



# University of Hawaii at Manoa

Environmental Center  
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Honolulu, Hawaii 96822  
Telephone (808) 948-7361

May 28, 1987  
RP:0074

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

Dear Sir:

Corps of Engineers Permit Application  
PODCO-O 1988-S, 1989-S, 1990-S  
Atlantis Submarines, Inc.  
(Commercial Submarine Tour Operation)  
Kakaako, Oahu; Lahaina, Maui; Kailua-Kona, Hawaii

We have conducted a review of the above noted documents with the assistance of Keith Chave, Oceanography; Steven Dollar, Hawaii Institute of Marine Biology; and Pamela Bahnsen, Environmental Center. Principal activities in each of the noted locations include the establishment of permanent mooring facilities and the deployment of artificial reef structures.

Our reviewers find few environmental concerns associated with the proposed activities as described. However, we are unable to comment on the adequacy of the various designs, because insufficient structural criteria for the component elements of the project are provided. Thus, questions relating to the stability of the artificial reefs and the various moorings remain unanswered. From the descriptions of the proposed depth ranges of operation, it is clear that considerable water motion will be felt at the artificial reef sites. Environmental damage resulting from the shifting of the reefs and moorings under storm conditions remains a distinct possibility. Additionally, it is not apparent whether an artificial reef is necessary or could be built near the old airport at Kailua-Kona because of the steepness of the slope in that area.

The applicant is aware that artificial reefs will attract fish and fishermen. However, if the operators wish to prevent fishing in these areas, this must be accomplished by the operators themselves with authority vested in them by the State, unless the State is specifically paid to provide this protection. At present, the State is not equipped to undertake such a policing function.

District Engineer

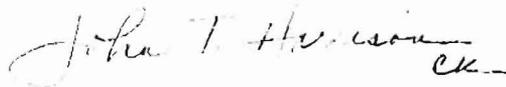
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Finally, the site of the artificial reef off Kakaako is very close to a former dumping ground noted on navigational charts. The presence of relict cables, structures, and debris poses hazards to the safe navigation of the submersible.

We appreciate the opportunity to provide comments on this public notice.

Sincerely,

A handwritten signature in cursive script that reads "John T. Harrison" with a small flourish at the end.

John T. Harrison  
Environmental Coordinator

cc: OEQC

L. Stephen Lau  
Keith Chave  
Steven Dollar  
Pamela Bahnsen