

Marshall file

UNITED STATES
 ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
 HEALTH AND SAFETY LABORATORY
 376 HUDSON STREET
 NEW YORK, NEW YORK 10014

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James L. Liverman, Assistant Administrator for Environment and Safety, HQ

TTG ANALYSIS OF BIKINI PLUTONIUM BURDEN

I think that TTG was most concerned that no one seemed to be looking at all of the data from Bikini and that this might be helpful in estimating the native body burden. I agree with both of these points and believe that either a single lab or a group of 2 or 3 people should do a writeup on what is known. We would be happy to cooperate in any way you think that we could be helpful.

Some of the problem has been in the HASL urine data where we were uncertain about the levels in U. S. residents subject only to fallout. We appear to be confirming the lower numbers that we first found and these agree quite well with values calculated from our best models. This means that the Bikini natives are either more highly exposed relative to the U. S. or that their urine samples are contaminated. It is our opinion that obtaining 20 liter samples of urine from a native population is a larger effort than could be justified by the value of deciding this question.

If ERDA is responsible for the health of the natives I strongly feel that their exposure to airborne plutonium is the major criterion. Four to six continuous monitors run over a period of a year should give adequate data to discharge our responsibility. It will probably be necessary to make other measurements such as external gamma or dietary strontium-90, but this is a separate problem. It should also be kept in mind that, while we have a responsibility for monitoring the natives, this is a most difficult laboratory to use for experiments.

I have expanded beyond your original question but I think the various portions all have to fit together.

J. H. Harley
 John H. Harley, Director
 Health and Safety Laboratory

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