04	1.35E-04	1.10E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	1.52E-01	1.99E-02	1.45E-02	1.62E-02	1.52E-02	2.32E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	1.39E-01	1.95E-03	2.76E-05	1.46E-03	7.01E-04	2.31E+00
ADULT	GROUND	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04	2.73E-04
ADULT	CLOUD	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02	1.33E-02
ADULT	VEG. ING	3.09E-04	3.57E-03	1.06E-03	1.06E-03	8.64E-04	0.00E+00
ADULT	MEAT ING	6.86E-05	7.93E-04	2.36E-04	2.36E-04	1.92E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	1.53E-01	1.99E-02	1.49E-02	1.63E-02	1.53E-02	2.32E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 12 NAME=WSW PB X= -3.0KM, Y= -1.3KM, Z= 0.0M, DIST= 3.3KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 12 NAME=WSW PB X= -3.0KM, Y= -1.3KM, Z= 0.0M, DIST= 3.3KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	2.02E-01	1.92E-03	1.79E-04	9.99E-03	3.88E-03	3.36E+00
INFANT	GROUND	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04
INFANT	CLOUD	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	2.21E-01	2.06E-02	1.89E-02	2.87E-02	2.26E-02	3.38E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	2.02E-01	1.46E-03	8.37E-05	4.44E-03	1.83E-03	3.36E+00
CHILD	GROUND	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04
CHILD	CLOUD	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02
CHILD	VEG. ING	1.47E-04	1.70E-03	5.06E-04	5.06E-04	4.12E-04	0.00E+00
CHILD	MEAT ING	2.63E-05	3.03E-04	9.02E-05	9.02E-05	7.35E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	2.21E-01	2.22E-02	1.94E-02	2.37E-02	2.10E-02	3.38E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	2.02E-01	3.59E-03	3.59E-05	1.90E-03	9.14E-04	3.36E+00
TEENAGE	GROUND	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04
TEENAGE	CLOUD	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02
TEENAGE	VEG. ING	2.43E-04	2.81E-03	8.34E-04	8.34E-04	6.79E-04	0.00E+00
TEENAGE	MEAT ING	4.26E-05	4.93E-04	1.46E-04	1.46E-04	1.19E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	2.21E-01	2.56E-02	1.97E-02	2.16E-02	2.04E-02	3.38E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	2.02E-01	2.11E-03	2.99E-05	1.59E-03	7.61E-04	3.36E+00
ADULT	GROUND	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04	3.94E-04
ADULT	CLOUD	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02	1.83E-02
ADULT	VEG. ING	3.35E-04	3.88E-03	1.15E-03	1.15E-03	9.38E-04	0.00E+00
ADULT	MEAT ING	7.45E-05	8.61E-04	2.56E-04	2.56E-04	2.08E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	2.21E-01	2.55E-02	2.01E-02	2.17E-02	2.06E-02	3.38E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 13 NAME=W PB X= -2.8KM, Y= 0.0KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 13 NAME=W PB X= -2.8KM, Y= 0.0KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	3.83E-01	2.42E-03	2.25E-04	1.26E-02	4.88E-03	6.37E+00
INFANT	GROUND	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04
INFANT	CLOUD	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.12E-01	3.15E-02	2.93E-02	4.17E-02	3.40E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	3.83E-01	1.83E-03	1.05E-04	5.58E-03	2.30E-03	6.37E+00
CHILD	GROUND	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04
CHILD	CLOUD	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02
CHILD	VEG. ING	1.85E-04	2.14E-03	6.36E-04	6.36E-04	5.18E-04	0.00E+00
CHILD	MEAT ING	3.30E-05	3.81E-04	1.13E-04	1.13E-04	9.23E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.12E-01	3.35E-02	3.00E-02	3.55E-02	3.20E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	3.83E-01	4.52E-03	4.50E-05	2.39E-03	1.15E-03	6.37E+00
TEENAGE	GROUND	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04
TEENAGE	CLOUD	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02
TEENAGE	VEG. ING	3.05E-04	3.53E-03	1.05E-03	1.05E-03	8.54E-04	0.00E+00
TEENAGE	MEAT ING	5.36E-05	6.19E-04	1.84E-04	1.84E-04	1.50E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.12E-01	3.78E-02	3.04E-02	3.27E-02	3.13E-02	6.40E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	3.83E-01	2.66E-03	3.75E-05	1.99E-03	9.57E-04	6.37E+00
ADULT	GROUND	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04	7.34E-04
ADULT	CLOUD	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02	2.84E-02
ADULT	VEG. ING	4.21E-04	4.87E-03	1.45E-03	1.45E-03	1.18E-03	0.00E+00
ADULT	MEAT ING	9.36E-05	1.08E-03	3.22E-04	3.22E-04	2.62E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.12E-01	3.77E-02	3.09E-02	3.29E-02	3.15E-02	6.40E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 14 NAME=WNW PB X= -2.2KM, Y= 0.9KM, Z= 0.0M, DIST= 2.3KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 14 NAME=WNW PB X= -2.2KM, Y= 0.9KM, Z= 0.0M, DIST= 2.3KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	6.99E-01	2.60E-03	2.42E-04	1.35E-02	5.24E-03	1.16E+01
INFANT	GROUND	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03
INFANT	CLOUD	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	7.38E-01	4.21E-02	3.97E-02	5.30E-02	4.47E-02	1.17E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	6.99E-01	1.97E-03	1.13E-04	5.99E-03	2.47E-03	1.16E+01
CHILD	GROUND	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03
CHILD	CLOUD	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02
CHILD	VEG. ING	1.99E-04	2.30E-03	6.84E-04	6.84E-04	5.57E-04	0.00E+00
CHILD	MEAT ING	3.55E-05	4.10E-04	1.22E-04	1.22E-04	9.92E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	7.38E-01	4.42E-02	4.04E-02	4.63E-02	4.26E-02	1.17E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	6.99E-01	4.85E-03	4.83E-05	2.57E-03	1.23E-03	1.16E+01
TEENAGE	GROUND	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03
TEENAGE	CLOUD	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02
TEENAGE	VEG. ING	3.28E-04	3.79E-03	1.13E-03	1.13E-03	9.17E-04	0.00E+00
TEENAGE	MEAT ING	5.76E-05	6.65E-04	1.98E-04	1.98E-04	1.61E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	7.38E-01	4.88E-02	4.09E-02	4.34E-02	4.18E-02	1.17E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	6.98E-01	2.85E-03	4.03E-05	2.14E-03	1.03E-03	1.16E+01
ADULT	GROUND	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03	1.31E-03
ADULT	CLOUD	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02	3.82E-02
ADULT	VEG. ING	4.53E-04	5.23E-03	1.56E-03	1.56E-03	1.27E-03	0.00E+00
ADULT	MEAT ING	1.01E-04	1.16E-03	3.46E-04	3.46E-04	2.81E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	7.39E-01	4.87E-02	4.14E-02	4.35E-02	4.21E-02	1.17E+01

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 15 NAME=NW PB X= -1.4KM, Y= 1.4KM, Z= 0.0M, DIST= 2.0KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 15 NAME=NW PB X= -1.4KM, Y= 1.4KM, Z= 0.0M, DIST= 2.0KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	7.58E-01	2.04E-03	1.90E-04	1.06E-02	4.12E-03	1.26E+01
INFANT	GROUND	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03
INFANT	CLOUD	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	7.95E-01	3.92E-02	3.74E-02	4.78E-02	4.13E-02	1.27E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	7.57E-01	1.55E-03	8.87E-05	4.71E-03	1.94E-03	1.26E+01
CHILD	GROUND	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03
CHILD	CLOUD	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02
CHILD	VEG. ING	1.57E-04	1.81E-03	5.38E-04	5.38E-04	4.38E-04	0.00E+00
CHILD	MEAT ING	2.79E-05	3.22E-04	9.58E-05	9.58E-05	7.80E-05	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	7.95E-01	4.09E-02	3.79E-02	4.25E-02	3.97E-02	1.27E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	7.57E-01	3.82E-03	3.80E-05	2.02E-03	9.70E-04	1.26E+01
TEENAGE	GROUND	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03
TEENAGE	CLOUD	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02
TEENAGE	VEG. ING	2.58E-04	2.98E-03	8.86E-04	8.86E-04	7.21E-04	0.00E+00
TEENAGE	MEAT ING	4.53E-05	5.23E-04	1.55E-04	1.55E-04	1.27E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	7.95E-01	4.45E-02	3.83E-02	4.03E-02	3.90E-02	1.27E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	7.57E-01	2.24E-03	3.17E-05	1.68E-03	8.08E-04	1.26E+01
ADULT	GROUND	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03
ADULT	CLOUD	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02	3.58E-02
ADULT	VEG. ING	3.56E-04	4.12E-03	1.22E-03	1.22E-03	9.96E-04	0.00E+00
ADULT	MEAT ING	7.91E-05	9.14E-04	2.72E-04	2.72E-04	2.21E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	7.95E-01	4.45E-02	3.87E-02	4.04E-02	3.92E-02	1.27E+01

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 16 NAME=NNW PB X= -1.1KM, Y= 2.6KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 16 NAME=NNW PB X= -1.1KM, Y= 2.6KM, Z= 0.0M, DIST= 2.8KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	4.28E-01	2.74E-03	2.55E-04	1.42E-02	5.53E-03	7.11E+00
INFANT	GROUND	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04
INFANT	CLOUD	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	4.59E-01	3.42E-02	3.17E-02	4.56E-02	3.69E-02	7.14E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	4.27E-01	2.08E-03	1.19E-04	6.33E-03	2.60E-03	7.11E+00
CHILD	GROUND	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04
CHILD	CLOUD	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02
CHILD	VEG. ING	2.10E-04	2.43E-03	7.22E-04	7.22E-04	5.88E-04	0.00E+00
CHILD	MEAT ING	3.74E-05	4.33E-04	1.29E-04	1.29E-04	1.05E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	4.59E-01	3.64E-02	3.24E-02	3.86E-02	3.47E-02	7.14E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	4.27E-01	5.12E-03	5.11E-05	2.71E-03	1.30E-03	7.11E+00
TEENAGE	GROUND	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04
TEENAGE	CLOUD	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02
TEENAGE	VEG. ING	3.46E-04	4.00E-03	1.19E-03	1.19E-03	9.68E-04	0.00E+00
TEENAGE	MEAT ING	6.08E-05	7.02E-04	2.09E-04	2.09E-04	1.70E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	4.59E-01	4.12E-02	3.29E-02	3.55E-02	3.39E-02	7.14E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	4.27E-01	3.01E-03	4.26E-05	2.26E-03	1.09E-03	7.11E+00
ADULT	GROUND	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04	8.17E-04
ADULT	CLOUD	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02	3.06E-02
ADULT	VEG. ING	4.78E-04	5.52E-03	1.64E-03	1.64E-03	1.34E-03	0.00E+00
ADULT	MEAT ING	1.06E-04	1.23E-03	3.65E-04	3.65E-04	2.97E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	4.59E-01	4.12E-02	3.35E-02	3.57E-02	3.41E-02	7.14E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 17 NAME=Nearest Resident Eas X= 4.5KM, Y= 0.0KM, Z= 0.0M, DIST= 4.5KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 17 NAME=Nearest Resident Eas X= 4.5KM, Y= 0.0KM, Z= 0.0M, DIST= 4.5KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	6.41E-01	6.83E-03	6.38E-04	3.55E-02	1.38E-02	1.07E+01
INFANT	GROUND	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03
INFANT	CLOUD	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	6.92E-01	5.74E-02	5.12E-02	8.60E-02	6.44E-02	1.07E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	6.40E-01	5.18E-03	2.98E-04	1.58E-02	6.49E-03	1.07E+01
CHILD	GROUND	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03
CHILD	CLOUD	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02
CHILD	VEG. ING	5.23E-04	6.05E-03	1.80E-03	1.80E-03	1.46E-03	0.00E+00
CHILD	MEAT ING	9.32E-05	1.08E-03	3.20E-04	3.20E-04	2.61E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	6.91E-01	6.29E-02	5.30E-02	6.85E-02	5.88E-02	1.07E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	6.40E-01	1.28E-02	1.28E-04	6.75E-03	3.24E-03	1.07E+01
TEENAGE	GROUND	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03
TEENAGE	CLOUD	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02
TEENAGE	VEG. ING	8.62E-04	9.96E-03	2.96E-03	2.96E-03	2.41E-03	0.00E+00
TEENAGE	MEAT ING	1.51E-04	1.75E-03	5.20E-04	5.20E-04	4.23E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	6.92E-01	7.50E-02	5.42E-02	6.08E-02	5.67E-02	1.07E+01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	6.40E-01	7.50E-03	1.06E-04	5.63E-03	2.70E-03	1.07E+01
ADULT	GROUND	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03	1.25E-03
ADULT	CLOUD	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02	4.93E-02
ADULT	VEG. ING	1.19E-03	1.38E-02	4.09E-03	4.09E-03	3.33E-03	0.00E+00
ADULT	MEAT ING	2.64E-04	3.06E-03	9.08E-04	9.08E-04	7.40E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	6.92E-01	7.49E-02	5.57E-02	6.12E-02	5.74E-02	1.07E+01

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 18 NAME=Nearest Resident Sou X= 0.0KM, Y= -13.4KM, Z= 0.0M, DIST= 13.4KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 18 NAME=Nearest Resident Sou X= 0.0KM, Y= -13.4KM, Z= 0.0M, DIST= 13.4KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	7.45E-02	4.13E-03	3.94E-04	2.14E-02	8.33E-03	1.22E+00
INFANT	GROUND	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04
INFANT	CLOUD	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	8.27E-02	1.24E-02	8.65E-03	2.97E-02	1.66E-02	1.23E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	7.38E-02	3.13E-03	1.84E-04	9.53E-03	3.92E-03	1.22E+00
CHILD	GROUND	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04
CHILD	CLOUD	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03
CHILD	VEG. ING	3.16E-04	3.66E-03	1.09E-03	1.09E-03	8.85E-04	0.00E+00
CHILD	MEAT ING	5.64E-05	6.51E-04	1.94E-04	1.94E-04	1.58E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	8.24E-02	1.57E-02	9.72E-03	1.91E-02	1.32E-02	1.23E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	7.38E-02	7.71E-03	7.88E-05	4.08E-03	1.96E-03	1.22E+00
TEENAGE	GROUND	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04
TEENAGE	CLOUD	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03
TEENAGE	VEG. ING	5.21E-04	6.02E-03	1.79E-03	1.79E-03	1.46E-03	0.00E+00
TEENAGE	MEAT ING	9.15E-05	1.06E-03	3.14E-04	3.14E-04	2.56E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	8.27E-02	2.30E-02	1.04E-02	1.44E-02	1.19E-02	1.23E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	7.37E-02	4.54E-03	6.56E-05	3.40E-03	1.63E-03	1.22E+00
ADULT	GROUND	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04	1.68E-04
ADULT	CLOUD	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03	8.09E-03
ADULT	VEG. ING	7.20E-04	8.32E-03	2.47E-03	2.47E-03	2.01E-03	0.00E+00
ADULT	MEAT ING	1.60E-04	1.85E-03	5.49E-04	5.49E-04	4.47E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	8.28E-02	2.30E-02	1.13E-02	1.47E-02	1.24E-02	1.23E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 19 NAME=Wright X= 26.0KM, Y= 18.9KM, Z= 0.0M, DIST= 32.2KM, IRTYPE=10

40CFR190 ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	GROUND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	CLOUD	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TIME STEP NUMBER 1, DURATION IN YRS IS...100.0

NUMBER 19 NAME=Wright X= 26.0KM, Y= 18.9KM, Z= 0.0M, DIST= 32.2KM, IRTYPE=10

TOTAL ANNUAL DOSE COMMITMENTS COMPUTED FOR THIS LOCATION, MREM/YR

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
INFANT	INHAL.	2.72E-02	4.18E-03	4.18E-04	2.17E-02	8.43E-03	4.31E-01
INFANT	GROUND	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05
INFANT	CLOUD	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03
INFANT	VEG. ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MEAT ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
INFANT	TOTALS	3.07E-02	7.70E-03	3.94E-03	2.52E-02	1.20E-02	4.34E-01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
CHILD	INHAL.	2.65E-02	3.17E-03	1.95E-04	9.64E-03	3.97E-03	4.31E-01
CHILD	GROUND	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05
CHILD	CLOUD	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03
CHILD	VEG. ING	3.20E-04	3.70E-03	1.10E-03	1.10E-03	8.95E-04	0.00E+00
CHILD	MEAT ING	5.70E-05	6.59E-04	1.96E-04	1.96E-04	1.59E-04	0.00E+00
CHILD	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CHILD	TOTALS	3.04E-02	1.10E-02	5.01E-03	1.45E-02	8.54E-03	4.34E-01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
TEENAGE	INHAL.	2.65E-02	7.80E-03	8.34E-05	4.13E-03	1.98E-03	4.31E-01
TEENAGE	GROUND	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05
TEENAGE	CLOUD	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03
TEENAGE	VEG. ING	5.27E-04	6.09E-03	1.81E-03	1.81E-03	1.47E-03	0.00E+00
TEENAGE	MEAT ING	9.25E-05	1.07E-03	3.18E-04	3.18E-04	2.59E-04	0.00E+00
TEENAGE	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TEENAGE	TOTALS	3.07E-02	1.85E-02	5.73E-03	9.78E-03	7.24E-03	4.34E-01

AGE	PATHWAY	EFFECTIV	BONE	AVG.LUNG	LIVER	KIDNEY	BRONCHI
ADULT	INHAL.	2.64E-02	4.59E-03	6.95E-05	3.44E-03	1.65E-03	4.31E-01
ADULT	GROUND	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05	7.90E-05
ADULT	CLOUD	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03	3.44E-03
ADULT	VEG. ING	7.28E-04	8.41E-03	2.50E-03	2.50E-03	2.04E-03	0.00E+00
ADULT	MEAT ING	1.62E-04	1.87E-03	5.55E-04	5.55E-04	4.52E-04	0.00E+00
ADULT	MILK ING	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ADULT	TOTALS	3.08E-02	1.84E-02	6.65E-03	1.00E-02	7.66E-03	4.34E-01

Program execution time = 1.43 seconds