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ATOMIC ENERGY COMMISSION  
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REPOSITORY DOE/PASO  
COLLECTION DOE/NV  
BOX No. 1227, "ERDA #2"  
BIKINI SURVEY  
FOLDER Jan Thru Dec / 1970

Maj Gen. E. B. Giller, AGMMA, HQ  
M. B. Biles, Dir., DOS, HQ  
J. R. Totter, Dir., DBM, HQ

REQUEST FOR POLICY DIRECTION - BIKINI PROGRAM ACTIVITIES

This requests direction on NVOO responsibility for long-term radiological monitoring at Bikini and a definition of program funding responsibility.

a. Background

From the time that nuclear weapons tests were last conducted at Bikini Atoll (1958), the radiological monitoring efforts in this area have been carried out largely through DBM auspices, with objectives which were oriented primarily toward biologic research.

The major exception was the Bikini Clean-up Program of Spring/Summer 1969, in which NVOO assisted DOD in the conduct of a radiological survey and clean-up program, with responsibility for determining (a) that DOD radiological health and safety plans for the clean-up were approved by the AEC prior to field operations; and (b) that radiological health and safety plans for the scrap removal project were met at completion of the project. This responsibility included radiological advice and assistance during the operation, but did not include certification of the islands as to their habitability by humans.

In both the 1969 clean-up operation and the 1970 follow-on survey, AEC contractors were used both in program definition and field sampling activities. This included the U. S. Public Health Service (sampling of plant foods and water, sampling and monitoring of terrestrial and airborne radiation levels) and University of Washington (radiological sampling of animal food, soil and water). These contractor forces were provided from the capabilities being maintained to support an AEC readiness-to-test response in the Pacific, and were funded from the Readiness Program.

211

NOV 3 1970

b. Present Situation

We are now facing the prospect that the AEC Readiness Program will be eliminated as a budget line item beginning in FY-72, and that any essential activities which require continuation will have to compete with underground test program requirements for the limited O3 Weapons Program funds. Under this concept, we are expecting that NVOO's other readiness safety programs (i.e., water wave) will be terminated, and we would expect that the radiological response capabilities will likewise be deleted as active programs.

On the other hand, with the impending resettlement of 200-300 Bikinians to their home islands, a continuing radiological monitoring program at Bikini Atoll is essential.

Since past surveys clearly indicate that exposure levels to the Bikini inhabitants will be near the upper limit of the Federal Radiation Council guideline, it seems clear that the requirement to monitor the environment there will continue for an indefinite period.

c. Proposed Program

The proposed program as presently conceived would employ a continuation of the efforts of both the USPHS and the University of Washington at levels similar to those expended at Bikini in the past. This would include monitoring of all plant foods currently grown there as well as sampling of new plant foods planned for future cultivation. Reef fish and other common sea foods would also be sampled and radiologically analyzed as well as ground water and soil. Some air sampling would also be done. Current plans call for family dwellings to be constructed of cement slabs made from local coral aggregate and sand; these dwellings should be examined for shielding capacity and background gamma radiation levels.

A program of this scope should be conducted on an annual basis and would require approximately 30 days per year in the field. Based on previous experience in these surveys, we estimate that the total cost (both agency efforts and logistic support) is on the order of \$125-150K per year. Arrangements already exist through PASO for providing field support from Kwajalein for these surveys, but on a reimbursable basis.

NOV 3 1970

- 3 -

d. Conclusions

The general conclusions follow:

- (1) It is clear that the AEC has the responsibility to carry out a continuing radiological survey program at Bikini in protection of human populations being relocated there.
- (2) The required capability and expertise is presently available within NVOO to carry out such a program. As in the case of other abandoned weapons test sites, it appears appropriate that NVOO should assume the responsibility to conduct a continuing monitoring program in the support of public safety.
- (3) The field program would be carried out by NVOO in close conjunction with Headquarters' staff, with guidance and concurrence of DOS as to program objectives and effort.
- (4) In this connection, the relationship of DEM's R&D interest in the program should also be defined, and if possible coordinated with the NVOO/DOS effort.
- (5) Under our current year budget, we plan to field a Bikini survey next spring. However, we would not expect field resources to be available through Readiness Program capabilities in subsequent years, and recommend that decisions should be made now as to program responsibility and funding source for FY-72 and beyond.

We request that guidance on this matter be provided to us by December 10, 1970, if possible, in order to facilitate our mid-year review to DMA and to support FY-73 budget preparation.

  
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Manager

NVT:FDC-499

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