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March 14, 1955

AEC 778/3

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ATOMIC ENERGY COMMISSION

RADIOACTIVE CONTAMINATION

NWD 972006
HR-M/SD 4/3/97

Note by the Secretary

1. The attached letter from the Secretary of Defense is circulated for the information of the Commission.
2. The attachment has been referred to the Division of Military Application for appropriate action.

REPOSITORY VARA - College Park 1451-58
 COLLECTION RC 326 - office of the Secretary
 BOX No. 188 (NW 3-326-93 c/o)
 FOLDER RR 4A 9-1 Radioactive Fallout
From High Yield weapons

W. B. McCOOL
Secretary

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: <u>04/14/95</u>	DECLASSIFICATION AUTHORITY: <u>110</u>
AUTHORITY: <u>110</u>	DECLASSIFICATION CATEGORY: <u>110</u>
NAME: <u>W. B. McCOOL</u>	CONTAINS NO UNCLASSIFIED INFO
2ND REVIEW DATE: <u>4/19/98</u>	COORDINATE WITH: <u>110</u>
AUTHORITY: ADD	UNCLASSIFIED INFO BRACKETED
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periods of time, ranging, in fact, from days in the local fallout effects to many years in atmospheric contamination effects.

In other words, radioactive effects force us to bring time in as an additional dimension in dealing with this problem. Moreover, the areas subject to lethal radiation effects are so large, that in planning the use of these weapons we must carefully weigh the damage to friendly as well as enemy installations.

The Department understands that investigations undertaken to date indicate a fair probability that high-yield thermonuclear weapons could be designed for greatly decreased long-life radioactive effects at the expense of a considerable reduction in blast and thermal effects for the same expenditure of critical materials; and that developments along this line could be pursued on a relatively short time schedule. It is understood also that there is some possibility that an entirely new approach to the problem, with intensive effort over a longer time period, might result in designs which would minimize long-life radioactive yield without such serious compromise of other effects.

The Department believes that the problems associated with the use of high-yield weapons are of such an order as to justify continued vigorous studies on all aspects of the problem, to

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include further explorations of methods of both increasing and decreasing the radioactive yield of thermonuclear weapons. These studies, in combination with military studies as to the strategic and tactical implications of the use of such weapons, should provide a more firm basis for evaluating the extent of the requirement for the development of a so-called "clean" bomb. Should our further studies reveal the need for development of such a weapon on a priority basis, the Department will wish to furnish further guidance.

Sincerely yours,

/s/ C.E. Wilson

Mr. Lewis L. Strauss, Chairman
Atomic Energy Commission
Washington 25, D.C.

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