



Department of Energy
Germantown, MD 20874-1290

DEC 31 1998

The Honorable Phillip Muller
Minister of Foreign Affairs and Trade
Republic of the Marshall Islands
Majuro, Marshall Islands 96960

Dear Minister Muller:

Enclosed is a draft proposed Memorandum of Understanding (MOU) between the Enewetak Atoll Local Government and the U.S. Department of Energy (DOE). I am forwarding this draft MOU to open discussion among the Parties concerning DOE's environmental monitoring activities at Enewetak Atoll.

I look forward to receiving your comments on the proposed draft MOU, as well as those of the Enewetak representatives. I can be reached by e-mail at pauli.seligman@eh.doe.gov, by telephone on (301) 903-5926, or by facsimile on (301) 903-3445. Best wishes for the new year.

Sincerely,

Paul J. Seligman, M.D., M.P.H.
Deputy Assistant Secretary
for Health Studies

Enclosure

cc w/enclosure:

- Ambassador Banny de Brum,
- RMI Embassy, Washington, D.C.
- Senator Ismael John, Enewetak
- Mayor Neptali Peter, Enewetak
- Davor Pevec, Esq.
- Nancy L.B. Fanning, DOI
- Ambassador Joan Plaisted,
- U.S. Embassy, Marshall Islands



**MEMORANDUM OF UNDERSTANDING
AMONG
THE UNITED STATES DEPARTMENT OF ENERGY
AND
THE GOVERNMENT OF THE REPUBLIC OF THE MARSHALL ISLANDS
AND
THE ENEWETAK/UJELANG LOCAL GOVERNMENT COUNCIL**

This Memorandum of Understanding ("MOU") is entered into among the United States Department of Energy ("DOE"), the Government of the Republic of the Marshall Islands ("RMI Government"), and the Enewetak/Ujelang Local Government Council ("Enewetak Council") (collectively the "Parties").

**Article 1
Purpose**

The purpose of this MOU is to establish a framework for cooperation among the Parties concerning DOE's environmental monitoring activities at Enewetak Atoll.

**Article 2
Enewetak Island**

2.1 DOE will:

- (1) Maintain DOE's whole body counter at Enewetak Island in good operating condition, help install personal computer-based electronics and software for the counter, and assist in the conduct of whole body counting of the resettled population.
- (2) Conduct training of selected Enewetak residents to perform whole body counting.
- (3) Hire two half-time (up to 20 hours per week), technically-qualified Enewetak residents to perform whole body counting under DOE supervision and in accordance with written DOE protocols.
- (4) Analyze and promptly report the results of whole body counting, in writing and in easy-to-understand terms, to the individuals concerned and, subject to the protection of those individuals' privacy, to the RMI Government and the Enewetak Council.
- (5) Perform such other or additional activities as the Parties may agree in writing.

2.2 The Enewetak Council will:

- (1) **Maintain a facility on Enewetak Island suitable to house DOE's whole body counter, pay for the utilities necessary to maintain and operate the counter, and be responsible for system security.**
- (2) **Be responsible for obtaining any licenses or other approvals from the RMI Government for any material and equipment required for any DOE-assisted radiological monitoring, including equipment that emits low levels of ionizing radiation.**
- (3) **Assist DOE with respect to the control and custody of any DOE equipment that is a radioactive source.**
- (4) **Provide DOE's Field Operations Manager with reasonable advance written request(s) to participate in community meetings to keep the Enewetak Council and the Enewetakese people apprised of DOE's activities.**
- (5) **Provide such other logistical support and/or operations and maintenance assistance to DOE as the Parties may agree to in writing.**

2.3 The RMI Government will:

- (1) **Facilitate the grant of any licenses or other approvals for any material and equipment required for any DOE-assisted radiological monitoring, including equipment that emits low levels of ionizing radiation.**
- (2) **Provide DOE with reasonable advance written request(s) to participate in community or other meetings to keep the RMI Government, the Enewetak Council and the Enewetakese people apprised of DOE's activities.**
- (3) **Provide such other assistance to DOE as the Parties may agree to in writing.**

**Article 3
Enjebi Island**

3.1 The Enewetak Council will keep DOE timely apprised of the status of the Council's deliberations concerning any plan to resettle Enjebi Island.

3.2 DOE will, upon request in connection with an Enewetak Council plan to resettle Enjebi Island, provide recommendations concerning soil remediation and develop a detailed resettlement support plan.

**Article 4
Enewetak Atoll**

4.1 DOE, through its contractor, will:

- (1) Complete the grid sampling characterization of Aej and Lujor islands, and issue a report on environmental monitoring activities at Enewetak, Medren, Japtan, Anij, Aej, Lujor, Allenbei, Lojwa, Bijire, Aomon, and Runit islands.
- (2) Complete the analysis of marine samples (northern lagoon) and issue a final report.
- (3) Provide recommendations concerning the application of potassium fertilizer on islands of Enewetak Atoll, other than Enewetak Island, where food gathering may be conducted.

**Article 5
General Conditions**

5.1 The Parties will maintain close and regular communication, to ensure the effective coordination of DOE's environmental monitoring activities at Enewetak Atoll.

5.2 Any notice or other communication in connection with this MOU will be in writing. All notices, requests, and other communications under this MOU will be given to or made upon the respective Parties as follows:

If to the RMI Government:

Minister of Foreign Affairs and Trade
P.O. Box 1349
Majuro, Republic of the Marshall Islands 96960
Facsimile: 111-692-625-4979

If to the Enewetak Council:

Enewetak/Ujelang Local Government Council
Office of the Mayor
P.O. Box 1777
Majuro, Republic of the Marshall Islands 96960
Facsimile: 111-692-625-3120

with copy to:

Davor Z. Pevec, Esq.
Hawaii Tower, Suite 2000
745 Fort Street
Honolulu, HI 96813
telephone: 808-599-5655
facsimile: 808-599-1609

If to DOE:

Mr. Frank Hawkins
U.S. Department of Energy
Office of International Health Programs
Attn: EH-63 GTN/270 Corporate Center
19901 Germantown Road
Germantown, MD 20874-1290
telephone: 301-903-3148
facsimile: 301-903-1413

If to DOE's Field Operations Manager:

Mr. William D. Jackson
U.S. Department of Energy
Pacific Area Support Office
P.O. Box 29939
Honolulu, HI 96820-2339
telephone: 808-422-9211
facsimile: 808-422-9217

5.3 DOE and the RMI Government will cooperate in a pilot project to determine the feasibility of establishing a publicly-available database of the whole body counting and environmental monitoring data reported by DOE under this MOU.

5.4 Governing law: The laws and regulations of the United States will govern this MOU, as set forth in the Compact of Free Association between the RMI Government and the United States of America and in the Federal Programs and Services Agreement concluded pursuant thereto. All questions relating to the MOU arising during its term will be settled by the Parties by mutual agreement.

5.5 It is understood that the ability of DOE to carry out its undertakings under the MOU and the DOE Support Plan is subject to the availability of appropriated funds.

Article 6

Commencement, Amendment, Renewal and Termination

6.1 Cooperation under this MOU will commence on the date that the last signatory signs the MOU, and will continue for three (3) years.

6.2 By written agreement of the Parties, and with the concurrence of the U.S. Department of the Interior, this MOU may be amended at any time, and may be renewed for additional periods.

6.3 This MOU may be terminated by written agreement of the Parties, or may be terminated by any Party upon ninety (90) days written notice to the other Parties.

ACCEPTANCE:

Date: _____

Phillip Muller
Minister of Foreign Affairs and Trade
Republic of the Marshall Islands

Date: _____

Neptali Peter
Mayor
Enewetak/Ujelang Local Government Council

Date: _____

Paul J. Seligman, M.D., M.P.H.
Deputy Assistant Secretary
for Health Studies
U.S. Department of Energy

ACKNOWLEDGED BY:

Date: _____

Nancy L.B. Fanning
Director, Office of Policy
Office of Insular Affairs
U.S. Department of the Interior

Law Offices
DAVOR Z. PEVEC
HONOLULU, HAWAII

HONOLULU OFFICE
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HONOLULU, HAWAII 96813
TELEPHONE (HON) 599-5633
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MARSHALL ISLANDS OFFICE
GIRSON'S CENTER
P.O. BOX 1777
MAJURO, MARSHALL ISLANDS 96960
TELEPHONE (692) 625 3120
FACSIMILE (692) 625 3120

February 27, 1997

VIA FACSIMILE

R. Thomas Bell, III
Supervisor
Pacific Health Programs
Office of International Health Programs
United States Department of Energy
Germantown, MD 20874-1290

Re: DOE/Fnewetak Memorandum of Understanding

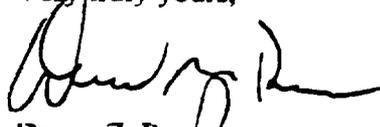
Dear Tom:

Please find attached a five page revised draft of the DOE/Fnewetak MOU. This revision is based primarily on the MOU drafted at Fnewetak in October of 1995 and subsequently revised by you in December of 1995. It also incorporates some of your proposed revisions contained in the August, 1996 DOE version. The further DOE revisions to the MOU sent to me on October 4, 1996 have not been incorporated, although we are willing to discuss such proposed revisions.

Please note that the Fnewetak Council was prepared to execute the October 1995 MOU which was drafted on Fnewetak. Your subsequent revisions and the necessity of the Senator, Mayor, and Council reviewing such repeated revisions is a cause of the delay of implementation.

We look forward to finalizing the MOU as soon as possible. Please note that I will travel to Majuro and Fnewetak the week of March 5.

Very truly yours,



Davor Z. Pevec

cc: Senator Ismael John
Mayor Neptali Peter
Nancy Fanning, DOI

**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE UNITED STATES DEPARTMENT OF ENERGY
AND
THE ENEWETAK/UJELANG LOCAL GOVERNMENT COUNCIL**

This Memorandum of Understanding ("MOU") is entered into between the UNITED STATES DEPARTMENT OF ENERGY (hereinafter the "DOE"), and the ENEWETAK/UJELANG LOCAL GOVERNMENT COUNCIL (hereinafter the "Enewetak Council") (collectively, "the Parties").

ARTICLE I - BACKGROUND AND RECITALS

1. Forty-three nuclear devices were exploded at Enewetak Atoll between 1947 and 1958 by the United States which used Enewetak Atoll as a nuclear test site.
2. Although a radiological clean-up effort occurred between 1977 and 1980, a large part of the land, reef and lagoon of Enewetak Atoll remain affected by radiation.
3. The Enewetak People returned to live on Enewetak Atoll in 1980, and approximately 900 to 1000 people now reside on Enewetak.
4. Because of the residual radioactivity present in the environment at Enewetak Atoll, the resettled population at Enewetak requires radiological monitoring to assure the inhabitants that any internal body levels (i.e., "body burden") of radioactivity remain acceptable.
5. The DOE has and is conducting radiological monitoring of the resettled population at Enewetak.
6. The radiological monitoring consists of (a) whole-body counting to estimate the total body burdens of cesium 137, potassium-40, and cobalt 60, and (b) urinalysis for the detection of plutonium.
7. The DOE recognizes that the whole-body counting of the entire resettled population should occur at least every two years, and that urinalysis of approximately 75 individuals should occur annually.
8. The above-described radiological monitoring (whole-body counting and urinalysis) was historically done by shipboard missions to Enewetak Atoll.
9. The DOE proposes that the shipboard missions be replaced by a permanent land-based system which the DOE contends would result in better and more effective radiological monitoring of the resettled population at Enewetak.

10. The Enewetak Council desires the DOE to better and more effectively conduct the radiological monitoring of the resettled population at Enewetak.

NOW THEREFORE, the DOE and the Enewetak Council agree as follows:

ARTICLE II - PURPOSE

The purpose of this Memorandum of Understanding (MOU) is for the DOE to better and more effectively conduct the radiological monitoring of the resettled population at Enewetak Atoll, Marshall Islands, by utilizing a land-based facility at Enewetak.

ARTICLE III - DOE DUTIES AND RESPONSIBILITIES

1. The DOE will continue to conduct the radiological monitoring of the resettled population at Enewetak. Such radiological monitoring consists of (a) whole-body counting to estimate the total body burdens of cesium 137, potassium-40, and cobalt 60, and (b) urinalysis for the detection of plutonium, and/or (c) any other means mutually agreed to by the DOE and the Enewetak Council. The whole-body counting of the entire resettled population will continue to occur on a two year basis. The urinalysis will be conducted annually and will involve a representative group of approximately 75 individuals, the identity of whom will be mutually agreed upon by the parties.

2. The whole-body counting may be done at a land-based facility located at Enewetak.

3. The physical structure of the land-based facility shall include a room and storage area and other areas required to perform the whole-body counting, urinalysis, and related activities.

4. To the greatest extent possible, pre-existing areas in the Enewetak Field Station will be used to house the whole-body counting system, associated electronics and related radiological monitoring supplies and equipment. Any additional construction or adaptations to pre-existing structures will be done by the DOE contractor. The construction includes provision of the initial air-conditioning device.

5. As an integral part of the land-based facility, the DOE will provide a whole-body counting system and place same at the land-based facility at Enewetak. The whole-body counting system will consist of all necessary whole-body counting equipment including, without limitation, a whole-body lead shielded counting chair, associated electronics, computers, and all other items necessary for the proper functioning of such device(s). The DOE will update the whole-body counting equipment based on future program evaluations. It is the intention of the parties that the whole-body counting system will be permanently located at Enewetak.

6. As an additional integral part of the land-based facility, the DOE shall provide all necessary urinalysis equipment and will update that equipment as required. The urinalysis

equipment includes, without limitation, a refrigerator and all other items necessary to properly collect, store, package and ship urine for plutonium analysis.

7. The DOE will be responsible for the use, operation, and maintenance of all material and equipment used for radiological monitoring including, without limitation, the whole-body counting chair, electronics, computers, low-level radiological material, and the material and equipment used for urinalysis, and similar types of material and equipment.

8. The DOE, in consultation with the Enewetak Council, will provide a communications system which would permit direct communication between Enewetak and Brookhaven National Laboratories to address emergencies, routine questions, system problems, and to provide for data transfer. It is anticipated that this communication system would include current voice communication networks and the submittal of data via floppy computer disk.

9. The DOE will be responsible for all the data relating to the radiological monitoring. The DOE will establish and follow strict protocols for data acquisition and during the time the whole-body counters are recording data. The DOE will describe such protocols in writing to the Enewetak Council. The DOE will make its data and database available to the Enewetak Council to the extent authorized by the Privacy Act, 5 U.S.C. Section 552a. In addition, the DOE will, upon request, make all data relating to radiological monitoring available to the individuals undergoing such monitoring, and will ensure that a summary of such data will be presented in a meaningful and understandable form to the individuals undergoing monitoring.

10. The DOE will be responsible for quality assurance and quality control of the radiological monitoring. The DOE recognizes that quality assurance and quality control is necessary to ensure the validity of the data and therefore will establish and adhere to a strict protocol of calibration and recounts, as well as extensive checking of data.

11. The DOE will work and coordinate with the Enewetak Council in obtaining any licenses or other approvals from the Republic of the Marshall Islands for any material and equipment required for the radiological monitoring at the land-based facility at Enewetak including equipment that emits low levels of ionizing radiation.

12. The DOE has offered and is willing to hire and train local Enewetakese residents to assist in conducting the radiological monitoring at Enewetak. In this regard, the DOE will consult with the Enewetak Council in order to identify suitable candidates for such employment. Enewetakese employees will be compensated at rates reasonable for local hires, as mutually negotiated by the Parties and set forth in the Scope of Work, such rates to be reviewed and renegotiated during the third year term of this MOU.

ARTICLE IV - ENEWETAK COUNCIL DUTIES AND RESPONSIBILITIES

1. The Enewetak Council will provide the space for the permanent land-based facility at Enewetak at a cost as mutually negotiated by the Parties and set forth in the Scope of Work.

2. After the construction of the facility, the Enewetak Council will be responsible for operation and maintenance of the following at the facility: (a) the walls, ceiling, floor and roofing; (b) the supply of power; (c) the air-conditioning device; (d) the refrigerator; and (e) the physical security of the radiological monitoring equipment and radioactive sources.

3. The Enewetak Council will work and coordinate with the DOE in obtaining any licenses or other approvals from the Republic of the Marshall Islands for any material and equipment required for the radiological monitoring at the land-based facility at Enewetak including equipment that emits low levels of ionizing radiation.

4. The Enewetak Council will designate an individual to assist the DOE in the control and custody of any equipment that is a radioactive source. In addition, the designated individual will assist the DOE to ensure that the radioactive source(s) will not be moved from its/their storage location, except in connection with the conduct of whole-body counting activities. The designated individual will be compensated as mutually agreed by the Parties in the Scope of Work.

5. Within thirty (30) days of the effective date of this MOU, the Enewetak Council will provide to DOE in writing the name of the individual who will provide the assistance functions described in paragraph 4 of this Article.

6. The Enewetak Council will use its best efforts to provide lodging, transportation, and like services to DOE personnel performing radiological monitoring activities at Enewetak as well as lodging and subsistence/support for any local overnight guests from the community that need to be housed at the station as part of any urine collection protocol. The DOE will pay for such services, lodging, subsistence/support at rates agreed upon by the Parties in the Scope of Work.

ARTICLE V - SCOPE OF WORK

The Parties will negotiate and mutually agree upon a Scope of Work and estimated costs, to be reviewed annually during the term of this MOU and updated as appropriate, to define: the agreed-upon cost per month for space and electricity in the whole body counting facility; reimbursement costs for employment of local Enewetakese personnel as needed or as necessary, use of local vehicles, and other support as required from the Enewetak Council to ensure the effective operation of the facility. The costs and reimbursements are retroactive to November 1, 1995.

ARTICLE VI - EFFECTIVE DATE, AMENDMENT, RENEWAL AND TERMINATION

1. This MOU will be effective upon the date the last signatory signs the MOU, and will remain in effect for a period of five (5) years.

2. By written agreement of the Parties, this MOU may be amended at any time, and may be renewed for successive five-year periods.

3. This MOU may be mutually terminated by written agreement of the Parties.

Date: _____

Paul J. Seligman, M.D., M.P.H.
Deputy Assistant Secretary for Health Studies
United States Department of Energy

Date: _____

Neptali Peter
Mayor
Fnewetak/Ujelang Local Government Council