DEPARTMENT OF THE NAVY
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
258 MAKALAPA DR., STE. 100
PEARL HARBOR, HI 96860-3134

RECEIVED
DEPARTMENT OF HEALTH
2000 SEP 28 P 3: 02
HEER OFFICE

5090.A14 --
Ser ENV1821/ 2520
27 SEP 2000

Mr. Mike Miyasaka
Hawaii State Department of Health
Hazard Evaluation Emergency Response Branch
919 Ala Moana Blvd, Room 206
Honolulu, HI 96814

Dear Mr. Miyasaka:

Subj: PETROLEUM CONTAMINATION AT RED HILL OILY WASTE DISPOSAL FACILITY

This letter is in response to your review comments dated May 5, 2000 on the draft final Remedial Investigation Report for the Former Red Hill Oily Waste Disposal Facility (OWDF), located at Halawa Valley. A revised draft final report was submitted to the Department of Health on September 5, 2000.

It is the Navy's conclusion that the site-related impacts to soil, perched groundwater, and the basal drinking water aquifer at the OWDF have been sufficiently characterized. Our environmental investigations indicate that the site-related impacts to these media do not represent significant risks to human health or the environment. This conclusion is based on several extensive investigations and a response action conducted over a 12-year period. The results of these reports are summarized in the Phase II Draft Final RI Report.

The Phase I RI concluded that impacts from the OWDF do not to pose a significant risk to human health and the environment. Additionally, the major source of contamination at the OWDF was excavated and treated during the 1995 Removal Action.

The DOH has recently expressed concern over the presence of Total Petroleum Hydrocarbon (TPH) above DOH criteria detected in the subsurface at a specific OWDF location during the most recent investigation, the Phase II RI. The concentrations of TPH detected have been evaluated under two approaches:

- Risk to human health represented by potential migration of TPH to the basal drinking water aquifer was evaluated by field observations, hydrogeologic characterization, testing surface and subsurface soils, testing groundwater, and contaminant fate and transport calculations. No evidence of TPH was present in deep borings for the monitoring well installed in the vicinity of the highest detected TPH concentrations. The potential for downward migration of TPH was determined to be insignificant, based upon the presence of multiple subsurface barriers to downward groundwater and contaminant migration. This conclusion was supported by the lack of detected TPH or petroleum-related substances that are regulated by

carrollcox.com, Box 4202, Mililani, HI 96789

5090.A14 –
Ser ENV1821/ 2520

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in the basal drinking water aquifer samples.

- Risk to human health represented by the TPH detected in the subsurface soil or rock which was evaluated by assessing the potential toxicity or carcinogenic effects of the detected CERCLA hazardous substances that comprise of TPH. The potential risks to human health represented by the cumulative effects of these detected concentrations were found to be below permissible levels of risk.

The results of both evaluation approaches indicate that subsurface TPH does not represent a significant risk to human health or the environment, nor has it impacted the basal drinking water aquifer. Because the TPH is buried at an approximate depth of 15 feet, the potential for nuisance or odor does not represent an issue of concern. Further delineation of the TPH at the OWDF is not warranted based upon these facts.

If you have any questions, please contact Mr. Wesley Ching of our Environmental Restoration Division at (808) 474-4513.

Sincerely,

Melvin Z. Waki

MELVIN Z. WAKI, P.E.
Head
Environmental Engineering Department

carrollcox.com

carrollcox.com, Box 4202, Mililani, HI 96789