



University of Hawaii at Manoa

Environmental Center
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December 3, 1987
RP:0082

Mr. Steven Chang
Environmental Permits Branch
Environmental Protection and
Health Services Division
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Mr. Chang:

Water Quality Certification (WQC)
Kaka'ako Drainage Improvements
Kaka'ako, Oahu

The Environmental Center has reviewed the above referenced document with the assistance of Hans-Jurgen Krock, Ocean Engineering; and Jennifer Crummer, Environmental Center. Project activities include enlargement of an open channel and a rock revetment, installation of box drains, drain lines, catch basins and manholes, and construction of a maintenance road adjacent to the channel.

We have two concerns that should be considered with regard to the proposed channel widening.

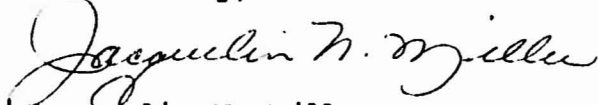
1. Excavation of the channel and construction of the rock revetment outlet is likely to generate sediment laden discharge to the nearshore waters. Although mitigating measures are noted, particularly in reference to dewatering procedures, there is no indication of the expected duration of the construction-related discharge, nor is the expected level of turbidity in the receiving waters estimated. Turbid discharges may have significant impacts on coral communities inhabiting waters offshore of this area, but the information provided is insufficient to evaluate the potential for such impacts. The Environmental Center is conducting a study of the applicability of NPDES permitting procedures to short term, construction-related discharges, and our preliminary findings indicate that discharges resulting in elevation of receiving water turbidity above criteria established in DOH Title 11 Chapter 54 may be in violation of the Federal Water Pollution Control Act.

Further mitigation of construction-related turbid discharges may be accomplished by excavating the inland portions of the channel before opening the box drain to the sea in order to minimize sediment discharge to the coastal waters. Efforts to minimize storm water run-off during road construction should also be required.

2. We note that the proposed channel would have a flat bottom some 30 feet wide. Since flow in this channel may be intermittent, stagnant ponding is likely to occur in the flat bed channel where the elevation is above sea level. Inclusion of a narrow, low-flow channel in the center of the main channel or a slight 'V' shape to the bottom channel in the sections that will be above sea level should result in a more efficient draining system, which, in turn could reduce potential mosquito breeding areas.

Thank you for the opportunity to comment on this document. We look forward to your consideration and response to our comments.

Yours truly,



Jacquelin N. Miller
Associate Environmental Coordinator

cc: OEQC
L. Stephen Lau
Hans-Jurgen Krock
Jennifer Crummer