

# Water Quality Report

## Joint Base Pearl Harbor-Hickam Water System

*(Waiawa, Halawa & Red Hill Sources)*



This report meets federal and state requirements for Consumer Confidence Reports. This report is updated annually and reflects monitoring data collected up to **Dec. 31, 2013**.

**The Navy is pleased to provide you with this year's annual Water Quality Report for the Joint Base Pearl Harbor-Hickam Water System.**

**This pamphlet provides information about the water that has been delivered to you over the past year. It describes where your water comes from, what it contains, and how it compares to standards for safe drinking water.**

**Our goal is, and always has been, to provide you safe and dependable drinking water.**

### Water Provider

The Naval Facilities Engineering Command (NAVFAC) Hawaii owns and operates the water system servicing your area. As the Navy water provider in the state, NAVFAC Hawaii primarily supplies water to military housing and installations.

### Drinking Water Standards

Last year, as in years past, your drinking water met all Environmental Protection Agency (EPA) and State of Hawaii regulations. The regulations require us to test your water for contaminants on a regular basis, making sure it is safe to drink, and to report our results accordingly.

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration does the same for bottled water.

In the latest compliance monitoring period, we conducted tests for over 70 contaminants that have potential for being found in your drinking water. Tables 1-1, 1-2, 1-3 show the levels of concentrations of regulated contaminants found in your water. In all cases, the levels measured met both EPA and State requirements for safe drinking water.

We are continually working to protect your drinking water from contaminants. The State of Hawaii's Department of Health completed the Source Water Assessment in 2004. This document identifies the susceptibility of your water supply to contamination. The source water assessment is available for review by contacting NAVFAC Hawaii, Public Affairs, at 808-471-7300.

### Source Of Water

Your drinking water comes from three ground water sources: Waiawa, Halawa, and Red Hill. Ground water is naturally filtered as it travels from the surface to the aquifer below ground. The water is pumped up from the aquifer, disinfected, fluoridated, and piped into the distribution system.

The Manana housing area is supplemented with water from the Honolulu Board of Water Supply's (BWS) Pearl City Shaft and Well 1.

### Possible Source Of Contaminants

The sources of drinking water (both tap water and bottled water) include: rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals. It can also pick up other substances resulting from the presence of animals or human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

### Potential Contaminants

Contaminants that may be present in your source water include:

Microbial contaminants – such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants** – such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and herbicides** – which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic chemical contaminants** – including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radionuclide contaminants** – which can be naturally-occurring or be the result of oil and gas production and mining activities.

**Lead** – If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NAVFAC Hawaii is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## **Navy Water Requirements**

**In accordance with Navy policy, we add chlorine and fluoride to your water supply. These items are added to your drinking water after it is pumped from the ground. We try to maintain the Navy's recommended concentration of approximately 0.7 ppm for fluoride and 0.2 ppm for chlorine throughout the distribution system.**

**In January 2014, a fuel release from Tank #5 at the Red Hill Underground Fuel Storage Facility was reported. In response, we conducted additional drinking water testing for fuel constituents at the Red Hill Shaft. We are continuing to conduct this extra testing to ensure that the drinking water is safe. Based on results received as of April 2014, there is no indication that drinking water has been impacted by the Tank #5 release.**

**As a proactive measure, we have been conducting testing at the Red Hill Shaft above what is required by regulation for several years. Table 1-4 shows the levels of concentrations of detected contaminants at Red Hill Shaft for 2013. All concentrations are below applicable EPA and State regulatory and action levels. Please note that the data from testing conducted in response to the Tank #5 release is not included in this report, but will be included in next year's Water Quality Report. We will continue to conduct this voluntary testing and data will be included in future Water Quality Reports.**

## **Concerns/Additional Copies**

**NAVFAC Hawaii does not have routine meetings about the water system. For questions or information about the water system, please contact the NAVFAC Hawaii Public Affairs Office (808-471-7300). Note: Additional copies of this report are available from Forest City Residential Management - Aloha Center, 4825 Bougainville Street, #100, Honolulu, HI 96818 (808-839-8690), Hickam Communities Administration, 211 Mercury Street, Honolulu, HI 96818 (808-423-2300), Carmel Partners – Waterfront at Puuloa, 5105 Iroquois Avenue, Ewa Beach, HI 96706 (808-203-5000), and/or NAVFAC Hawaii Public Affairs. *Please share this information with all other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, schools, and businesses).***

## **Owner of Water System**

**Naval Facilities Engineering Command, Hawaii  
400 Marshall Road, JBPHH HI 96860-3139**

**April 2014**

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# Water Quality Data Table

The following tables list contaminants which were detected during the latest round of sampling required by EPA and State of Hawaii regulations. The water samples were collected from either the source water or distribution system and analyzed by the State and/or NAVFAC Hawaii. The presence of contaminants does not necessarily indicate that the water poses a health risk. You may obtain more information about contaminants and potential health effects by calling the EPA's Safe Drinking Water Hotline 1-800-426-4791 or the State of Hawaii's Department of Health at 808-586-4258.

**Contaminants in the Source Water**

**Table 1-1**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation
<b>Inorganic Contaminants</b>							
Chromium (total) (ppb)	100	100	2.1	0.9 – 2.1	2013	Naturally-occurring	n/a
Fluoride (ppm)	4	4	0.73	0.5 - 0.73	2013	Erosion of natural deposits; water additive which promotes strong teeth	No
Nitrate (ppm)	10	10	0.6	0.58 – 0.6	2013	Runoff from fertilizer use; Erosion of natural deposits	No
<b>Organic Contaminants</b>							
Chlordane (ppb)	2	2	0.12	nd – 0.12	2012 <sup>1</sup>	Residue of banned termiticide	No
Dibromochloropropane (ppt)	40	0	14	nd - 14	2012 <sup>1</sup>	Runoff from soil fumigant used on pineapples, and orchards	No
<b>Radionuclides</b>							
Gross Beta (pCi/L)	50 <sup>2</sup>	0	2.4	2.4 <sup>3</sup>	2012 <sup>1</sup>	Decay of natural and man-made deposits	No
<b>Unregulated Contaminants</b>							
Chlorate	n/a <sup>4</sup>	n/a <sup>4</sup>	37	nd - 37	2013	Byproduct of drinking water disinfection	n/a
Chromium-6 (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	2.3	0.93 – 2.3	2013	Naturally-occurring	n/a
1,4-dioxane (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	0.35	nd – 0.35	2013	Synthetic industrial chemical	n/a
Sodium (ppm)	n/a <sup>4</sup>	n/a <sup>4</sup>	57	27 - 57	2013	Naturally-occurring	n/a
Strontium (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	260	40 - 260	2013	Naturally-occurring	n/a
Sulfate (ppm)	n/a <sup>4</sup>	n/a <sup>4</sup>	19	nd - 19	2013	Naturally-occurring	n/a
Vanadium (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	32	14 – 32	2013	Naturally-occurring	n/a

**Contaminants in the Distribution System**

**Table 1-2**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation
<b>Inorganic Contaminants</b>							
Copper (ppm)	AL=1.3	1.3	0.089 <sup>5</sup>	0 <sup>6</sup>	2013	Corrosion of household plumbing systems; erosion of natural deposits	No
Lead (ppb)	AL = 15	0	< 5 <sup>5</sup>	0 <sup>6</sup>	2013	Corrosion of household plumbing systems; erosion of natural deposits	No
<b>Organic Contaminants</b>							
Residual Chlorine (ppm)	MRDL=4	MRDLG=4	1.4	0.2 – 1.4	2013	Water additive used to control microbes	No
Total Trihalomethanes (ppb)	80	n/a	4.4	nd – 4.4	2013	Byproduct of drinking water disinfection	No

**Contaminants in BWS' Source Water (serving Manana housing only)**

**Table 1-3**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.003	0.003 – 0.003	2013	Erosion of natural deposits	No
Chromium (ppb)	100	100	1.3	0.98 – 1.3	2013	Erosion of natural deposits	No
Fluoride (ppm)	4	4	0.055	0.055 – 0.055	2013	Erosion of natural deposits	No
Nitrate (ppm)	10	10	0.94	0.62 – 0.94	2013	Runoff from fertilizer use; erosion of natural deposits	No
<b>Organic Contaminants</b>							
1,2,3-Trichloropropane (ppb)	0.6	0	0.032	nd – 0.032	2013	Formerly used as soil fumigant in agriculture and as gasoline additive.	No
<b>Unregulated Contaminants</b>							
Chlorate (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	46	26 - 46	2013	Byproduct of drinking water disinfection	n/a
Chromium-6 (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	1.3	1.3 – 1.3	2013	Naturally-occurring	n/a
Strontium (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	68	46 - 68	2013	Naturally-occurring	n/a
Sulfate (ppm)	n/a <sup>4</sup>	n/a <sup>4</sup>	14	8.6 - 14	2013	Naturally-occurring	n/a
Vanadium (ppb)	n/a <sup>4</sup>	n/a <sup>4</sup>	14	12 - 14	2013	Naturally-occurring	n/a

