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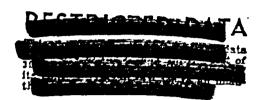
LOS ALAMOS SCIENTIFIC LABORATORY
(CONTRACT W-7405-ENG-36)
P. O. Box 1663
LOS ALAMOS, NEW MEXICO

28 Harch 1952

J. C - 799.

Commander Russell H. Maynard, USH Joint Task Force 132 Washington 25, D. C.

Dear Commander Maynard:



It has occurred to us that there may be a rather peculiar radiological safety problem after the Mike Shot on Ivy. This problem can arise in the following fashion. After the detonation has taken place there still exists for a reasonable length of time (of the order of two or three seconds) a fairly large flux of both slow and fast neutrons. However, at such times as that, the blast wave will probably clear off the water in the shallow part of the reef, both toward Bogallua and toward Engebi. This will allow the bottom surface of the reef to become activated by slow neutrons. After that time the normal water level will re-establish itself. Since the current flows from the ocean to the lagoon in this portion of the Atoll, it is probable that within a few hours or days at most the water in this portion of the Atoll will be uncontaminated.

If it is found necessary, as I expect to be the case, that recovery perties will have to work on this portion of the reef after the shot, we may find the circumstance that a normal beta or gamma intensity reading mater above the surface of the water will indicate no contamination but the coral under the water which is well shielded from these instruments could be still fairly hot.

It therefore occurs to us that there is perhaps a requirement for a gamma intensity reading mater to be used by Ead-Safe which would be sufficiently waterproof as to allow itself to be placed under the water close to the coral bottom.

I have written this letter simply as a suggestion of one of the possible difficulties we may have, in order that you may consider whether the problem is real and whether you would care to arrange to have such instruments available.

Copled/DOE LANL, J-Div.





Cdr E. H. Kaynard

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3/28/52

If you would care to discuss this problem further, I presume we will see you in a few weeks and could go into it in detail.

Sincerely,

William E. Ogle Asst J Division Leader

WEO: diw

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