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TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. <i>William Bair</i> ✓		
2. <i>Jack Healy</i>		
3. <i>William Robinson</i>		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

*For your information.
 would like to discuss this
 with you later.*

REPOSITORY *PNVL*
 COLLECTION *Marshall Research*
 BOX NO. *SC 84*
 FOLDER *Adkins - 1981*

DOCUMENT DOES NOT CONTAIN ECI

Reviewed by *[Signature]* Date *4/30/97*

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GPO : 1981 O - 341-529 (25)

OPTIONAL FORM 41 (Rev. 7-76)
 Prescribed by GSA
 FPMR (41 CFR) 101-11.206

EPIDEMIOLOGY RESOURCES, INC.

PROPOSAL TO PROVIDE INDEPENDENT SCIENTIFIC ASSESSMENT
OF THE RADIOLOGICAL RISK OF RESETTLING ENEU AND BIKINI ISLANDS

SUBMITTED TO:

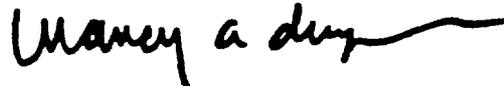
U.S. DEPARTMENT OF ENERGY

WASHINGTON, D.C.

SEPTEMBER 9, 1981

This proposal is a firm offer for sixty (60) days from the date of this letter. Upon notification by the Department of Energy, we guarantee to begin work within three (3) weeks. We will make an effort to coordinate our travel plans with DOE laboratory personnel, unless such coordination is clearly impractical.

Respectfully submitted,



Nancy A. Dreyer, MPH, Ph.D.
President

mot

P.O. Box 57, Chestnut Hill, Massachusetts 02167 (617) 734-9100

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PROPOSAL TO PROVIDE INDEPENDENT SCIENTIFIC ASSESSMENT OF
THE RADIOLOGICAL RISK OF RESETTLING ENEU AND BIKINI ISLANDS

BACKGROUND

Bikini Atoll is a chain of 26 islands with a combined land area of 2.32 square miles, surrounding a lagoon of approximately 243 square miles. Bikini is the largest of the atoll's islands and covers 0.66 square miles. The atoll is one of 29 atolls and 5 islands comprising the Marshall Islands, which are spread over 357,000 square miles in the central Pacific Ocean.

In January, 1946, the Joint Chiefs selected Bikini Atoll as the site to conduct a series of nuclear tests in a program known as "Operation Crossroads." The Bikini people were evacuated to Rongerik Atoll, 140 miles east of Bikini in March of the same year. Two years later they were moved to the U.S. military base at Kwajalein, and then to the island of Kili, where most Bikinians continue to live today. Between 1946 and 1958, the Bikini atoll was the site for 23 nuclear tests.

Ever since the Bikinians were moved off their atoll in 1946, the people have looked forward to returning to their homeland at such time when it was no longer needed. Clearly their wish to return to their native home is balanced by their desire for physical safety and health for themselves and their progeny. Their experience in dealing with the U.S. government has led them to become cautious and distrustful. Now instead of accepting without question the

recommendations of U.S. government scientists, the Bikini people have requested the U.S. government fund the participation of an independent scientist to review and interpret the most recent radiological survey. The Memorandum Agreement of October 27, 1978, which settled the litigation in People of Bikini v. Seamans, et al., Civ. No. 75-348 (D-Ha) provides that the people of Bikini may select a qualified scientist having generally accepted scientific training and experience to participate in the process of analysis of survey results." (see Appendix A).

In 1980 the Department of Energy released a bilingual report in English and Marshallese entitled, "The Meaning of Radiation at Bikini Atoll."¹ The report described what radiation is, how the radioactive fallout occurred and spread as a result of the nuclear tests, and the nature and kinds of radioactivity in the Bikini environment of that time. Some of the delayed health effects of ionizing radiation were discussed with particular emphasis on cancer and birth defects. If parts of the Bikini Atoll were resettled, the largest potential dose that an individual might receive was estimated to range from 280 mrem/year to 6200 mrem/year, depending on which islands were settled and whether or not the local diets were supplemented with imported food.⁻¹

In March 1980 Senator Henchi Balos, the elected representative of the Bikinians to the Marshall Islands Legislature, met with representatives of Epidemiology Resources, Inc. and requested that they conduct an independent review of the DOE study on behalf of the Bikinians. As a result, we propose:

- (a) A technical evaluation of the dosimetric information to be supplied by the U.S. government, and

1. Bair WJ, Healy JW, and Wacholz, BW: The Meaning of Radiation at Bikini Atoll, Publication No. DOE/TIC-11222, U.S. Dept. of Energy, Washington, D.C. Sept., 1980

(b) A lay report to be translated into Marshallese and presented orally to the Bikinians on Kili.

Since the Memorandum Agreement suggests that the Department of Energy and the Department of Interior have shared responsibility for the independent scientific assessment, this project is divided into two phases to be funded separately. Funding for the technical evaluation will be the responsibility of the Department of Energy, whereas funding for preparation and delivery of the lay report will be the responsibility of the Department of Interior. Since the project requires technical review involving the disciplines of radiation biology, medicine, environmental dosimetry and social behavior, Epidemiology Resources, Inc. is proposing a team of three scientists to conduct the project. Dr. Henry I. Kohn, the David Wesley Gaiser Professor Emeritus of Radiation Biology at Harvard Medical School, is proposed as the principal investigator. Dr. Nancy Dreyer would be the co-principal investigator and project coordinator. Dr. Dreyer, an epidemiologist with training in sociology and research experience in radiation, is the director of Epidemiology Resources, Inc. Dr. John Harley, a well known authority in environmental radiation, is proposed as the third member for this project. Dr. Harley was the director of the U.S. Environmental Measurements Laboratory for 20 years and retired in 1980.

This document is a revision of our May 6, 1981 proposal to the Department of Energy. It incorporates all the recommendations made by Mr. Stephen H. Greenleigh of the Department of Energy in his letter of August 19, 1980 (Appendix B).

QUALIFICATIONS OF EPIDEMIOLOGY RESOURCES, INC. (ERI)

ERI was selected for this project by the Bikinians and approved by the Department of Energy (Appendix C) primarily for two reasons: (1) because of

their scientific expertise in the area of ionizing radiation, and
(2) because ERI has no on-going contractual agreements with the Department of Energy or any related agencies that might be construed as conflict of interest. Currently ERI receives no federal support for research activities.

Directly Related Work Experience

The following project was conducted by the Epidemiology Resources, Inc. staff when they were the Epidemiology Group at the Health Systems Division of Equifax, Inc.

CLIENT: Nuclear Regulatory Commission
5650 Nicholson Lane
Rockville, MD 20850

PROJECT OFFICER: Dr. Michael Parsont
(301) 443-5860

PROJECT TITLE: A STUDY TO DETERMINE THE FEASIBILITY OF CONDUCTING
EPIDEMIOLOGIC STUDIES OF THE HEALTH EFFECTS OF
LOW-LEVEL IONIZING RADIATION

This project focused on identifying suitable populations for study and evaluated the probability of conducting a definitive study on any one of them. Occupationally exposed groups, medically exposed populations and groups with special environmental exposure to radiation were evaluated. The project utilized skills in epidemiology, radiation biology, occupational, medical and environmental dosimetry, occupational health and medicine. Dr. Dreyer, as the principal investigator, coordinated the work of staff and consultants, who critically considered the broad spectrum of biological

effects of low-level ionizing radiation, the expected excess in health defects according to dose, and the precision in dose assessment as a consequence of natural variability and sampling error. Various sites across the United States were visited to determine the availability of records for the candidate populations and to identify problems associated with obtaining access to data and with record linkage. The results led to recommendations for policy makers and the Congress regarding the most cost-efficient and valid investigations worthy of future support.

Project Staff

To provide the requisite combination of skills, ERI is proposing a group of three people to conduct the scientific assessment of the Department of Energy's radiological survey of Bikini Atoll. The proposed staff is:

Principal Investigator --	Dr. Henry I. Kohn
Co-Principal Investigator --	Dr. Nancy A. Dreyer
Advisor on Environmental Dosimetry --	Dr. John H. Harley

Curricula Vitarum

The following pages contain the C.V.s of Drs. Henry Kohn, Nancy Dreyer, and John Harley.

B.A.

Zoology
Dartmouth College
Hanover, NH

1930

POSITIONS HELD

Senior Advisor

Epidemiology Resources, Inc.
Chestnut Hill, MA

1980 - Present

SCIENTIST

GENERAL, INC.
Reading, MA

Gaiser Professor
Emeritus

Harvard Medical School
Boston, MA

1978 - Present

Director

Shields Warren Radiation Laboratory
New England Deaconess Hospital
(a research laboratory)
Boston, MA

1965 - 1979

Gaiser Professor of
Radiation Biology

Harvard Medical School
Boston, MA

1968 - 1976

Director

Center for Human Genetics
Harvard Medical School
Boston, MA

1971 - 1975

Fuller-American Cancer
Society Professor
of Radiology

Harvard Medical School
Boston, MA

1963 - 1968

Oak Ridge National Laboratory &
University of California
San Francisco, CA

Instructor and
Assistant Professor

Physiology & Pharmacology
Duke Medical School
Durham, NC

1937 - 1943

MAJOR COMMITTEES AND OTHER ACTIVITIES

Member	Committee on Nuclear & Alternative Energy Systems, N.A.S. - N.R.C. Washington, DC	1975 - Present
Member	Biomedical Research Review Committee Argonne Associated Universities Argonne, IL	1974 - Present
Council	Radiation Research Society Bethesda, MD	1962 - 1965
Member	Radiation Study Section National Institutes of Health Bethesda, MD	1968 - 1970
Scientific Secretary	Atomic Energy Commission Advisory Committee on Biology & Medicine Germantown, MD	1958 - 1962
Associate Editor	Radiation Research	1957 - 1961

PROFESSIONAL SOCIETIES

American Physiological Society
Radiation Research Society
Environmental Mutagen Society

PUBLICATIONS

A complete list will be supplied on request.

	Chapel Hill, NC	
M.P.H.	Epidemiology University of North Carolina Chapel Hill, NC	1978
B.A.	Sociology Brandeis University Waltham, MA	1972

POSITIONS HELD

Director	Epidemiology Resources, Inc. Chestnut Hill, MA	1980 - Present
Director of Summer Program	New England Epidemiology Institute Chestnut Hill, MA	1980 - Present
Director of Epidemiologic Research	Equifax Inc. Health Systems Division Reading, MA.	1979 - 1980
Epidemiologist	Depts. of Pathology and Medicine Duke University Medical Center Durham, NC	1977 - 1979
Summer Intern	Contraceptive Evaluation Branch Center for Population Research National Institute for Child Health and Human Development Bethesda, MD	1978
Epidemiologist	Chronic Disease Branch Division of Health Services N.C. Dept. of Human Resources Raleigh, NC	1975 - 1976

Research Analyst Registry of Clear-Cell Adenocarcinoma 1972 - 1974
 of the Lower Genital Tract in
 Young Females
 Massachusetts General Hospital
 Boston, MA

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science
American Public Health Association
International Epidemiological Association
National Women's Health Network
Society for Epidemiologic Research

OTHER ACTIVITIES

Consultant	DES Mothers Study Dartmouth College	1980 - Present
Guest Lecturer	Women's Health Course Harvard School of Public Health	1979 - Present

PUBLICATIONS

MONOGRAPHS:

Dreyer, N.A., R.W. Clapp, S.J. Covino, Jr., *et al.*: A study to determine the feasibility of conducting epidemiologic studies of the health effects of low-level ionizing radiation. Phase I Report, January 15, 1980. Nuclear Regulatory Commission Publication *NUREG/CR-1171*, May 1980.

Dreyer, N.A., H.I. Kohn, R.W. Clapp, *et al.*: The feasibility of epidemiologic investigations of the health effects of low-level ionizing radiation. Final Report, September 30, 1980. Nuclear Regulatory Commission Publication *NUREG/CR-1728*, November 1980.

PAPERS AND LETTERS:

Dreyer, N.A.: Sex Roles and Delay Behaviour, (Letter), *Journal of Chronic Disease* 31: 493-495, 1978.

Dreyer, N.A. and S.V. Pizzo: Blood coagulation and idiopathic thromboembolism in fertile women, *Contraception* 22 (2):123-135, 1980.

Dreyer, N.A., N.F. Woods, and S.A. James: ISRO: A scale for measuring sex role orientation in women, *Sex Roles* 7 (2):173-182, 1981.

Pizzo, S.V., J.G. Lewis, E.E. Campbell, and N.A. Dreyer: Fibrinolytic response and oral contraceptive-associated thromboembolism, *Contraception*, in press, 1981.

Dreyer, N.A., J.E. Loughlin, F.H. Fahey, and N. Harley: The feasibility of epidemiologic studies of cancer in people residing near Rocky Flats, *Health Physics*, in press.

Dreyer, N.A. and S.V. Pizzo: A study of menstrual variation in fibrinolytic activity among women in the fertile age range, Submitted for publication.

Dreyer, N.A., J.E. Loughlin, E.R. Friedlander, *et al*: Choosing populations for study of human health effects of low-dose ionizing radiation, *American Journal of Public Health*, in press.

Dreyer, N.A. and E.R. Friedlander: The risk of neoplasia from low-dose sparsely ionizing radiation, Submitted for publication.

ABSTRACTS:

Dreyer, N.A.: Prospects for epidemiologic studies of low-level ionizing radiation. Presented at the meeting of the Society for Epidemiologic Research, June 18-20, 1980, Minneapolis, MN. *American Journal of Epidemiology* 112 (3):424-425, 1980.

Dreyer, N.A.: Examining the puzzle of health effects of low-dose ionizing radiation. Presented at the meeting of the American Public Health Association, October 22, 1980, Detroit, MI.

JOHN H. HARLEY

SENIOR ADVISOR

ACADEMIC TRAINING

Ph.D.	Chemistry Rensselaer Polytechnic Institute Troy, NY	1952
Sc.B.	Chemistry Brown University Providence, RI	1938

POSITIONS HELD

Senior Advisor	Epidemiology Resources, Inc. Chestnut Hill, MA	1981-Present
Director	Environmental Measurements Laboratory U.S. Department of Energy New York, NY	1977-1980
Director	Health and Safety Laboratory U.S. Energy Research & Development Administration New York, NY	1975-1977
Director	Health and Safety Laboratory U.S. Atomic Energy Commission New York, NY	1960-1975
Assistant Director	Health and Safety Laboratory U.S. Atomic Energy Commission New York, NY	1959-1960
Chief	Analytical Branch Health and Safety Laboratory U.S. Atomic Energy Commission New York, NY	1949-1959
Instructor and Ass't Professor	Rensselaer Polytechnic Institute Troy, NY	1946-1949
Analytical Chemist	Union Carbide and Carbon Niagara Falls, NY	1942-1946
Chemist	U.S. Rubber Company, Latex Development Providence, RI	1938-1940

PUBLICATIONS

A complete list will be supplied on request.

ISLANDS (TO BE SUPPORTED BY THE DEPARTMENT OF ENERGY) -- 3 MONTHS

Task 1: Review Lawrence Livermore Laboratory's dosimetry

Task 2: Go to Bikini atoll and collect 40 environmental samples of soil and foodstuffs, including marine foods and animals, such as pigs, chickens,

etc. The taking and handling of these environmental samples will be jointly supervised by one person designated by Epidemiology Resources, Inc. and one person designated by Lawrence Livermore Laboratory. Technical procedures covering such matters as sampling techniques, sample storage and transportation, analytical procedures, etc., will be determined by joint agreement between Epidemiology Resources, Inc. and a representative designated by the Lawrence Livermore National Laboratory.

- Task 3: Assay environmental samples for gamma radiation, plutonium and strontium (to be subcontracted to Environmental Analysis Laboratories, Richmond, CA). Enough material will be collected to permit splitting of samples for confirmatory analyses by Epidemiology Resources, Inc. and Lawrence Livermore Laboratory.
- Task 4: Compare the diet used by the Department of Energy with other available dietary surveys and provide at least two different dietary profiles to be used in our dosage estimates. Parallel calculations using the Lawrence Livermore National Laboratory's dietary assumptions will be made.
- Task 5: Estimate average dose per year and dose range for embryo, fetus, adults — and their progeny for likely lifestyles on resettled Eneu and Bikini islands.
- Task 6: Based on Task 5, estimate the magnitude and range of potential health defects for resettlement of Eneu and Bikini islands.

PROJECT DELIVERABLE: One scientific report

Dreyer, Mr. Weisgall and Mrs. Buck or her representative(s)).

Task 3: Transmit written report to Department of Interior plus a brief summary of the discussion of the report by the Bikinians at Kili, as noted in Task 2.

PROJECT DELIVERABLES: One bilingual report (1000 copies) and one summary of meeting.

NOTE: We assume that the cost for the translator's time and travel will be supported directly by the Department of Interior.

TIME-PHASE SCHEDULE

PHASE ONE:

1. Review LLL dosimetry 
2. Collect environmental samples 
3. Re-assay samples 
4. Evaluate diet 
5. Estimate dose 
6. Estimate health risk 

PHASE TWO:

1. Write lay report 
2. Give oral report on Kili 
3. Transmit final report to Dept. of Interior 

PROJECT DELIVERABLES:

1. Scientific report 
2. Bilingual report 
3. Summary of Kili meeting 

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

WEEKS

BUDGET

This is a cost proposal for a cost-plus-fixed-fee contract. Reimbursement for translators fees and travel are not included. Our overhead rate was modified at the end of our fiscal year, June 30th.

r. S. James Adelstein, Professor of Nuclear Medicine, Dean of Faculty, Harvard Medical School (\$500/day)	500		
r. John Harley, Dosimetry (\$400/day)	10,000		
r. Jonathan Weisgall, Legal Counsel to Bikinians (\$600/day)	6,600		
TOTAL CONSULTANTS			17,100
OTHER DIRECT COSTS (Itemize on Exhibit A)			7,850
TOTAL DIRECT COST AND OVERHEAD			91,306
GENERAL AND ADMINISTRATIVE EXPENSE (Rate -0- % of cost element Nos.)			
ROYALTIES *			
TOTAL ESTIMATED COST			91,306
FEE OR PROFIT (9%)			8,218
TOTAL ESTIMATED COST AND FEE OR PROFIT			99,524

III. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? <input type="checkbox"/> YES <input type="checkbox"/> NO (If yes, identify): <input checked="" type="checkbox"/> ADVANCE PAYMENTS <input type="checkbox"/> PROGRESS PAYMENTS OR <input type="checkbox"/> GUARANTEED LOANS
IV. DO YOU NOW HOLD ANY CONTRACT (Or, do you have any independently financed (IR&D) projects) FOR THE SAME OR SIMILAR WORK CALLED FOR BY THIS PROPOSED CONTRACT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If yes, identify):
V. DOES THIS COST SUMMARY CONFORM WITH THE COST PRINCIPLES SET FORTH IN AGENCY REGULATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (If no, explain on reverse or separate page)

See Reverse for Instructions and Footnotes

OPTIONAL FORM 60 (10-71)

Reference 1 -- SUPPORT FOR TRAVEL ESTIMATES

<u>Destination</u>	<u>Cost</u>
Brookhaven National Laboratory -- 1 person for 3 days	\$426
Airfare -- \$151	
Per diem - 225	Cost per trip = \$426
Taxis -- 50	
Washington, D.C. -- 1 person for 2 days, 3 trips	1,353
Airfare -- \$216	
Per diem - 150	Cost per trip = \$451
Car rental/parking - 85	
Eneu/Bikini via San Francisco -- 1 person (ND) for 14 days (3 in California) and 3 Bikinians	9,418
Airfare: Boston-Kwajalein -- \$1,528 (N.D.)	
Majuro-Kwajalein -- 480 (3 Bikinians)	
Per diems (11 days) - 385 (N.D.)	
Per diems in CA(re: sample assays) -- 225 (N.D.)	
Taxis in CA -- 100 (N.D.)	
Boat from Kwajalein-Bikini -- 6,800	
Boston -- New York -- 1 person for 2 days, 2 trips	666
Airfare -- \$151	
Per diem - 132	Cost per trip = \$333
Taxi - 50	
San Francisco (LLNL) -- 1 person, 2 trips (5 days, 2 days)(J.H.)	2,470
Airfare -- \$920	
Per diem - 375 (5 days); 150 (2 days)	
Car rental - 75; 30	
Cost per trip: \$1,370 (5 days); \$1,100 (2 days)	

1. Enter in this column those necessary and reasonable costs which in the judgment of the offeror will properly be incurred in the efficient performance of the contract. When any of the costs in this column have already been incurred (e.g., on a letter contract or change order), describe them on an attached supporting schedule. Identify all sales and transfers between your plants, divisions, or organizations, under a common control, which are included at other than the lower of cost to the original transferee or current market price.

2. When space in addition to that available in Exhibit A is required, attach separate pages as necessary and identify in this "Reference" column the attachment in which the information supporting the specific cost element may be found. No standard format is prescribed, however, the cost or pricing data must be accurate, complete and current, and the judgment factors used in projecting from the data to the estimates must be stated in sufficient detail to enable the Contracting Officer to evaluate the proposal. For example, provide the basis used for pricing materials such as by vendor quotations, shop estimates, or invoice prices; the reason for use of overhead rates which depart significantly from experienced rates (reduced volume, a planned major re-arrangement, etc.); or justification for an increase in labor rates (anticipated wage and salary increases, etc.). Identify and explain any contingencies which are included in the proposed price, such as anticipated costs of rejects and defective work, or anticipated technical difficulties.

3. Indicate the rates used and provide an appropriate explanation. If a cost agreement has been reached with Government representatives on the use of forward pricing rates, describe the nature of the agreement. Provide the method of computation and application of your overhead expense, including cost breakdown and showing trends and budgetary data as necessary to provide a basis for evaluation of the reasonableness of proposed rates.

4. If the total cost entered here is in excess of \$250, provide on a separate page the following information on each separate item of royalty or license fee: name and address of licensor, date of license agreement, patent numbers, patent application serial numbers, or other basis on which the royalty is payable; brief description, including any part or model numbers of each contract item or component on which the royalty is payable; percentage or dollar rate of royalty per unit; unit price of contract item; number of units; and total dollar amount of royalties. In addition, if specifically requested by the contracting officer, a copy of the current license agreement and identification of applicable claims of specific patents shall be provided.

5. Provide a list of principal items within each category indicating known or anticipated source, quantity, unit price, competition obtained, and basis of establishing source and reasonableness of cost.

six months to report on the status of the project.

5. Funds shall be specifically budgeted for the expense of participation in project planning and execution by representatives of the Bikini people and such funds shall specifically include funds for transportation and lodging expense for representatives of the Bikini people to facilitate the maximum practicable participation by the Bikini people in the planning and execution of the project.

6. All major project documents, including documents relating to radiation exposure, shall be translated or summarized in the Marshallese language to the maximum feasible extent and the project manager shall be responsible for causing such translations or summaries to be made and delivered to the Bikini people.

7. No final disposition of any rights of any kind relative to Bikini Atoll, Kili Island or certain lands of the Bikini people on Jaluit Atoll shall be made without the consent of those who have rights in Bikini Atoll under Marshallese custom and tradition and applicable Trust Territory of the Pacific Islands law, and no additional land or land rights for resettlement of the Bikini people shall be obtained without the concurrence of those who have rights in Bikini Atoll in accordance with Marshallese custom and tradition and applicable Trust Territory of the Pacific Islands law.

II. Radiation Survey

8. A radiation survey, using latest and most effective technology, including aerial radiation surveying, shall be completed no later than December 31, 1978, with respect to Bikini Atoll in connection with the radiation survey of the Northern Marshalls including, in addition to

them in making a decision with respect to resettlement, the Bikini people shall be entitled to select a qualified scientist having generally accepted scientific training and experience to participate in the process of analysis of survey results and preparation of the final survey report.

11. The United States Department of Energy, as the agency in charge of the radiation survey, shall arrange to contract with the individual selected by the Bikini people for the purposes set forth in the preceding paragraph, provided only that terms of any such contract with respect to compensation and expenses shall be reasonably based on prevailing consultation fees and expenses for work of similar character.

12. The individual selected by the Bikini people to participate in the analysis of survey data and preparation of the final survey report shall be guaranteed independence and full access to all survey data available to the Department of Energy and shall have a full opportunity to make a complete and detailed report of his or her findings, analyses, recommendations and conclusions.

IV. General Provisions

13. It is the intantion of the parties to this agreement that the terms of the agreement shall survive any change in the political status of the Marshall Islands, subject to the wishes of the Bikini people.

14. The execution of this document in no way constitutes an admission that the Trust Territory of the Pacific Islands defendants have submitted to the jurisdiction of the United States District Court for the District of Hawaii.

The People of Bikini by
Bikini Counsel

By: *Jonathan M. Weisgall*
Jonathan M. Weisgall

Attorney for Plaintiffs

October 27, 1978

Federal Defendants
(Department of the Interior
on behalf of the Government
of the Trust Territories
of the Pacific Islands)

By: *Gary B. Randall*
Gary B. Randall

Attorney for Federal Defendants

October 27, 1978

with a visit by our laboratory personnel. If this is done, we will deduct an appropriate portion of transportation expense from our contract payment. If such coordination is clearly impractical, then you may proceed as indicated in the proposal.

4. Should Epidemiology Resources, Inc. base its dose calculation upon any dietary assumptions other than those used by the Lawrence Livermore National Laboratory, parallel calculations using the Lawrence Livermore National Laboratory dietary assumptions also should be included so that the source of any differences due to the assumed diet is clear.

We must observe that it is our belief that obtaining 40 environmental samples from Bikini Atoll is not required by the court agreement and, further, is of dubious scientific or technical merit. Nevertheless, we are sensitive to the desire of the Bikini people for site confirmation and we therefore agree to accommodate their perceived needs.

We must observe also that the court agreement requires review by a single scientist. Because you believe that a small team is required to comprehensively review the data, and perform related tasks, we have agreed to your request so that there will be absolutely no question of our having provided every resource needed to perform this task. Please understand that if you wish to alter the distribution of time among the three principal investigators (without exceeding the total amount allotted to them by contract) this would be acceptable to us.

As stated in previous letters dated January 22, 1981 and March 31, 1981, the Bikini people must formally acknowledge that execution of this contract with Epidemiology Resources, Inc. constitutes full and complete compliance by the Department of Energy in fulfilling the Department's sole outstanding obligation under the terms of the Memorandum Agreement settling the litigation.

Inasmuch as this contract will be between the Department of Energy and Epidemiology Resources, Inc., and since your letter-proposal of May 26, 1981, is neither on Epidemiology Resources, Inc. letterhead nor signed by an authorized Epidemiology Resources, Inc. officer, a proposal from Epidemiology Resources, Inc. addressed to the Department of Energy and signed by an Epidemiology Resources, Inc. official will be needed in order to comply with Departmental procurement requirements. We look forward to receiving a proposal from Epidemiology Resources, Inc. Written agreement on the conditions and procedures set forth above can be either incorporated directly into the proposal or set forth in a letter which will become part of any signed agreement.

Please call us if you have any questions.

Sincerely,



Stephen H. Greenleigh
Acting Deputy Assistant Secretary
for Environment, Safety and Health
Environmental Protection, Safety and
Emergency Preparedness

cc: W. Robison, LLNL
S. Gottlieb, DOE/OGC
R. Ray, NVOO
B. Wachholz, DOE/EP
H. Gill, DOE/OGC

unacceptable because of his present affiliations. However, in view of the personnel and competence available to Epidemiology Resources, Inc. (ERI), the Department of Energy finds ERI to be acceptable as "...having generally accepted scientific training and experience..." to review the results of the radiological survey of Bikini Atoll.

Several points in my letter to you of January 22, 1981, need to be reiterated, however. Firstly, the Agreement speaks to "a qualified scientist," and, while we have indicated a willingness to consider the participation of two scientists because of the multi-disciplinary nature of the material to be reviewed, we feel that a single person must be the responsible agent. Furthermore, while the Department of Energy is willing to consider the participation of two scientists, your letter speaks to the involvement of three people; this goes somewhat beyond the terms of the Agreement and of our previous discussions. Such an expansion of the "independent scientist" will need to be the subject of further negotiation.

Secondly, should agreement between ERI and the Department of Energy ultimately be reached, it must be clearly recognized and formally acknowledged by the Bikini people that this constitutes full and complete compliance by the Department of Energy in fulfilling its sole outstanding obligation under the Agreement.

Of course, our previous statements regarding reviewers' independence and access to data remain valid.

In summary, we are pleased to agree to your request that ERI be selected in place of Dr. Fabrikant as the "independent scientist" to review the radiological survey of Bikini Atoll, and we will be pleased to enter into discussion regarding the matter with you.

Sincerely,



Bruce W. Wachholz
Office of Health and
Environmental Research