Ms. Prema Qadir  
Clean Water Branch  
Department of Health  
Five Waterfront Plaza, Suite 250  
500 Ala Moana Boulevard  
Honolulu, Hawai‘i 96816

Dear Ms. Qadir:

Section 401 Water Quality Certification (WQC) Application  
Honolulu Waterfront Master Plan—Kaka‘ako Makai Area Plan  
(Seawall Reconstruction)  
Kaka‘ako, Honolulu, O‘ahu

The above referenced document describes potential impacts associated with reconstruction of 2,300 feet of unreinforced rock seawall. The present action is part of "phase one" of the Honolulu waterfront project.

This review was prepared with the assistance of Hans-Jurgen Krock, Ocean Engineering/Look Laboratory; and Robert Irwin, Environmental Center.

**Seawall Construction**

Our reviewers found little problem with water quality concerns related to the construction of the proposed seawall. As mixing through the porous seawalls already is occurring, and erosion is a notable problem at the western section of the wall, water quality impacts resulting from the proposed reconstruction (with mitigative measures) are considered relatively insignificant.

**Inland Waterways**

Construction of the proposed inland waterways, which is described in the Kaka‘ako Makai Area Plan Final Supplemental EIS (January, 1990; page 3-9) as part of phase one but is actually a separate action from the one described by the present document, would effectively intercept the contaminated water table and drain it towards Kewalo Basin and/or Honolulu Harbor. Water flow direction would depend on relative quantities of fresh
water runoff at each embayment at any given time. The probable predominant direction of flow is towards Kewalo Basin, as Honolulu Harbor generally receives greater surface runoff resulting in a slightly elevated seawater level. Potential quality impacts to the Class A waters resulting from heavy metal contaminants in the water table beneath the incinerator landfill cannot be assessed adequately until further data regarding concentrations of such contaminants are tabulated and documented for public review. Test hole locations throughout the course of the proposed waterways should be mapped and presented with these important data before certification of this future "phase one" action.

We thank you for this opportunity to have participated in the water quality permitting process.

Yours truly,

John T. Harrison, PhD
Environmental Coordinator

cc: OBQC
   L. Stephen Lau
   Hans-Jurgen Krock
   Robert Irwin