



DEPARTMENT OF HEALTH

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LOW LEVELS OF LEAD AND OTHER CHEMICALS DETECTED IN JOINT BASE PEARL HARBOR HICKAM WATER SYSTEM

Findings do not represent health threat

HONOLULU – The Hawaii State Department of Health (DOH) is notifying the public that very low levels of lead and other chemicals have been detected in the Joint Base Pearl Harbor Hickam water system. The levels of lead found are within federal and state compliance levels for drinking water in a water distribution system (below the lead “Action Level”) and do not represent a health threat.

In addition, very low levels of toluene, naphthalene, total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), 1-methylnaphthalene, and 2-methylnaphthalene were discovered during a subsequent search of historical records of groundwater monitoring conducted at the Red Hill Shaft source. The level of toluene was well below the drinking water Maximum Contaminant Level (MCL). The other chemicals were detected at levels well below DOH environmental action levels (EALs) and do not pose a health threat.

“The state is required to notify the public of any new contaminants found in drinking water systems statewide, even if the findings do not represent a health risk,” said Chris Whelen, acting deputy director for Environmental Health. “DOH will continue to work with the U.S. Navy to monitor and test the water being served to consumers and ensure that public health is not compromised.”

A summary of findings since 2005 reported by the U.S. Navy to DOH is as follows:

Finding	Level Detected	Action Level	Maximum Contaminant Level	DOH Environmental Action Level
lead	1.9 ppb	15 ppb	n/a	n/a

toluene	0.71 ppb	n/a	1000 ppb	40 ppb
naphthalene	0.036 ppb	n/a	n/a	17 ppb
TPH-g	19.1 ppb	n/a	n/a	100 ppb
TPH-d	45 ppb	n/a	n/a	190 ppb
1-methylnaphthalene	0.0276 ppb	n/a	n/a	4.7 ppb
2-methylnaphthalene	0.0071 ppb	n/a	n/a	24 ppb

Detection levels are measured in parts per billion (ppb). Action Levels and Maximum Contaminant Levels (MCLs) are standards set by the United States Environmental Protection Agency (EPA) for drinking water quality. An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act. DOH Environmental Action Levels (EALs) are risk-based levels published by DOH for compounds that do not have promulgated MCL values. EALs are calculated using EPA models and are considered to be conservative estimates for the protection of human health.

“Earlier records provided to the DOH Underground Storage Tank program by the Navy indicate similar historic findings that are well within safe drinking water standards,” Whelen said. “While these past findings are well below state and federal action levels, the department is concerned about the Navy’s lapse in properly reporting their earlier results to the state Safe Drinking Water program.”

Careful monitoring of the Red Hill Shaft source and the other wells within the Red Hill Bulk Fuel Storage Facility will continue for naphthalene and the other petroleum compounds. Toluene, TPH-d, 1-methylnaphthalene and 2-methylnaphthalene have not been detected in the most recent water samples collected at the Red Hill Shaft in January 2014. If chemical concentrations increase, DOH will require increased groundwater sampling and plans for remedial actions. Further action will be based on the type and concentration of chemicals found.

To date, the Joint Base Pearl Harbor Hickam water system is in compliance with federal and state drinking water standards for lead and toluene, and the DOH Environmental Action Levels for naphthalene and the other petroleum constituents. The water system serves a population of about 65,000 people, and the Red Hill shaft where chemicals were detected contributes a percentage of the water to the system.

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