

Is my water safe?

Yes it is. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and State drinking water health standards. The Department of Water Supply vigilantly safeguards its water supplies and once again we are proud to report that your system has complied with all drinking water standards.

Why are there contaminants in my drinking water?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-(800) 426-4791. If you have any questions regarding this Water Quality Report, call Keith Okamoto, P.E., at 961-8670.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-(800) 426-4791.

Source Water Assessment Program

In 2004, the preliminary source water assessment report was released. The purpose of the source water assessment report is to enable the public and decision-makers to make well-founded decisions for the protection and preservation of our drinking water. The source water assessment report identifies the potential contaminating activities for each source of water. In the report, Papaikou Water System sources are potentially vulnerable to contaminants associated with the following activities: septic tanks, cesspools, sugarcane, residential parcel, and roads. Atrazine has been detected in this system which is attributed to runoff from herbicide used on row crops. For more information, please contact Keith Okamoto, P.E., at 961-8670.

How can I get more information?

The Water Board meets the fourth Tuesday of every month. Call for the time and location of the meeting.

You Can Contact Us
at the Following Numbers:

Administration/Finance/General..... (808) 961-8050
Billing/Customer Service..... (808) 961-8060
Engineering..... (808) 961-8070
Emergencies & Field Operations..... (808) 961-8790
Water Quality..... (808) 961-8670

You can find us on the web at www.hawaiiidws.org

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2006

Papaikou
Water System

Annual
Water Quality
Report

County of Hawai'i



Department of
Water Supply

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The Department of Water Supply is an equal opportunity provider and employer.

Papaikou System Water Quality Data

The table below lists the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Regulated Contaminants													
Contaminants	MCL	MCLG	Papaikou Deep Well			Kaieie Spring			Papaikou Spring			Violation	Typical Source of Contaminant
			Level Found	Range of Detections	Sample Date	Level Found	Range of Detections	Sample Date	Level Found	Range of Detections	Sample Date		
Inorganic Contaminants													
Barium (ppm)	2	2	ND	ND - ND	2005	ND	n/a	2006	0.016	n/a	2006	No	Discharge of drilling wastes; erosion of natural deposits.
Nitrate (ppm)	10	10	ND	ND - ND	2006	0.58	n/a	2006	ND	n/a	2006	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Organic Contaminants													
Atrazine (ppb)	3	3	ND	n/a	2005	0.23	0.20 - 0.25	2006	0.20	n/a	2006	No	Runoff from herbicide used on row crops.
Disinfection By-Products													
Haloacetic acids (ppb)	60	n/a	3.3	ND - 3.3	2006	n/a	n/a	2006	1.0	n/a	2006	No	Byproduct of drinking water disinfection.
Total Trihalomethanes (TTHMs) (ppb)	80	n/a	8.8	ND - 8.8	2006	n/a	n/a	2006	2.8	n/a	2006	No	Byproduct of drinking water disinfection.

Haloacetic Acids or "HAA5" means the sum of the concentration of the haloacetic acids (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid).
Total Trihalomethanes or "TTHM" means the sum of the concentration of the trihalomethane compounds [trichloromethane (chloroform), dibromochloromethane, bromodichloromethane, and tribromomethane (bromoform)].

Sodium (Not Regulated by State or Federal Government)													
Contaminants	MCL	MCLG	Papaikou Deep Well			Kaieie Spring			Papaikou Spring			Violation	Typical Source of Contaminant
			Level Found	Range of Detections	Sample Date	Level Found	Range of Detections	Sample Date	Level Found	Range of Detections	Sample Date		
Inorganic Contaminants													
Sodium (ppm)	n/a	none	6.8	6.8 - 6.8	2005	8.7	n/a	2006	46.0	n/a	2006	No	Erosion of naturally occurring deposits.

Lead and Copper Rule Compliance							
Contaminant	AL	MCLG	Papaikou Water System				Typical Source of Contaminant
			Level Found	# of Sites > AL	Violation	Sample Date	
Copper (ppm)	1.3	1.3	0.11	0/21	No	2006	Corrosion of household plumbing systems; erosion of natural deposits.

Key definitions of terms used in this report

- MCLG** = Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk for health. MCLGs allow for a margin of safety.
- MCL** = Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology
- ND** = Not Detected: If a contaminant is not measured at or above its minimum detection limit, it is reported as Not Detected - detection limits are available upon request.
- ppm** = Parts per million. One ppm corresponds to a single penny in \$10,000 or about one minute in two years.
- ppb** = Parts per billion. One ppb corresponds to a single penny in \$10,000,000 or about one minute in two thousand years.
- AL** = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- n/a** = not applicable

Where does my water come from?

The sources of water for the Papaikou Water System are Papaikou Deep Well, Kaieie Spring, and Papaikou Spring (which are groundwater sources). The source(s) may change depending on the supply and demand. In previous years we have included a map of the distribution system. However, because we are taking measures to safeguard your water supply, we are not including the map in this year's water quality report. Thank you for your understanding.

Sodium in drinking water

There is no State or Federal maximum contaminant level for sodium. Although required, monitoring for sodium is performed primarily to gather information for the consumers, the Safe Drinking Water Branch, and the Department of Water Supply. The EPA Drinking Water Advisory recommends that the sodium concentration in drinking water not exceed a range of 30 to 60 ppm because of the possible adverse effects on taste at higher concentra-

tions. For persons on a sodium-restricted diet, sodium concentrations greater than 120 ppm could be problematic. If you are on a sodium-restricted diet, you should consult your physician about the level of sodium in the drinking water.

Sources of drinking water

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.