



Princeville Utilities Company, Inc. 2016 Water Quality Report

Introduction

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. We are committed to providing you with information because informed customers are our best allies. For more information about your water, call Brad Suizu, Princeville Utilities Manager, at 826-6100.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and began compliance with a new rule, the Revised Total Coliform Rule on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbial (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a monthly maximum contamination level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the public water system.

Princeville Utilities Company, Inc.'s (PUCI's) water system is a community water system owned and operated by Princeville Utilities Company, Inc.

Last year, PUCI tested your water for a wide array of contaminants. We detected no contaminants. This report is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State of Hawaii Department of Health (DOH) standards.

Where does my water come from?

The source of PUCI's water is groundwater from three deep wells located mauka of Kuhio Highway in Princeville. Rain falls in the mountains above Princeville and filters through the ground before entering the wells. The water from these wells is disinfected with sodium hypochlorite and pumped into three storage tanks for distribution to the Princeville Resort and surrounding areas. The water system serves approximately 6,911 persons through approximately 1,102 service connections.

A Source Water Assessment Report, intended to enable "well-founded, fair and reasonable decisions for the protection and preservation of Hawai'i's drinking water" was completed by the State of Hawai'i Department of Health (DOH) and the University of Hawai'i. This Assessment Report is available for viewing at our office. Please contact Brad Suizu, PUCI Manager, at (808) 826-6100, to make arrangements to view this document.

What kinds of contaminants are a concern to 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 or bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts or 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.

Information about 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. PUCI is responsible for providing high quality drinking water, and uses lead-free materials in the construction of its water system. However, PUCI cannot control the variety of materials used in plumbing components for home construction. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for thirty 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791, or online at <http://www.epa.gov/safewater/lead>.

In order to be sure 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.

Terms & Abbreviations Used Below:

Maximum Contaminant Level Goal: (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level: (MCL) is 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.

Action Level: (AL) is the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

ppm or mg/L: parts per million or milligrams per liter (corresponds to one penny in \$10,000)

ppb or ug/L: parts per billion or micrograms per liter (corresponds to one penny in \$10,000,000)
 pCi/l: picoCuries per liter (a measure of radiation)
 ND: Not Detected

Princeville Water Quality

In order to ensure that tap water provided by public and private water systems is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants which may be present in the water. Federal and State laws require testing of your water for many different types of contaminants, including those for which there are no drinking water standards (unregulated contaminants). In our effort to supply our customers with the safest possible product, PUCI's water is disinfected and monitored daily.

The tables below list the contaminants that we are required to test for. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. The data in the following tables is accompanied by the year during which the testing was done. All drinking water analyses were performed in accordance with federal and state drinking water requirements.

Radiological Gross Alpha (2016)	Gross Beta (2016)	Combined Radium 226 (2016) Radium 226 (2016) Radium 228 (2016)	Combined Uranium (2016) Uranium (2005)
Inorganics Antimony (2016) Arsenic (2016) Asbestos (2013) Barium (2016) Beryllium (2016)	Cadmium (2016) Chromium (2016) Copper (2016) Cyanide (2016)	Fluoride (2016) Lead (2016) Mercury (2016) Nickel (2016) Nitrate (as Nitrogen) (2016)	Nitrite (as Nitrogen) (2016) Selenium (2016) Sodium (2016) Sulfate (2016) Thallium-Total (2016)
Volatiles Organics Benzene (2015) Benzo-A-Pyrene (2016) Carbon Tetrachloride (2015) Chlorobenzene (2015) o-Dichlorobenzene (2015) p-Dichlorobenzene (2015) 1,2-Dichloroethane (2015)	1,1-Dichloroethylene (2015) cis-1,2-Dichloroethylene (2015) trans-1,2-Dichloroethylene (2015) 1,2-Dichloropropane (DCP) (2015) Dichloromethane (2015) Ethylbenzene (2015)	Styrene (2015) Tetrachloroethylene (PCE) (2015) 1,2,4-Trichlorobenzene (2015) 1,1,1-Trichloroethane (2015) 1,1,2-Trichloroethane (2015) Trichloroethylene (2015)	Toluene (2015) Vinyl Chloride (2015) Total Xylenes (2015)
Synthetic Organics 1-2 Dibromo-3-Chloroprop (2016) 1-2-3 Trichloropropane (2016) 2,4,5-TP (2016) 2,3,7,8-TCDD (Dioxin) (2016) 2,4-D (2016) Atrachlor (2016) Arochlor 1016 (2016) Arochlor 1221 (2016) Arochlor 1232 (2016) Arochlor 1242 (2016) Arochlor 1248 (2016)	Arochlor 1254 (2016) Arochlor 1260 (2016) Atrazine (2016) Benzo(a)pyrene (2016) BHC-Gamma-Lindane (2016) Carbofuran (2016) Chlordane (2016) Dalapon (2016) Di(2-ethylhexyl) adipate (2016) Di(2-ethylhexyl) phthalate (2016)	Dibromochloropropane (DBCP) (2012) Dinoseb (2016) Diquat (2016) Endothal (2016) Endrin (2016) Ethylene Dibromide (EDB) (2016) Glyphosate (2016) Heptachlor (2016) Heptachlor Epoxide (2016)	Hexachlorobenzene (2016) Hexachlorocyclopentadiene (2016) Lindane (2012) Methoxychlor (206) Oxamyl (Vydate) (2016) Paraquat (2016) Pentachlorophenol (2016) Picloram (2016) Simazine (2016) Toxaphene (2016)

Disinfection By-Products

Halooacetic Acids (Dibromoacetic acid, Dichloroacetic acid, Monobromoacetic acid, Monochloroacetic acid and Trichloroacetic Acid) (2016)

Total Trihalomethanes (TTHM) (Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane) (2016)

UNREGULATED CONTAMINANTS

Aldicarb (2016) Aldicarb sulfone (2016) Aldicarb sulfoxide (2016) Aldrin (2016)	Butachlor (2016) Carbaryl (2016) Dicamba (2016) Dieldrin (2016)	3-Hydroxycarbofuran (2016) Methiocarb (2016) Methomyl (2016) Metolachlor (2016)	Metribuzin (2016) Nickel (2011) Propachlor (2016) Propoxur (2016) Sulfate (2016)
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The table below lists all of the drinking water contaminants detected during calendar year 2016 unless otherwise indicated. In all cases, the amounts found are fully compliant with the standards for safe drinking water.

Contaminants in the distribution system (units of measurement)	MCL	MCLG	Your Water	Range of Detections (multiple samples only)	Likely Source of Contaminant	Violation
Chromium (ppb)	100		4.1	2.8-5.5 ^b	Erosion of natural deposits.	No
Alpha emitters (pCi/L)	15		4.2	ND -- 4.2	Erosion of natural deposits.	No

Table notes:
 a. This number represents the 90th percentile value of the samples collected.
 b. The number of samples above the action level.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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 (800-426-4791).

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 your water poses a health risk. More information about contaminants and potential health affects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Information on Violations of National Primary Drinking Water Rule (NPDWR)

There have been no system violations nor any individual sampling deficiencies found in PUCI's Coliform/Bacteriological, chemical, or the lead and copper monitoring programs.

EPA's brochure, "Water on Tap", a consumer's guide to the nation's drinking water, provides answers to frequently asked questions and also stresses the need for all of us to be responsible for water quality and protecting the resource from potential contamination. The U.S. Environmental Protection Agency and the Hawaii State DOH encourages consumers to become involved citizens and participate in maintaining high quality drinking water. For more information on how to become more involved with water protection, call EPA's hotline at (800) 426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies as you choose.

If you have questions about your water system or water quality, please contact Brad Suizu, PUCI Manager, at (808) 826-6100.

**For more information please visit our website
PrincevilleUtilities.com
and go to the section entitled "Documents".**