



# University of Hawaii at Manoa

## Environmental Center

A Unit of Water Resources Research Center  
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November 21, 1991  
RP:0147

District Engineer (PODCO-0)  
U.S. Army Corps of Engineers  
Building 230  
Ft. Shafter, Hawaii 96858

Dear Sir:

Revised Application for  
Department of the Army Permit PODCO 2186  
Resort Hotel and Marina  
Ngesaol, Koror State, Republic of Palau

The Environmental Center has reviewed the above cited document with the assistance of Hans-Jurgen Krock, Look Laboratory; and Elizabeth Muller, Environmental Center.

Our reviewers note that certain issues should be addressed prior to granting a permit for this project.

### Mangrove Swamp Forest

The proposed construction of a luxury resort and marina will affect 48.3 acres of mangrove swamp forest, converting 21.6 acres to open water channels and 26.7 acres to filled fastlands.

The transformation of this mangrove forest will result in the removal of a natural sediment trap which is an inherent property of mangrove forests. This will result in a change in the amount of sediment load released into the outer water channel. Any possible effects upon the surrounding environment, particularly coral reefs, as a result of this altered sediment load should be examined prior to granting a permit for this project.

Mangrove sediment is composed of anoxic and highly reduced material. The dredging of 21.6 acres of such sediment may have significant effects upon the surrounding environment. The application should state more clearly if and how the applicant plans to protect the environment from these potentially harmful sediments.

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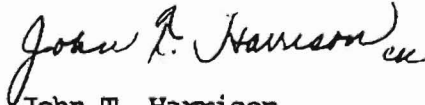
Water Supply and Disposal

Potable water is a scarce commodity in the Republic of Palau. The resort's effect upon the island's water supply should be discussed before permitting this project.

Consideration also should be given to the effects of the resort's wastewater on the capacity of the present treatment plant.

Thank you for the opportunity to comment on this project.

Yours truly,



John T. Harrison  
Environmental Coordinator

cc: Roger Fujioka  
Hans-Jurgen Krock  
Elizabeth Muller