Battelle

942-3631

May 12, 1978

409854

R

Dr. Victor Noshkin
Lawrence Livermore Laboratories
P O Box 808
Livermore, CA 94550

Dear Vic:

Enclosed are my comments on the 4/24/78 draft. If you have any questions, we can discuss them June 5/6.

Sincerely yours,

William L. Templeton
Associate Manager
Ecosystems Department

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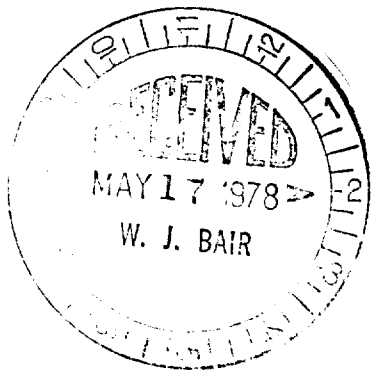
Enclosure

cc: W. J. Bair, PNL



REPOSITORY PNNL
COLLECTION Marshall Islands
BOX No. 5685
FOLDER ~~Soil Dump Data~~
Enewetak May 1978

DOCUMENT **DOES NOT** CONTAIN ECI
Reviewed by RK Schuttle Date 4/29/97

Is this an average diet for a male person? Is this a maximum intake person? What variations are there for a child? When food is imported, what local diet item is most likely to be reduced?

2) Soil Concentrations

Dose assessment should include ingrowth of ^{241}Am. 2:1 ^{239} & $^{240}Pu/^{241}Am$ ratio should be shown as coming from real life data. Data should be presented that indicates that the soil concentration in the root zone is approximating one-half of the surface soil concentration. I would have expected large variations. If this is average, what are the variations.

3) Time Distribution and Source of Dietary Intake

State GI tract coefficient is I.C.R.P. value of 3×10^{-5} upfront. Note that the Advisory Group did not give guidance on what coefficient you should use for ^{239} & ^{240}Pu, ^{238}Pu and ^{241}Am.

a) Terrestrial Foodchain

Report needs to amplify on all the concentration ratios used. I think you should give all the references and data and then say why you have chosen to use a particular value. The terrestrial annual bone dose rates should be calculated for each 1/4 -- 1/2 hectare area using the latest ^{239} & $^{240}Pu/^{241}Am$

[redacted]

This will provide a more accurate basis for assessing the average and maximum annual bone dose rates.

It is very important that as much of the recent data collected at Enewetak Atoll by LLL on resuspended material, transuranic concentration, and particle size be incorporated in the next calculations. I think it is important that the next draft also should include the "background" dose rate from breathing marine aerosols alone.

RESULTS

[redacted]

recalculated as soon as additional LLL data on concentration ratio becomes available.