

DATE: April 21, 1978



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Reviewed by W. J. Bair Date 4/29/78

946-2421

REPOSITORY PNNL
 COLLECTION Marshall Islands
 BOX No. 5685
 FOLDER Enewetak April 1978

SUBJECT: Eniwetok Advisory Group

A draft report using the comments I have received from you this week on the Livermore draft report, "Assessment of Potential Doses to Populations from the Transuranic Radionuclides at Eniwetok Atoll", is in preparation and will be telecopied to you on Monday. In the meantime I have learned from Hal Hollister that our assistance is needed on a broader front. DNA expects our report to provide guidance on cleanup levels. Hal recognizes that neither DOE nor we are in a position to recommend cleanup levels that, if met, would assure "safe" reoccupation of the atoll--which, unfortunately, is what DNA and Congress expects to achieve. At the review last August which most of us attended, we concurred with the 40 pCi/g soil value adopted in the EIS as a minimal action level and with 400 pCi/g as a mandatory cleanup level because the data presented to us indicated the proposed new EPA guidance levels of 1 mrad/year to lung and 3 mrad/year to bone would not be exceeded. Using assumptions in the EIS we estimated that the life time inhalation of air containing $100 \mu\text{g soil}/\text{m}^3$ ($4 \text{ fCi Pu}/\text{m}^3$) would give a lung dose of 1 mrad/year. The LLL draft report challenges the assumptions in the EIS upon which the 1 mrad/year dose calculation was based, indicating that a soil level of 40 pCi/g would give a lung dose of ~ 2 mrad/year and a bone dose rate ranging from 10 mrad/year to 2000 or more depending upon the choice of gut absorption factor. The questions that must be answered are: 1. Do the LLL calculations warrant repudiation of the earlier dose estimate? 2. If the lung and bone doses associated with 40 pCi/g soil exceed the EPA guidance, what doses are acceptable and what would be the associated soil level--the minimum action level? In other words if the committee repudiates the earlier acceptance of 40 pCi/g what does it recommend? Hal needs more than just our response to these two questions. He asks specifically for advice on what can and should be done towards developing cleanup guidance 1. within the next two weeks 2. within the next two months, and 3. over the next 6-8 months. This includes research, sampling, analysis, modeling, and anything that will help DOE meet its commitment on the Eniwetok issue. For example, one thing achievable within 2 weeks and, which should be informative, is an evaluation of the plutonium in urine data from the people who have been living on Bikini to determine whether the soil contamination levels at Bikini have resulted in positive body burdens.

Will you think about these questions and send me your response by wire as early as possible? Please be specific. Although emphasis should be on technical aspects, suggestions on management of the DOE effort are also welcome. I must get our views to Hal by April 28 but I want to circulate our response to you first. Thank you.