

UNITED STATES  
 ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION  
 NEVADA OPERATIONS OFFICE  
 P. O. BOX 14100  
 LAS VEGAS, NEVADA 89114

December 14, 1976

Dr. W. W. Burr, Jr., Deputy Director  
 Division of Biomedical & Environmental  
 Research  
 U. S. Energy Research & Development  
 Administration  
 Washington, D. C. 20545

Dear Bill,

Although I am gratified with what appear to be the positive results of our discussion with Jim on Wednesday morning (December 8), I regret that the price of that session was early departure from the TTG meeting. Permit me this opportunity to follow through on some remarks I made just before we had to leave that session.

The subject was perceptions, but it is also substance, and I'm afraid I did not articulate it very well in the brief time I had. It troubles me more than a little to hear that we may now consider some of the more sophisticated bio-assay techniques (viz: in-vivo counting) to gain more knowledge, after the fact, of Pu uptake. I am not qualified to judge whether in-vivo counting is likely to significantly increase our understanding. But I do feel qualified to offer some judgement as to the price we may pay for doing it. I believe that price may well be more fear, apprehension and even mistrust (the "guinea pig" problem).

Let me review the kinds of things we have said over the past couple of years regarding the Brookhaven program and its role at Bikini and distinguished from that at Rongelap and Utirik. We have said that we are confident that there is not undue risk in a return to Bikini provided certain precautions are taken, that we have studied that environment and do not anticipate that exposure or uptake will be significant to the health of the people. We have said that on the basis of anticipated radiation dose, we see no reason for medical examinations of the people,



5011403

Dr. W. W. Burr

-2-

December 14, 1976

that the bio-assay program is really environmental surveillance. We have said that we will use it to confirm that our predictions - our assurances to the people - were sound. This is the way we have explained urine sampling and whole body counting. And we have said that long before the concentrations of radionuclides in people would reach levels which would be significant to health we would detect the uptake and be able to take protective or preventive action.

Now, rightly or wrongly, the people have been told that they are taking up plutonium, and one of ERDA's own doctors has said that he does not know whether the concentrations represent a health hazard. And where is the protective or preventive action? (Please remember that in my "devil's advocacy" I am talking mostly about perceptions.)

When I alluded very briefly to the concern I have expressed here and said that I am troubled about the Bikinians' perception of the bio-assay program, Bob Conard said "would you have us stop it?" and I responded rather hastily "I don't know, Bob". But I do know. I would not stop it, but I would be sure that it is what we say it is: an effort to confirm that our understanding of the environmental setting is good and that our recommendations are sound. If much of our visible effort to characterize and understand that environmental setting uses man as the indicator, I think we deserve and will receive criticism. In a not too far-fetched analogy, can you imagine FDA leaving Red Dye #1 on the market for a period of years while studying a representative sample of the consuming population? And while we are talking about perceptions, did you know that American cigarettes are available throughout the Marshalls without the Surgeon General's warning?

I cannot design the program that I think is urgently needed at Bikini, but my approach would be just the one that Jim Liverman suggested in a rhetorical question last Wednesday morning: "Have we ever called together all of the people who are involved in this problem and tried to find out what we know, what we don't know, and what is worth doing?" (I take liberties with his words, but the sense is there).

5011404

Dr. W. W. Burr

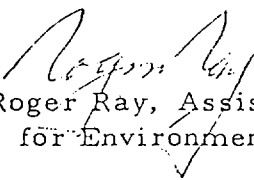
-3-

December 14, 1976

On August 26, Ink Gates signed a letter which I prepared, to Jim, discussing resuspension studies at Bikini and Enewetak. In part this was motivated by concern regarding the urine - Pu problem. For your convenience, I am enclosing a copy of that letter as well as a copy of the reply which Ink received from Martin Biles. I do not find that response very satisfying. For the record, there has been no discussion or coordination on this subject between the BNL environmental surveillance group and any of my staff. Even more unfortunate, I think, is the apparent inadequacy of communication between the BNL environmental effort and those responsible at LLL for past extensive effort to understand resuspension problems. (An effort in which ERDA (AEC) has invested on the order of a million dollars over the past four or five years.)


I shall look forward to the report of the TTG, and hope that they will have recognized how limited is our data and how even more limited is our understanding. There are those who refer to much of our research as "fun and games", but if there ever was a case for a directed and accelerated research effort, I think this is it. I believe you agree, and thus would like to offer whatever assistance you may need in order to get such an effort underway.

Sincerely,

  
Roger Ray, Assistant Manager  
for Environment & Safety

Enclosures:

1. Memo, Gates/Liverman  
dtd 8-26-76
2. Memo, Biles/Gates  
dtd 9-29-76

 5011405