

Department of Energy
Washington, D.C. 20545

MSG. NR. _____
(COMM CENTER USE ONLY)

Communications Center
Germentown, Maryland

THIS COVER SHEET IS FOR THE TRANSMITTAL OF UNCLASSIFIED MESSAGES ONLY

USE BLACK FELT
TIP PEN ONLY

XEROX 200 TELECOPIER
FTS 233-3870
COMMERCIAL 301-353-3870

REMOVE ALL STAPLES

VERIFICATION
FTS 233-3486
COMMERCIAL 301-353-3486

DATE _____

TO: W. J. Bair (Battelle)
NAME

Richland, Wash.
Pacific Northwest Lab.
LOCATION

TELEPHONE NR. _____

FROM: L. Joe Deal
NAME

OES
LOCATION

353-4093
TELEPHONE NR.

THIS TRANSMITTAL CONSISTS OF 1 PAGES. (EXCLUDING COVER SHEET)

I WANT ORIGINAL BACK: YES XX NO _____

NAME Nancy Rogers EXT. 4093 (FOR PICKUP)

OR MAIL STOP E-201 (IF BY MAIL) PLEASE SEND.

THIS MESSAGE CONTAINS ONLY UNCLASSIFIED INFORMATION: _____
SIGNATURE

Bill Bair and Committee.

These are the dose predictions for Bikini people if they resettle again on Eneu Island which we want to discuss with you tomorrow evening. We expect to have a statement to go with this available then.

PREDICTED MAXIMUM ANNUAL WHOLE BODY AND BONE MARROW DOSES*
RESIDENCE ON ENEU ISLAND

	MRem/YR	PLANNING CRITERIA** ENEU/ETA	FEDERAL** STANDARDS
WHOLE BODY	DIET WITH IMPORTS 166	250	500
BONE MARROW	DIET WITHOUT IMPORTS 187	250	500

*PREDICTED WHOLE BODY AND BONE MARROW DOSES WILL BE HIGHER FOR INDIVIDUALS WITH A TYPICAL DIET.

**APPLY TO INDIVIDUAL IN THE POPULATION.

COMPARISON OF ENEU ISLAND AND NATURAL BACKGROUND EXPOSURES
mREM/YR

	BIKINI ATOLL NATURAL BACKGROUND	US NATURAL BACKGROUND	RESIDENCE* ON ENEU ISLAND
WHOLE BODY	48	125	166/255
BONE MARROW	44	122	187/299

WITH IMPORTS/NO IMPORTS

*THIS IS THE PREDICTED EXPOSURE DUE TO RESIDUAL RADIONUCLIDES FROM NUCLEAR TESTING.

PREDICTED 30-YEAR WHOLE BODY DOSES*
RESIDENCE ON ENEU ISLAND

mREM

DIET WITH IMPORTS	5,100
DIET WITHOUT IMPORTS	7,100

PLANNING CRITERIA ENEWETAK	4,000
FEDERAL STANDARDS	5,000

WHOLE BODY

*PREDICTED WHOLE BODY DOSES WILL BE HIGHER FOR RESIDENCE ON ENEU ISLAND IF FOOD GROWN ON BIKINI ISLAND IS EATEN.

TOTAL 30 YEAR DOSE
BIKINI IS. RESIDENTS RESETTLED ON ENEU IS.

mREM

BIKINI IS. RESIDENCE	1200	PREDICTED 30 YEAR DOSE, ENEU IS.	6300/8300
ADULT MALE	930		6030/8030
ADULT FEMALE	1300		6400/8400
CHILDREN			
IMPORTS/MO IMPORTS			
TOTAL*			

*FEDERAL STANDARD = 5000

3/2/79

SUMMARY, MEASURED BODY BURDENS ¹³⁷Cs

BIKINI IS. RESIDENTS

	μ Ci				'78-'79
	<u>1974</u>	<u>1977</u>	<u>1978</u>	<u>1979*</u>	<u>REDUCTION FACTOR</u>
MALE	.1	1.3	1.9	1.0	2.3
FEMALE	.04	.9	1.4	.4	3.8
CHILDREN	—	—	1.2	.1	12

*45 RESIDENTS MEASURED IN JANUARY '79 AT MAJURO ATOLL WERE AMONG 101 MEASURED IN APRIL '78 AT BIKINI IS.

3/2/79

AVERAGE TOTAL BODY DOSES - EXTERNAL PLUS INTERNAL
BIKINI RESIDENTS - mREM

DOSE
DURING RESIDENCE

DOSE
COMMITMENT

600 mrem

1,100

110

60 mrem

840

85

40 "

1,200

140

ADULT MALES

ADULT FEMALES

CHILDREN
(5-14 YEARS)

REPOSITORY PNNL
COLLECTION Marshall Islands
BOX No. 5684
FOLDER Bikini - 1979