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March 5, 1984

RV:0066
RP:0038

Mr. Shinji Soneda, Chief
Environmental Protection
and Health Services Division
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96813

Dear Mr. Soneda:

NPDES and ZOM Applications
Fort Kamehameha Sewage Treatment Plant
Pearl Harbor, Oahu

In response to your request of January 17, 1984, we have reviewed the above cited applications with the assistance of Keith Chave, Oceanography; Jacquelin Miller and Mark Inouye, Environmental Center. The following comments, based on the information provided, are offered for your consideration.

Type of Discharge

There appear to be some inconsistencies between the ZOM application and the application for a NPDES permit. In the ZOM application the U.S. Navy Public Works Center indicates that 6 mgd of domestic sewage will be discharged. The NPDES application indicates that 5.3 mgd of domestic and industrial sewage will be discharged. The difference between 5.3 and 6.0 mgd, while not necessarily significant environmentally, should be resolved for the sake of consistency. The addition of industrial waste, however, as indicated in the NPDES permit, would imply a potentially significant impact to the water quality of the receiving areas and certainly needs to be taken into consideration in delimiting the boundaries of the ZOM.

Quality and Monitoring of Discharge

Inconsistencies also exist between the NPDES and ZOM permits with regard to the quality and proposed monitoring of the discharge. The applications list the following characteristics of the existing effluent.

<u>ZOM Application</u>	<u>NPDES/ZOM Permit</u>
ph 7	-----
BOD 15 mg/l	7 mg/l
Chlorine residual 1.5 mg/l	-----
Total phosphorus 3 mg/l	-----
Total nitrogen 5 mg/l	-----
Suspended solids ---	22 mg/l

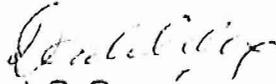
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The ZOM application indicates no suspended or settleable solids while the NPDES/ZOM permit indicates an average concentration of 22 mg/l for suspended solids. The BOD values are given as 15 mg/l (ZOM) and 7 mg/l (NPDES/ZOM). The NPDES application requires monitoring of constituents which are not present per the ZOM application, i.e. oil and grease, and settleable solids. The ZOM application specifically requests a permit to discharge domestic sewage, with no mention of industrial waste as is clearly included in the NPDES application. These multiple inconsistencies should be rectified prior to issuance of the requested permits.

The requested discharge, which occurs in the entrance of Pearl Harbor and is undoubtedly carried back into the harbor by the tides, is most likely unavoidable under present economic conditions. It is unlikely that it presents a hazard to human health because of the restricted access and use of Pearl Harbor by the Navy. Similarly because of that restrictive use, it would be unlikely that any recreational uses of the harbor would be jeopardized by a continuation of the present discharge. It does seem reasonable however to assure that the very minimum of industrial wastes are discharged into this near shore environment so as to minimize, to the greatest extent practicable, any potential for bioaccumulation of these industrial wastes.

We appreciate the opportunity to comment on these requested discharge permits. If you have any questions, please give us a call.

Yours truly,


Doak C. Cox
Director

cc: OEQC
Keith Chave
Jacquelin Miller
Mark Inouye