



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HAWAII 96801-3378

CHUYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

In reply, please refer to:
EMD/SHWB

April 4, 2003

U04007RT

Mr. Darren Uchima
Navy Region Hawaii
Regional Environmental Department, N465
517 Russell Avenue, Suite 110
Pearl Harbor, Hawaii 96860-1884

Dear Mr. Uchima:

SUBJECT: Red Hill Tank Complex
Facility ID No. 9-102271 / Release ID No. 990051

The Department of Health (DOH) has reviewed the following reports:

1. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume I, Part 1,"* dated August 2002 and prepared by AMEC Earth & Environmental, Inc. (AMEC);
2. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume I, Part 2,"* dated August 2002 and prepared by AMEC;
3. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume II, Part 1,"* dated August 2002 and prepared by AMEC;
4. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume II, Part 2,"* dated August 2002 and prepared by AMEC;
5. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume III, Part 1,"* dated August 2002 and prepared by AMEC; and
6. *"Comprehensive Long-Term Environmental Action Navy (CLEAN) for Pacific Division, Naval Facilities Engineering Command, Pearl Harbor, Hawaii, Volume III, Part 2,"* dated August 2002 and prepared by AMEC.

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The reports were received on November 26, 2002. Please note that the aforementioned documents now reside with the public record for the subject facility.

Thank you for visiting with DOH on February 5, 2003 to discuss the confirmed underground storage tank releases of the United States Navy in the State of Hawaii. DOH requests clarification on the following issues:

1. Statement found in Section 2.10, page 2-6 of Volume I, Part 1:
"Until recently, ground-water quality on the islands of Hawaii has been of high quality. Realizing the importance of fresh potable drinking water, Hawaii has effectively used land management practices as a safeguard to protect ground-water quality."

Please provide an explanation for the stated, "until recently," with references and actual dates.

2. Statement found in Section 2.11, page 2-7 of Volume I, Part 1:
"The closest known ground water extraction point intersecting the basal aquifer is located in the Red Hill water supply tunnel in Adit #3. Approximately 8 to 12 mgd are withdrawn from this location and account for 10% of Honolulu's water supply (USGS, 1991)."

Please provide scale maps and figures identifying the precise location and distance of the ground water extraction point to the tanks and piping of the Red Hill Tank Complex.

3. Statement found in Section 2.11, page 2-7 of Volume I, Part 1:
"The basal aquifer is tapped as a source of drinking water by the Navy PWC and supplies the drinking water for the Pearl Harbor Naval Complex. The pumping station is located within the lower tunnel system and approximately 0.5 miles to the west of the bulk fuel storage tanks. Regular testing of the basal aquifer is conducted through the PWC pump station by the PWC and by the Hawaii Department of Health (DOH) to ensure that the water is maintained within drinking water standards."

Please provide scale maps and figures identifying the precise location and distance of the pumping station to the tanks and piping of the Red Hill Tank Complex. In addition, please provide analytical data on all groundwater monitoring conducted at the pump station by PWC and DOH during 2001 and 2002, including dates, staff performing the sampling, laboratory, analytical method, detection limits, and reported results.

4. The reports state that a monitoring well was installed within the Red Hill Tank Complex which penetrated the drinking water aquifer. Please provide scale maps and figures identifying the precise location and distance of this groundwater

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monitoring well to the tanks and piping of the Red Hill Tank Complex, and any documentation of permitting issued by the Hawaii Department of Land and Natural Resources.

Because the Red Hill Tank Complex is a confirmed underground storage tank release site, the Navy is required to send quarterly release response reports to this office every 90 days. The format for a quarterly release response report is found in Appendix 5-E (enclosed) of our *Technical Guidance Manual for Underground Storage Tank Closure and Release Response, 2nd Edition*.

DOH also requests that all future reports for your facility contain soil and groundwater analytical results, in separate tables, including minimum detection limits and reporting results for the following chemical constituents only: TPH-g, TPH-d, TPH-o, benzene, toluene, ethylbenzene, xylenes, MtBE, benzo(a)pyrene, acenaphthene, fluoranthene, naphthalene, total lead.

The analytical results of your submitted reports show each soil/rock sample was analyzed for 118 chemical compounds. Please compile a separate results table for all compounds not found in the preceding list. In addition, the data tables in your submitted reports lack clearly identifiable sample origins. All analytical results should clearly indicate the location or monitoring well of origin with corresponding maps or figures.

DOH notes that petroleum contamination exceeding DOH Tier 1 Action Levels for "drinking water threatened" was found beneath Tank 1, Tank 2, Tank 6, Tank 14, Tank 16 and Tank 17. At this time, DOH requests that a comprehensive risk assessment for the Red Hill Tank Complex be performed as soon as possible. Please provide a scope of work and schedule for conducting the risk assessment.

Should you have any questions regarding this letter, please contact Mr. Richard Takaba of our Underground Storage Tank Section at (808) 586-4226.

Sincerely,


STEVEN Y.K. CHANG, P.E., CHIEF
Solid and Hazardous Waste Branch

Enclosure