

September 10, 1982

CANCER

	1	2	3	4	5	6	7
Atoll	Initial Population	30-Year Bone Marrow Dose* (rem)	30-Year Person Rems (Col. 1 x Col. 2)	Number of Births Expected in 30 Years	30-Year Dose (0.36 x Col. 2) (rem)	30-Year Additional Person Rems (Col. 4 x Col. 5)	Total Person Rems (Col. 3 + Col. 6)
Rongelap (Rongelap)	200	3.4	680.	460	1.22	563	1243
(Naen)		20.	4000.	460	7.2	3312	7312
(Rongelap)	130	3.4	442.	300	1.22	366	808
Likiep (Likiep)	600	.60	360.	1400	.216	302.4	662
(Rikuraru)	600	.40	240.	1400	.144	201.6	
Mejit	300	.73	219.	700	.263	183.96	403
Utrik (Aon)	250	.72	180.	580	.259	150.3	330
(Utrik)		.68	170.		.2448	141.98	312
Ujelang	100	.15	15.	230	.054	12.4	27
Ailuk (Kapen)	400	2.5	1000.	930	.9	837.	1837
(Bigen)	400	1.3	520.	930	.468	435.24	955
(Berejao)	400	.82	320.	930	.295	274.5	595
(Ailuk)	400	.69	276.	930	.248	231.	507
Wotho (Wotho)	100	.23	23.	230	.0828	19.	42
(Medjeron)	100	.33	33.	230	.1188	27.3	60
(Kabben)	100	.20	20.	230	.072	16.6	37
Taka (Taka)	100	.19	19.	230	.068	15.7	35
Jemo	100	.50	50.	230	.18	41.4	91
Bikar	100	1.5	150.	230	.54	124.2	274
Rongerik (Rongerik)	100	3.8	380.	230	1.368	314.6	695
Ailinginae (Knox)	100	1.8	180	230	.648	149.0	329

* Highest dose values were used. These were based on BNL Community A or B Survey.

RISK	9			10		11		12		13		14
	BEIR-I Absolute (Col. 7 x 87 x 10 ⁻⁶ rem ⁻¹)	BEIR-I Relative (Col. 7 x 458 x 10 ⁻⁶ rem ⁻¹)	Number of Cancer Deaths	BEIR-III Absolute (Col. 7 x 67 x 10 ⁻⁶ rem ⁻¹)	BEIR-III Relative (Col. 7 x 430 x 10 ⁻⁶ rem ⁻¹)	Deaths in 30 years	Natural Rates (15% of All Deaths)	Cancer (Col. 11 x 10 ⁻⁶ rem ⁻¹)	Perce Increa (Col. 11 x 10 ⁻⁶ rem ⁻¹)			
.108	.569	.083	.534	9	5.9	60	9	5.9				
.636	3.35	.49	3.14	9	34.9	60	9	34.9				
.070	.370	.054	.347	6	5.7	40	6	5.7				
.0576	.303	.044	.285	27	1.0	180	27	1.0				
.0384	.202	.029	.190	27	.7	180	27	.7				
.035	.185	.027	.173	13.5	1.3	90	13.5	1.3				
.0287	.151	.022	.142	10.5	1.3	70	10.5	1.3				
.0271	.143	.021	.134	10.5	1.2	70	10.5	1.2				
.00235	.012	.0018	.012	4.5	.2	30	4.5	.2				
.1598	.841	.123	.79	18.	4.4	120	18.	4.4				
.0831	.437	.064	.41	18.	2.3	120	18.	2.3				
.0518	.273	.04	.256	18.	1.4	120	18.	1.4				
.0441	.232	.034	.218	18.	1.2	120	18.	1.2				
.00365	.019	.0028	.018	4.5	.4	30	4.5	.4				
.00522	.027	.0040	.026	4.5	.5	30	4.5	.5				
.00322	.017	.0025	.016	4.5	.3	30	4.5	.3				
.00305	.016	.0023	.015	4.5	.3	30	4.5	.3				
.00792	.042	.0061	.039	4.5	.8	30	4.5	.8				
.0238	.125	.018	.118	4.5	2.6	30	4.5	2.6				
.0605	.318	.047	.299	4.5	6.6	30	4.5	6.6				
.0286	.151	.022	.141	4.5	3.1	30	4.5	3.1				

Rongelap (F
(P
(P

Likiep (Lil
(Ril

Mejit

Utrik (Aon
(Utr

Ujelang

Atluk (Kapf
(Big
(Ber
(Atlu

Wotho (Wot
(Med
(Kabf

Taka (Taka
Jemo
Bikar
Rongerik
Atlinginae

* Highest

REPOSITORY PNNL
COLLECTION Marshall Islands
BOX No. 5688
FOLDER Calculations 9/82

DOCUMENT DOES NOT CONTAIN ECI

Reviewed by DG Kusky Date 4/30/97