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STANDARD OPERATING PROCEDURE NO. 21

REVISION NO. 1

PACIFIC AREA SUPPORT OFFICE
(PASO)

BIKINI ATOLL SUPPORT SERVICES

I. PURPOSE AND SCOPE

The Pacific Area Support Office and its integrated contractor, Holmes & Narver, Inc., has, for several years provided logistical and other support services to the Department of Energy funded research program operated at Bikini Atoll by Lawrence Livermore National Laboratory (LLNL). The research studies are designed to measure and analyze radionuclides in the environment at Bikini in order to predict and refine dose assessments to man. Another significant aspect of the program is to conduct experiments aimed at reducing the inventory of radionuclides in the soil or to otherwise limit their entry into the food chain.

The scientific information gained thus far has been made generally available to the Bikinians, their Government, the U. S. Government, other interested governments, international agencies, and organizations concerned with the resettlement and rehabilitation of the atoll.

Recently, as a result of activities at several levels by the U. S. Government, the Government of the Republic of the Marshall Islands, and the Kili-Bikini Council, there has been an intensification of the research program at Bikini Atoll. In 1983, the U. S. Congress created the Bikini Atoll Rehabilitation Committee (BARC), charging it specifically with the task of investigating and reporting to the Congress on the feasibility and cost of rehabilitating Bikini Atoll. Consequently, in the interests of efficiency and economy, the Department of Energy and the Department of the Interior (which funds the BARC) executed in mid-1985 a Memorandum of Understanding to pool their efforts and work jointly on the scientific programs at Bikini Atoll.

II. BACKGROUND

The U. S. Government's direct involvement in Bikini dates from 1946 at which time the 167 inhabitants agreed to move from their atoll so that it could be used for atomic testing. Between 1946-1958, twenty-three tests were conducted at the Atoll, rendering it largely uninhabitable.

The dri-Bikini (Bikinians) initially stayed at Rongerik Atoll, moved later to Kwajalein, and by 1948, settled on the island of Kili located 425 miles southeast of Bikini Atoll.

DOE
John Rudolph's Files
D-File
Marshall Islands 1988

In 1969, the U. S. began a clean up and resettlement program at the atoll. Several islands were brushed and cleaned of debris and abandoned equipment. Between 1970-73, thousands of coconuts, and some pandanus, breadfruit trees were planted on Bikini and Eneu Islands. Approximately one-hundred and forty Bikinians built and resettled Bikini Island. The move proved to be premature since, by 1975, it had been learned that the residents were ingesting larger amounts of locally grown food than had been predicted, and thus incorporating radiation at levels deemed unacceptable by U. S. scientists. In August of 1978, this group of Bikinians moved to Ejit Island, near Majuro.

In the meantime, the USDOE continued, through LLNL, conducting detailed scientific studies to measure the radioactivity in the Bikini Atoll environment, to refine radiological dose predictions, and to evaluate methods to reduce the level of radioactivity in the soil and food chain.

As mentioned, the BARC was established in 1983 to accelerate and expand upon the research work at Bikini. It is scheduled to report its findings and recommendations to the U. S. Congress sometime in 1987.

III. DESCRIPTION

Bikini Atoll is located 4,000 KM (2,500 miles) southwest of the Hawaiian Islands at 11 35'N and 165 'E. It is comprised of a ring of twenty-six islands with a total land area of 8.8 KM (3.4 sq. miles) and a lagoon of 630 KM (240 sq. miles). The average depth of the lagoon is 47M (180 ft). Of the 26 islands, only Bikini (2.41 KM) and, to a much lesser extent, nearby Eneu (1.22 KM) were permanently inhabited in the past.

The geological structure of Bikini Atoll is that of a coral reef atoll resting on a submerged volcanic mass. The islands are made of reef debris, and reef organisms. The reef is continuously being built and eroded, but under present conditions the islands and passes that connect lagoon and ocean are fairly stable.

The atoll is similar in appearance to others in the Marshall Islands with 45-60 inches of rain per year with winds out of the northeast at 15-22 knots during the months of December through June. The winds will vary at 6-12 knots in the months from July through November. Both Bikini and Eneu are thickly covered with vegetation. The sandy soil supports a variety of plants, shrubbery-thickets along exposed coasts, and, for the larger islands of Bikini and Eneu, subsistence crops and man-made coconut plantations. As the present scientific program attests, a surprising range of food sources such as breadfruit, pandanus, pumpkin, squash, arrowroot, corn, citrus, banana, papaya, etc., can be grown with care and attention.

Bikini Atoll is part of the new Pacific island nation of the Republic of the Marshall Islands. Formerly it had been a subdivision within the Marshall Islands District of the Trust Territory of the Pacific Islands. The TTPI, a United Nations Trusteeship formed in 1947, was placed under the administration of the United States. In 1983 voters in the Marshall Islands approved a Compact of Free Association with the United States which was approved December 1985 by the U. S. Congress and became effective on October 21, 1986. The Compact granted full autonomy to the Marshall Islands. Moreover, the U.S. Government, in exchange for security considerations, awarded considerable financial assistance for the initial fifteen years of the Compact.

Bikini Atoll is under the legal and administrative jurisdiction of the Bikini-Kili Council, a 12 member, elected political body headed by a Mayor. It is currently headquartered at Kili Island in the Southwestern Marshall Islands. Requests to enter Bikini must be cleared with the Government of the Marshall Islands and the local Bikini Council. The DOE will sponsor such requests if they are required in connection with its activities at Bikini Atoll and/or are in the interests of the United States Government.