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Office of the Director

August 8, 1980

Mrs. Ruth Clusen, Assistant Secretary
Office of Environment
U.S. Department of Energy
Washington, D.C. 20545

Dear Mrs. Clusen:

Enclosed is Brookhaven National Laboratory's proposal for continuing participation in the Marshall Islands research project. The proposal's main points are:

1. Continuation of the investigation of effects of radiation on human health.
2. Continuation of BNL's study of body burdens, island contamination, and analysis of past, present and future exposures in order to more accurately determine the dose to exposed Marshallese.
3. Close collaboration with the designated health care delivery institution.
4. Annual evaluation of clinical findings by an appropriate review group.
5. Continuation of the BNL Physician in residence in the Islands until the health care delivery plan has been implemented.

I trust this concise statement of the Brookhaven proposal will meet your needs.

Very truly yours,

Victor P. Bond, M.D.
Associate Director for Life Sciences

encls.

Cc: Bruce W. Wachholz
William W. Burr, Jr.
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PROPOSAL OF BNL MEDICAL DEPARTMENT
for
CONTINUING PARTICIPATION IN MARSHALL ISLAND STUDIES

E. P. Cronkite, M.D.

The Medical Department proposes to continue the surveillance of the Marshallese exposed on Rongelap, Ailingnae and Utirik along with the appropriate comparison populations and other Marshall Islands groups in which it may be shown that there has been a significant exposure to fallout. An essential and, in fact, integral part of the medical surveillance is the continuing study, by the Safety and Environmental Protection Division (S/EP), of body burdens, island contamination, and a continuing analysis of past, present and future exposure of the Marshallese to radiation on the above-named atolls and, in addition, those Marshallese relocated to Bikini and Eniwetok. This is essential for determination of the possible cause and effect relation of exposure to radiation. (See enclosure.)

The BNL team will concentrate efforts on determination of incidence of malignant disease in comparison and exposed populations and on study of thyroid functions. The medical research literature will be continually surveyed for evidence of other diseases that may be related to exposure to radiation and appropriate special studies on the Marshallese initiated when indicated.

Through the P.I. there will be a regular exchange of information with the RERF to see if any new findings on the Japanese at Hiroshima and Nagasaki indicate specific new studies on the Marshallese.

Brookhaven desires to continue the present level of health care delivery through the Resident Physician and the Survey teams. As the DOI implements the Burton Bill, BNL wishes to be absolved of the responsibility for delivery of health care other than that which would be performed during surveys for humanitarian reasons.

BNL further believes that the best interests of the Marshallese would be served by a close integration of the efforts of the health care providers with the medical surveillance efforts of the BNL team. It is proposed that members of the health care delivery effort accompany the BNL research group during its several annual surveys. The determination of probable relationship of disease incidence to prior exposure to radiation should not be the responsibility of the health care provider. It is proposed that the determination of the probable relationship of incidence of disease with the past exposure to radiation be evaluated annually by a review group consisting of:

1. A representative of RERF Hiroshima.
2. The BNL Survey Team.
3. A member of the Health Care Delivery Group.
4. A member of the S/EP Team.
5. A member of NRC-NAS, such as Seymour Jablon.
6. A member at large from the university community, in epidemiology.
7. Said review group to be chaired by P.I., BNL Medical Team.

Position Statement

on

BNL Marshall Islands Radiological Safety Program

The long range plan is to provide contemporary personnel monitoring and dosimetry data for present and former residents of Utirik, Rongelap, Ailinginae, Enewetak, and Bikini Atolls. Whole-body counting and urine bioassay activities are to be conducted to assess chronic radiation doses. These services will be expanded to include the growing number of people returning to Enewetak.

Important historical radiological monitoring data is to be used to reassess past thyroid and whole-body doses to residents of Rongelap, Utirik, Likiep, Ujelang and Ailuk. Activation analysis of soil samples and meteorological modelling of BRAVO fallout transport and deposition has been used to reassess doses to Rongelap, Utirik, and Likiep residents. The future performance of retrospective dosimetry requires further manipulation of historical and contemporary personnel monitoring and environmental monitoring data. Retrospective dosimetry will assist in identifying exposed populations and potential health effects.

Development of control data is to be performed for medical, physiological, and radiological parameters. A compilation of control statistics on spontaneous incidence levels for radiation related diseases and means and ranges for anthropometric, radiologic and metabolic parameters for Marshallese man, woman, and child will be used to accurately define personnel doses. Progress in this area is to be made in cooperation with the Medical Research Program.

A quantitative assessment of radionuclide intake will be performed to model body burden kinetics and predict or reconstruct doses. Diet and living pattern studies will require periods of residence by BNL scientists in a Marshallese community. Also, educational programs regarding radiation will be conducted to help persons learn about radiation related problems on their home atolls. The transmittal of educational information will be facilitated by the same conditions which permit development of diet and living pattern information.

These activities formulate the future direction of sound radiation safety programs in the Marshall Islands. They involve direct interaction with Marshallese people and provide individual radiation exposure histories. For harmonious field trip impact on Marshallese communities, for logistical cost effectiveness and for dosimetry which relates to medical findings, the Medical Program and the Radiological Safety Program should be closely coupled.