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Chalk River, Ontario
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Dr. Paul McDaniels
U. S. Atomic Energy Commission
1901 Constitution Avenue
Washington, D. C.

Dear Paul:

May I take this opportunity to summarize briefly our discussion of October 17th concerning the Naval Radiation Laboratory, its objectives, the general aspects of the program there, and the problem of positive distribution of reports to the laboratory.

In the simplest possible statement, the objective of the Laboratory is to study the defensive aspects of atomic warfare. As indicated in my conversation with you, I have chosen to break this broad objective down into twelve major components; namely:

1) Contamination and Decontamination Studies, which will include fundamental studies of the nature of the adsorption and desorption phenomena involved as well as a testing program to determine the efficiency of any decontamination procedures.

2) Disposal of Radioactive Materials, including consideration of the ways and means of handling of radioactive materials which must be gotten rid of after performing any decontamination procedure.

3) Atomic Bomb Detonation Observations and Studies, including examination of the Bikini target ships and participation in any tests, etc., which may be conducted in the future.

4) Theoretical Studies, including phenomenology and calculations concerning the chemistry and physics of the bomb for various military situations (such considerations will be limited to those covered by the objective of the laboratory).

5) Dosimetry, including evaluation of the tolerance dose, studies leading to the predictions of the performance of personnel who might receive sub-lethal acute doses under certain tactical situations and who must perform useful services thereafter, and methods for measuring and properly evaluating radiation dosage received by personnel under specified tactical situations.

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6) Personnel Protection Studies, including the testing and development of better respirators, ventilation systems, protective apparel, and special shielding.

7) Biological Effects and Clinical Studies, including compilation and evaluation of data and performance of some basic research in the fields of toxicology, pathology, histology, cytology, hematology, immunology, physiology, etc.

8) Monitoring Procedures and Standards, including the development of standard methods of monitoring and the preparation of manuals for use by relatively untrained persons. This also includes the development of special monitoring procedures as required for unusual situations.

9) Instruments, Instrumentation and Special Apparatus, including critical examination of and field tests with equipment now in design and production.

10) Analytical Procedures and Standards, including all analytical procedures needed for proper analysis of materials and samples. This will include ionic analysis, radiochemical analysis for fission products and heavy isotopes, and any other physical and chemical assay methods required.

11) Structual Materials Investigations, including studies of the behavior of materials under radiation, the contaminability of surfaces and correlation of their contaminability with structure, etc. Obviously this work will be directed toward the development of a surface having very low contaminability and which can be used in or on any structual form.

12) Training Programs, Literature Surveys and Compilations, and Similar Special Projects.

To implement the objectives set forth above, the positive distribution of certain categories of A.E.C. reports as given in the standard distribution list (Report M-3679) is necessary. At the present time, a request has been submitted for the following categories:

Chemistry	-	General
Chemistry	-	Radiation & Radiochemistry
Health & Biology	-	General
Health & Biology	-	Fissionable Materials
Physics	-	Instrumentation

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In addition to these categories, I consider the following additional categories to be very important:

Administrative	- General
Chemistry	- Transuranic elements
Physics	- General
Physics	- Fission
Radiation effects on structual materials	

In addition to the positive distribution of reports in the above-named categories, it would be very desirable to make arrangements so that particular reports from any other category, containing information necessary for the prosecution of the objectives of the laboratory, may be made available after review by your office.

I hope that this information will be helpful in your future considerations concerning the laboratory. As soon as a more definitive outline of the laboratory's program is prepared, be assured you will receive such information.

Very sincerely yours,

WHS

William H Sullivan

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