

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

February 28, 1974

Mr. Tommy McCraw Division of Operational Safety U. S. Atomic Energy Commission Washington, D.C. 20545

Dear Mr. McCraw:

In reference to your February 5 memorandum to Claire Palmiter we offer the following comments on the draft, "Report by AEC Task Group on Recommendations for Cleanup and Rehabilitation of Enewetok Atoll."

- 1. In view of possible precedents for handling plutonium contamination problems in other localities that may be established by the task group report, we have serious reservations as to the adequacy of the AEC recommendations for environmental protection. The exposure situation at Enewetok is expected to continue indefinitely with the return of civilians into a contaminated area. These Trust Territory people are entitled to as much protection as that afforded residents of the U. S. by the Federal Radiation Protection Guides. Conversely, it might be argued that the degree of soil contamination and the total doses expected to be received by the Marshallese are acceptable in the U. S.
- 2. Recommendations 3a through 3e on pages 5 and 6 calling for partial cleanup with limited habitation is insufficient. The task group should carefully consider recommending sufficient removal of contaminated soils on all islands so that no restriction on the activities of the Enewetok natives will be a prerequisite for their return. Partial cleanup with limited habitation is probably not a viable alternative strategy, since the restrictions required would be unenforceable.
- 3. The method of disposal to be used for contaminated soils appears to be beyond the scope of this study and such alternatives will no doubt be considered in a following EIS. Therefore we do not believe inclusion of Appendix IV in this report is appropriate. We also believe the EPA position on ocean disposal of radioactive wastes, which is sufficiently flexible to give a fair consideration of an appropriate EIS, is seriously misrepresented in Appendix IV and we request this material be deleted from the task force report.



- 4. We have difficulty in reconciling the statements on page 4 about using 50 percent of the ICRP dose limits; then at the bottom of the page, it is stated that the ICRP limit of the 5 rems in 30 years is proposed to be used the guideline for genetic or gonadal exposure. This is contrary to the guidance given in paragraphs 86 and 87 of ICRP Report No. 9, as well as applicable Federal guidances as expressed by the FRC.
- 5. It should be understood and stated that any proposed guidelines 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.
- 6. Children are the critical segment of the native population and we cannot determine from the report to what extent they were considered either in calculating the dose estimates, or in the development of the guidance on pages 4 and 5.
- 7. It is not clear in the guidance (page 5) or the text what criteria will be used to decide if areas below 400 pCi/gm of soil should receive corrective action. More information and criteria should be included in the next draft to indicate how the cost of removal is to be balanced against risk reduction. In addition, the Task Group may want to reconsider whether the guide for plutonium in soil is conservative enough. It is obvious that insufficient data on the dust load in Enewetok air was available for the prediction of lung doses; nor does the "lung burden approach" presented in the appendix agree with the task group recommendation of 400 pCi per gram of soil. At the very least, recommendation 15 on page 9 should be revised to insure sufficient data is available in the future to settle this point.
- 8. Our final major comment relates to a deficiency in the recommendations section in regard to needed verification of expected doses. It would appear most desirable that the Task Group recommend procedures and actions that will provide assurance that cleanup activities have been completed and that the natives can return to the islands and live without meaningless restrictions. This should be institutionalized by setting provisions and procedures to monitor the population exposure at reoccupation and in future years. It is our understanding that such arrangements were made after the Bikini cleanup, and a similar operation with regard to the repopulation of Enewetok would appear to be in order.

If deemed necessary, we will be pleased to meet with you to discuss our comments and resolve any differences remaining.

Sincerely yours,

William A. Mills, Ph.D.

Director

Criteria & Standards Division (HM-560)

cc: Dr. Biles
Mr. Weaver