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Department of Energy
Washington, DC 20585

John D44

N-11

February 20, 1987

As requested

Honorable Tom Bevill
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
House of Representatives
Washington, DC 20515

Over
3/24

(Have sent copy to
Harry Brown &
Larry Major)

Dear Mr. Chairman:

The Palau Compact of Free Association Act, Public Law 99-658, directs the Departments of Energy and Interior to provide a report detailing how funds were spent during the previous fiscal year for the special medical program for Rongelap and Utrik and for the agriculture and food programs for Enewetak and Bikini. The report also is to specify current and following fiscal year needs for those programs.

The Department of Energy has direct responsibility for the medical program, and our report is enclosed herewith. The Department of the Interior, through the High Commissioner of the Trust Territory of the Pacific Islands, has management responsibility for the Enewetak programs. We are advised that they will submit that report to you under separate cover.

Sincerely,

S. R. Foley, Jr.
S. R. Foley, Jr.
Assistant Secretary
for Defense Programs

Enclosure

cc: Honorable John T. Myers
Ranking Minority Member
Subcommittee on Energy and
Water Development
Committee on Appropriations
House of Representatives
Washington, DC 20515

DOE
John Ruppel's Files
D-File
Marshall Islands 1987

THE DEPARTMENT OF ENERGY MARSHALL ISLANDS MEDICAL PROGRAM

The Marshall Islands Medical Program, which is a clinical responsibility of the Medical Department, Brookhaven National Laboratory, continued to fulfill its contractual obligation to the U.S. Department of Energy in this, its thirty-second year of medical follow-up of the radiation-exposed populations of Rongelap and Utrik atolls. All missions include a representative of the U.S. Department of Energy.

BACKGROUND AND MEDICAL SCOPE OF WORK

The exposed population, which now numbers 168, must be considered at increased risk for malignant disease as a late complication of radiation injury. Therefore, the Medical Program has in place a cancer-related annual health evaluation. The examination follows the guidelines of the American Cancer Society, and includes a medical history, complete physical examination, advice on decreasing risk factors for cancer, advice on self-detection of lesions, annual pelvic examinations and Papanicolaou smears, stool testing for blood, blood count, urinalysis, mammography, and flexible sigmoidoscopy. These procedures are performed more frequently than for a general population because of the presumed increased risk. In addition, because of earlier Brookhaven observations, it is known that the exposed are at greater risk for certain endocrine problems and for this, they receive annual thyroid function blood tests and thyroid examinations by a specialist. Other tests are performed on a regular basis to attempt early detection of malignant lesions. There is also ongoing monitoring for clinical evidence of immune competence, for the exposed may also be at increased risk for unusual manifestations of infectious diseases. Any exposed person with a malignant neoplasm, or who might conceivably have a malignant neoplasm, is referred to secondary or tertiary

medical facilities for a definitive evaluation and for therapy if a lesion is found. The usual referral hospitals are in Honolulu and Cleveland, the latter because of the presence of a preeminent thyroid surgeon who has long been involved with the exposed Marshallese. Above and beyond the cancer-oriented examination outlined above, the Medical Program also dispenses primary medical care and preventive medical services (such as immunizations) for all illnesses encountered at the time of the visits to the exposed population.

ORGANIZATIONAL STRUCTURE

The medical direction of the program and the organization of the medical missions to the Marshall Islands are activities which are centered at Brookhaven. The full-time nucleus of the Medical Program includes a physician director, administrator, and technical specialist located at Brookhaven National Laboratory. The physicians chosen to support the mission are highly skilled volunteers, primarily faculty with medical schools. Logistical support, including translators, is provided by or through the Department of Energy. The resulting medical teams are primarily composed of personnel with past experience with the program. A copy of each examination is given to the examinee, originals of all medical records are retained at Brookhaven for clinical use and for statistical purposes. Also archived there are all pathology specimens, blood smears, and x-rays obtained over the many years of the program.

In the process of bringing to the exposed Marshallese modern facilities for diagnosis and treatment of disease, the physicians of the Medical Program come

into contact with children and other family members of the exposed, as well as other Island inhabitants. It has been the policy of the Department of Energy that primary medical care be offered to these individuals on the basis of humanitarian need and as resources permit. Problems requiring further medical attention are directed into referral channels of the Republic of the Marshall Islands (RMI).

FY 1986 PROGRAM

Two ship-supported medical missions have been carried out in the past year. The spring mission, being the major medical effort, included the following medical specialties: hematology, obstetrics/gynecology, endocrinology, cardiology, neurology, dermatology, general internal medical, and family medicine. The second mission was necessary to complete some aspects of the examinations begun on the spring mission and to permit exposed persons unable to be seen in the spring another chance for examination. Of the remaining 168 exposed persons, 154 received an examination in the past year; 162, or 96.4 percent, have received an examination within the past 2 years. Among the six persons missed are two individuals now residing in the United States. Of the exposed persons examined in the past year, 19 required medical evaluation beyond that available from the ship-supported Brookhaven medical team. They were referred to Honolulu, Cleveland, or to the National Institutes of Health.

FY 1987 PROGRAM

The DOE-funded FY 1987 program is similar to that of recent years pending any changes that may arise out of PL 99-239, as amended. The funding level is sufficient, assuming no major changes in circumstances.

FY 1988 PROGRAM REQUIREMENTS

Major uncertainties must be resolved as to who carries out and seeks funding for a health care program for the 168 remaining exposed people. Also, the issue of which health care entity (RMI, four-atoll program, or a federal agency like DOE) provides what level of care to those individuals remains unresolved. Currently, DOE monitors the health of the individuals, provides primary care "on the spot" during missions, and provides diagnosis and treatment for radiation-relatable disease on a referral basis outside the Marshall Islands. The RMI provides primary, secondary, and tertiary health care to all of its citizens, including the exposed, all other times. For the past year, the four-atoll program has been augmenting this by attempting to provide (or have provided by RMI at four-atoll expense) health care to over 7,000 people from Rongelap, Utrik, Enewetak, and Bikini (exclusive of DOE's treatment in the U.S. of radiation-relatable disease of the 168 exposed).

The RMI will receive \$2 million per year to pay for U.S. technical assistance for health care as provided for in the Compact PL 99-239. How and for whom these funds will be utilized is, to our knowledge, not resolved.

The following outlines expenditures for FY 1986, planned expenditures for FY 1987, and requirements for FY 1988. Acknowledging the unresolved issues for FY 1988 and beyond, we base the FY 1988 requirements on these assumptions:

1. A. U.S. federal agency will be tasked with some level of monitoring/care for the exposed.
2. A. U.S. government-controlled ship will be available to conduct two annual missions.

3. The RMI will fund all primary, secondary, and tertiary care for the exposed (except for diagnostics and treatment for radiation-relatable illnesses).

FY 1986 EXPENDITURES

1. Administration, four full-time employees; Cleveland General Hospital and NIH referrals; mission medical and technical personnel; one-half year of physician and staff at Ebeye; two major ship-supported missions.	\$1,020K
2. Ship charter, ^{1/} fuel, medical supplies, shipping, personnel transportation, logistics and administration.	1,000K
3. Medical referrals to Honolulu.	125K
TOTAL	<u>\$2,145K</u>

^{1/}The ship is chartered on a full-time basis by DOE and also supports other DOE missions in the Marshall Islands, such as the joint DOE/BARC effort at Bikini. Because of the remote location, it has not been possible to charter a suitable specialized vessel of opportunity on an ad hoc basis. Thus, we have not attempted to attribute vessel costs to specific programs. At this time, there is no economical or sound logistical alternative to support by a ship because of an aging population, specialized medical equipment requirements, and limited air service to outer atolls.

FY 1987 PROJECTED EXPENDITURES

1. Administration, four full-time employees; Cleveland General Hospital and NIH referrals; mission medical and technical personnel; one major and one follow-up ship-supported mission.	\$ 811K
2. Ship charter, ^{1/} fuel, medical supplies, shipping, personnel transportation, logistics and administration.	1,000K
3. Medical referrals to Honolulu.	150K
TOTAL	<u>\$1,961K</u>

^{1/}The ship is chartered on a full-time basis by DOE and also supports other DOE missions in the Marshall Islands, such as the joint DOE/BARC effort at Bikini. Because of the remote location, it has not been possible to charter a suitable specialized vessel of opportunity on an ad hoc basis. Thus, we have not attempted to attribute vessel costs to specific programs. At this time, there is no economical or sound logistical alternative to support by a ship because of an aging population, specialized medical equipment requirements, and limited air service to outer atolls.

FY 1988 PROJECTED FUNDING REQUIREMENTS

1. Administration, four full-time employees; Cleveland General Hospital and NIH referrals; mission medical and technical personnel; two major ship-supported missions; Reestablish Ebeye office with physician. ^{1/}	\$1,150K
2. Ship charter, ^{2/} fuel, medical supplies, shipping, personnel transportation, logistics and administration.	1,100K
3. Medical referrals to Honolulu.	200K
TOTAL	<u>\$2,450K</u>

^{1/} Provides for contingency that the four-atoll program may no longer be in existence; thus, the need for follow-up between major missions.

^{2/} The ship is chartered on a full-time basis by DOE and also supports other DOE missions in the Marshall Islands, such as the joint DOE/BARC effort at Bikini. Because of the remote location, it has not been possible to charter a suitable specialized vessel of opportunity on an ad hoc basis. Thus, we have not attempted to attribute vessel costs to specific programs. At this time, there is no economical or sound logistical alternative to support by a ship because of an aging population, specialized medical equipment requirements, and limited air service to outer atolls.