

Territorial and International
Affairs
U.S. Department of the Interior
Washington, D.C. 20240

Attached are the estimated radiation dose projections to the people of Bikini should they return to live on Bikini Island or on Eneu Island. The various scenarios (e.g., residence island, time spent on Bikini or Eneu Islands, diet, rotation times) were requested by Mr. Jonathan Weisgall in consultation both with you and with us.

The table is self-explanatory. For example, should the people (a) return to reside on Eneu Island, (b) spend 10% of their time on Bikini Island (but eat no food from Bikini Island), and (c) consume a diet 50% of which consists of imported foods, the maximum annual dose to the bone marrow (the organ receiving the greatest amount of radiation) is estimated to be about 450 millirem per year, with a 30-year dose of 3000-3500 millirem. These values compare with U.S. radiation exposure limits of 500 millirem per year and 5000 millirem over 30 years, respectively.

The dose levels in the table assume that the people would return to Bikini Atoll during 1981. Also, it is assumed that, except for the case in which residence is on Bikini Island, no food from Bikini Island will be eaten.

These estimates are based upon the most recent analyses of data from Bikini Atoll which was obtained during the Northern Marshall Islands survey, as well as upon other information. We have no reason to believe that these estimated values will change, but should additional information become available which might significantly affect these estimates, you will immediately be informed.

DOCUMENT DOES NOT CONTAIN ECI

Reviewed by WJ Rushee Date 5/1/97

Even though the above are not available at this time, we did not wish to delay the attached information in view of its significance to your planning activities.

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Should there be any questions, please feel free to call me at 353-3208.

JDeal

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WWBurr

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Attachment

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ESTIMATED RA
 ENEU AND/OR BIKINI ISL

<u>Residence Island</u>	<u>Years on/ Years off</u>	<u>Time on Eneu (%)</u>	<u>Time on Bikini</u>
Bikini	Permanent	0	100
Bikini	Permanent	0	100
Eneu	Permanent	100	0
Eneu	Permanent	100	0
Eneu	Permanent	90	10
Eneu	Permanent	90	10
Eneu	1/1	100	0
Eneu	1/1	100	0
Eneu	1/1	90	10
Eneu	1/1	90	10
Eneu	1/2	100	0
Eneu	1/2	100	0
Eneu	1/2	90	10
Eneu	1/2	90	10
Eneu	1/3	100	0
Eneu	1/3	100	0
Eneu	1/3	90	10
Eneu	1/3	90	10

* Doses are rounded off.

** Federal Radiation Council exposure limit is 50 mrem/yr (numerical value given is three times the average value)

*** Federal Radiation Council exposure limit is a maximum of 500 mrem/yr (numerical value given is three times the average value based upon averaged parameters of radionuclides, diet); any specific individual's exposure may be higher than the amount

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Reviewed by DG Kucina Date 5/1/97