

Enclosure H

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United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

OCT 22 1979

Dr. Bruce Wachholz
Environment Division
Department of Energy
Washington, D.C. 20543

Dear Dr. Wachholz:

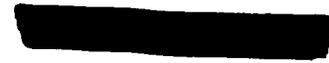
This Department has been requested by the people of Enewetak, through their legal counsel, Mr. Theodore Mitchell, Micronesian Legal Services Corporation to consider at this time the agricultural redevelopment of Engebi Island and reestablishment of a community on that island for the Engebi people. As you know, the revised Environmental Impact Statement of 1975, as well as the revised Master Plan for the Enewetak Resettlement and Rehabilitation Program, had excluded the use of Engebi Island.

This request is under study within the Department. It would be extremely helpful if the Department of Energy could provide us with an estimate of the period of time which must elapse before exposure levels on Engebi island would meet applicable exposure limits.

Sincerely yours,

Ruth S. Van Cleve

Mrs. Ruth G. Van Cleve
Director
Office of Territorial Affairs



RG 434

Location EH
Access B.1086 Jot 9/89
Folder 5470 Enewetak
Cleanup

65372

*Re Wachholz
action
request
info*

Enclosure I

Draft #2
12/3/79

Mrs. Ruth G. Van Cleve, Director
Office of Territorial Affairs
U. S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

Dear Mrs. Van Cleve:

Reference is made to your letter of October 22, 1979, in which you state that the Department of the Interior is considering the agricultural redevelopment of Enjebi Island and the reestablishment of a community on that island for the Enjebi people. As part of this consideration you requested estimates of the time which must elapse before exposure levels on Enjebi Island would meet exposure limits.

Current estimates of the number of years which must pass if exposure limits are to be adhered to are based upon the potential dose estimates provided in the Preliminary Dose Assessment Report prepared by the staff of the Lawrence Livermore Laboratory (LLL). These dose estimates have been compared to the exposure guidance, and, based upon known radioactive decay rates of the radionuclides involved, time intervals have been calculated. U. S. Federal Radiation Council recommended exposure levels (adopted also by the Environmental Protection Agency) are 500 mrem to the maximum exposed individual in any one year (and assumes that the maximum exposed individual does not vary from the average population exposure by more than a factor of 3, resulting in a recommended average population exposure level of 170 mrem per year) and 5000 mrem over a 30 year period. Atomic Energy Commission recommendations, recognizing the uncertainties inherent in such dose estimates, were one-half of the FRC guidance for the maximum

individual, or 250 mrem in any one year and eighty per cent of the 30 year exposure value, or 4000 mrem over 30 years.

Several different scenarios and living patterns and conditions were examined assuming that people would be living on Enjebi:

<u>Living Pattern</u>	<u>Potential Exposure(mrem)</u>	<u>Years to Meet FRC Guidance</u>
a. Local and imported food consumed Coconuts only from southern islands	300	0
b. No imported food available Coconuts only from southern islands	560	10-15
c. Local and imported food consumed Coconuts only from Enjebi	975	35-40
d. Local and imported food consumed Coconuts from Enjebi to Billae	900	30-35
e. No imported food available Coconuts only from Enjebi	2000	65-70
f. No imported food available Coconuts from Enjebi to Billae	1860	60-65

(The assumptions underlying these estimates are identified in the LLL preliminary report and should be recalled, e.g., time spent on islands other than Enjebi, coconuts consumed from other islands, etc.)

If the AEC recommendations are applied, the time intervals increase by about 30 years. For example, category "c" above would be about 65-70 years, category "d" would be 60-65 years, category "e" would be about 95-100 years, and category "f" would be about 90-95 years.

see insert A
Presumably this decision was based at least in part upon our letter to you of September 28, 1979, in which we estimated the potential additional radiation exposure to people assumed to live on Enewetak,

Insert A

We note that the Department of the Interior is proceeding with the planting of coconut trees on the six northeastern islands of Enewetak Atoll. This decision eliminates all of the above options except for "d" and "f."

Japtan and Medren islands, should the six islands be planted with coconut trees. The assumptions inherent in those dose estimates were identified in that letter. As we pointed out in that letter, however, the dose estimates do not account for those individuals who might, for whatever purpose, engage in activities and practices which would lead to greater exposures than those indicated.

Furthermore, we stated in that letter that the acceptability of copra from those coconut trees at processing facilities or its marketability in world commerce was not being addressed. At present there is no basis for encouraging the expectation that "science" will find a way to reduce the uptake of radionuclides, particularly cesium and strontium, by coconut trees. While studies to modify this uptake continue to be in progress, currently there is no justification for optimism on this matter.

An additional question is the administrative mechanism by means of which decisions will be made in the years to come should the concentration of radionuclides in the coconuts be unacceptable on the world market. Based upon the experience at Bikini Island, and in view of Mr. Deal's letter of September 29, 1978, to Admiral Monroe, the unacceptability of these coconuts on the world market would appear to be a very real possibility. In view of the changing relationships in the Marshall Islands, it is not clear where responsibility and authority may reside should this matter need to be addressed in the future.

Enclosed are 20 copies of the book "Enewetak Today," which was presented to and discussed with the Enewetak people at Ujelang. These may help to supplement those which you previously received directly from Dr. Bair.

I hope that this information is responsive to your request. Please let me know if we can be of further assistance.

Sincerely,

Bruce W. Wachholz, Ph.D.
Office of Environment

20 Enclosures

bcc: McCraw, Deal, Burr, Hollister, Clusen

Concurrence: McCraw, Deal, Burr, Hollister, Watters, McCammon