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Department of Energy Washington, D.C. 20585

Honorable James A. Joseph
Under Secretary of the Interior
Washington, D. C. 20240

Dear Mr. Joseph:

I am pleased to reply to your letter of April 12, 1979, regarding the possible return of the Bikini people to Eneu Island.

This response will address both of the issues you raise:

- 1. Your understanding of previous statements by my staff.
- 2. More detailed information on estimated dose assessments for people living on Eneu Island, including various assumed living and eating patterns.

With respect to the first point, your understandings are, in general, correct. The more detailed information addressing the second point is included as an enclosure to this letter.

If the guidance of the Federal Radiation Council (FRC) (500 mrem/yr to individuals, and 170 mrem/yr and 5000 mrem/30 yrs to a population) is to be complied with, the people could return to Eneu only if it is assured that adequate imported food would be available to and used by the people for approximately 20 years, that food grown on Bikini Island is not eaten for approximately 30 years, that residence is restricted to Eneu Island, and that visitation to Bikini Island is initially banned and subsequently controlled.

Since the FRC guides were originally formulated, an Environmental Impact Statement (EIS) was prepared for the resettlement of Enewetak Atoll. In the EIS, recommended criteria which are one-half of the FRC guidance for individuals and 80 percent of the 30-year FRC guidance for populations were proposed for evaluating land use options for use in planning the cleanup and rehabilitation of Enewetak Atoll. These

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criteria were recommended because of uncertainties in estimating future doses to the people at Enewetak Atoll. However, following the return of people to the Islands, direct radiation exposure measurements would be available and compared with the full FRC guidance of 500 mrem/yr to individuals and 5000 mrem/30 yrs to the population. These criteria for Enewetak were agreed to by all parties to the Statement, including the Environmental Protection Agency (EPA), who considered the Enewetak criteria to be "... upper limits ..." and that "... any proposed guideline or numerical values for the dose limits are only preliminary guidance and that a cost-benefit analysis must be undertaken to determine whether the projected doses are really as low as readily achievable and practical before proceeding with the relocation project. On the basis of such analysis it may be prudent to lower dose guidelines for this operation."

We interpret EPA's comments as essentially endorsing the Enewetak criteria, with the admonition that exposures be reduced even further if possible. We expect that the EPA will provide any needed clarification on this matter to the Department of Interior.

The degree of uncertainty in estimating doses on Eneu Island is similar to that for Enewetak Atoll. Assuming, therefore, that Enewetak criteria are applicable to other situations in the northern Marshall Islands, the dose estimates for return of the Bikini people to Eneu Island would be compared to the Enewetak criteria as described above rather than to the FRC guidance. When this is done, it is found that even with imported food the radiation doses to the people on Eneu would not be expected to be in compliance with the Enewetak criteria for about 20 years.

Several combinations of residence and food constraints are discussed in the enclosed, and are illustrated and summarized in the attachments to the enclosed. Other considerations also are addressed. If any further refinement of the data changes these estimates in a significant way, we will immediately inform you.

We trust that this is helpful to you in resolving the issue of the acceptability of Eneu Island as a residence island.

Sincerely,

Ruth C. Clusen Assistant Secretary for Environment

Enclosure

cc: Dr. William Mills, EPA

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