

OAK RIDGE NATIONAL LABORATORY

OPERATED BY
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NUCLEAR DIVISION



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OAK RIDGE, TENNESSEE 37830

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Dr. Bruce W. Wachholz
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Office of Health and Environmental
Research
Office of Energy Research
U.S. Department of Energy
Washington, DC 20545

Dear Bruce:

My comments for the non-medical component of the Marshall Islands program at Brookhaven are going to be brief.

In my opinion, the work (particularly that of Lessard) represents good individual efforts. My concern is that it is basically a "one-man" show when it comes to dosimetry models. Lessard needs some interaction with a strong modeling group. Particular emphasis needs to be placed on error analyses of the model (or models). I did not get the feeling that Lessard could make much of an attempt at estimating error except by some of the standard statistical procedures. Predicting error associated with models is becoming a discipline in itself, and I suggest that the next approach be estimating the degree of error or basically what kind of confidence can you place in the model.

There should be more and better communication between BNL and LLL; however, I am not sure how realistic it is to think that such an interaction will take place. For example, it is often difficult to get groups within large institutions to interact (or even between floors of buildings), let alone two groups each on different sides of the U.S. Thus, if there is a lack of communication it could be the fault of DOE.

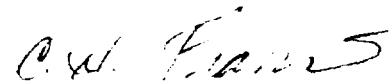
The data that Bob Mittenberger generates are the backbone of their work and any errors would have far-reaching circumstances. He is certainly enthusiastic about his work, and it probably bears on the quality. I got the idea that they were cross-checking, duplicating, and conducting round-robins with other laboratories that quality assurance was being maintained. In my opinion, the detection of Pu body burdens in attocurie levels is not necessary; however, remember this is not my major interest. If the opportunity comes about, they could send a person (presumably a native from Rongelap) to ORNL to verify the possible differences in counting ability. I would think this would be the first step before investing heavily in additional body counting equipment.

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In my opinion, Jan Naidu's data and experience would be of more value to LLL than BNL. In fact, I see little justification in his type of work at BNL in view of the previous guidance to BNL on environmental sampling and surveys. I would suggest the funding be expended in error analysis of the dose reassessment programs. I think DOE-HTQ's is on the right track in directing BNL toward the whole-body counting, bioassay work, and development of reassessment models and less along the environmental sampling. Are soil samples, etc. available to BNL from the 13 Atoll Survey? If not, how useful is the activity data measured by LLL to the BNL reassessment work? This is another reason for more exchange between BNL and LLL.

Considering the political and libelling implications involved in this work I consider it only fair to the American taxpayer that DOE-HTQ's at least be sent an information copy of any work to be published from this group. It should also have a tighter internal review than what I think some of it has had in the past. Both of these processes, although admittedly a hassel, could likely save embarrassment not only to DOE but also to BNL.

Sincerely yours,



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CWF/clh