LAWRENCE LIVERMORE LABORATORY



401351

September 27, 1976

Mr. Tommy McCraw Division of Safety, Standards and Compliance U.S. ERDA Headquarters Washington, D.C. 20545

Dear Tommy:

Enclosed is a draft copy of our paper evaluating the Pu concentrations observed in urine samples from Bikini and New York. We plan to publish the report as a UCRL and would appreciate any comments you may have. I am also sending information copies to Bob Watters and Bill Forster of DBER and Nat Barr of DTO.

It is interesting that the relative difference in observed Pu concentrations at Bikini and New York can be accounted for by the difference in intake of Pu via the various pathways.

However, a very significant point is the inability to account for the absolute magnitude of the Pu urine concentrations observed. We feel the Bikini data indicate that perhaps for humans, and for Pu incorporated in food products, that the transfer across the gut wall may be considerably greater than that predicted from animal studies. We feel this is a very significant point and we hope that support for follow-up research, for which we have several proposals, would be supported by ERDA.

We would greatly appreciate any comments you have in the analysis presented in the paper and also on the potential for pursuing the metabolism of Pu ingested in food products by human populations.

Sincerely,

William L. Robison