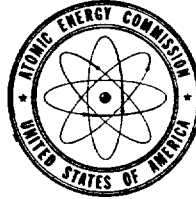


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SECY-651

November 18, 1970



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INTERIM STAFF REPORT ON 1970 BIKINI ATOLL ENVIRONMENTAL SURVEY

Note by the Secretary

The General Manager has requested that the attached memorandum of November 17, 1970 from the Director of Operational Safety, with enclosure, be circulated for the information of the Commission.

W. B. McCool

Secretary of the Commission

DISTRIBUTION

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H.L. Hoppe 10/4/85 REVIEWED BY DATE

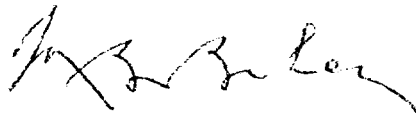
By: W. Tench 3/5/87

Administrative stamp area containing: US DOE ARCHIVES, 326 U.S. ATOMIC ENERGY COMMISSION, RG, Collection 70-72 Secretariat, Box 7821, Folder MHS 3 Radiation v. 2

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renabilitation program. The results from all sampling are considered to be final values. Data from soil sampling are not to be available until the end of November. At that time a final report of survey activities will be prepared.



Martin B. Biles, Director  
Division of Operational Safety

Enclosure:  
Bikini Atoll Report

Considerable progress by Trust Territory was observed in the agricultural portion of the rehabilitation program. The coconut tree nursery contained several thousand seedlings in various stages of growth and the job of transplanting trees into rows has been completed for much of the Island of Eneu. Planting is to start later this year on Bikini Island.

The construction of housing had not started as of June 1970 and would appear to be still some time in the future.<sup>2/</sup> At the time of the team visit, there was a small Trust Territory administrative

1/ The total cost of the 1970 survey was about \$110,000. DBM provided \$17,000 for logistics support. NV provided \$30,000 for PHS travel and sample analysis and \$63,000 for University of Washington participation including program planning, transportation, equipment, salaries, and sample analysis. These contractor forces were provided from the capabilities being maintained to support AEC readiness-to-test response in the Pacific, and their costs were funded from the Readiness Program.

2/ Plans reported in March 1970 by Trust Territory officials called for initial construction of 30 houses on Bikini Island in 1970. While some equipment and building materials were observed in stockpile on nearby Eneu Island, such construction had not begun at the time of the survey. When contacted on November 5, 1970, a Trust Territory official reported that 40 houses were currently financed with completion due in 1972. The Trust Territory budget request for FY 1972 was said to contain an item of \$125,000 for construction of bathhouses and outhouses on Bikini Island.

built with local sand and aggregate in 1969, the surrounding environment, Bravo crater muck, and on urine samples for one Trust Territory resident and one team member.

**[REDACTED]**

Table 1  
Radioactivity in Air (pCi/m<sup>3</sup>)  
Composite Samples

<u>Station</u>	<u>Ce-144</u>	<u>Ru-106</u>	<u>Zr-95</u>	<u>Pu-238</u>	<u>Pu-239*</u>
<u>Bikini</u>					
1	.8 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	.7 X 10 <sup>-2</sup>	< .1 X 10 <sup>-4</sup>	5.4 X 10 <sup>-4</sup>
2	.7 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	< .1 X 10 <sup>-4</sup>	1.1 X 10 <sup>-4</sup>
3	.7 X 10 <sup>-2</sup>	.9 X 10 <sup>-2</sup>	.9 X 10 <sup>-2</sup>	.1 X 10 <sup>-4</sup>	1.0 X 10 <sup>-4</sup>
4	.9 X 10 <sup>-2</sup>	.1	.8 X 10 <sup>-2</sup>	< .1 X 10 <sup>-4</sup>	.6 X 10 <sup>-4</sup>
5	.6 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	.7 X 10 <sup>-2</sup>	.1 X 10 <sup>-4</sup>	1.2 X 10 <sup>-4</sup>
<u>Eneu</u>					
1	.8 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	.7 X 10 <sup>-2</sup>	.1 X 10 <sup>-4</sup>	.4 X 10 <sup>-4</sup>
2	.8 X 10 <sup>-2</sup>	.1	.8 X 10 <sup>-2</sup>	.1 X 10 <sup>-4</sup>	.4 X 10 <sup>-4</sup>
3	.6 X 10 <sup>-2</sup>	.8 X 10 <sup>-2</sup>	.7 X 10 <sup>-2</sup>	.1 X 10 <sup>-4</sup>	.4 X 10 <sup>-4</sup>
4	.9 X 10 <sup>-2</sup>	.1 X 10 <sup>-1</sup>	.7 X 10 <sup>-2</sup>	< .1 X 10 <sup>-4</sup>	.4 X 10 <sup>-4</sup>

MPC in Air, pCi/m<sup>3</sup> (individuals)

	<u>Soluble</u>	<u>Insoluble</u>
Ce-144	3 X 10 <sup>2</sup>	2 X 10 <sup>2</sup>
Ru-106	3 X 10 <sup>3</sup>	2 X 10 <sup>2</sup>

Zr-95	7 X 10 <sup>-2</sup>	1
Pu-238	7 X 10 <sup>-2</sup>	1
Pu-239	6 X 10 <sup>-2</sup>	1

\*Background in U.S. in 1968 was about 0.4 X 10<sup>-4</sup> pCi/m<sup>3</sup>. Station 1 (Bikini) was moved from upwind to downwind side of lagoon road after the second day.

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1. $< 0.7 \times 10^{-4}$	5. $5.5 \times 10^{-4}$	9. $2.5 \times 10^{-4}$	13. $2.6 \times 10^{-4}$
2. $0.7 \times 10^{-4}$	6. $4.0 \times 10^{-4}$	10. $4.8 \times 10^{-4}$	14. $4.0 \times 10^{-4}$
3. $1.2 \times 10^{-4}$	7. $7.9 \times 10^{-4}$	11. $6.1 \times 10^{-4}$	
4. $7.2 \times 10^{-4}$	8. $4.7 \times 10^{-4}$	12. $1.2 \times 10^{-4}$	

\*Background in U.S. in 1968 was about  $0.4 \times 10^{-4}$  pCi/m<sup>3</sup>. Station was moved from upwind to downwind side of lagoon road after the second day.