2014
Annual Consumer Confidence Report on the Quality of Naval Base Kitsap Bangor Drinking Water System

This is an annual report on the quality of water delivered by the Naval Base Kitsap Bangor Drinking Water System. Under the "Consumer Confidence Reporting Rule" of the Federal Safe Drinking Water Act, community water systems are required to report this water quality information to their customers. Presented in this report is information on the source of our water, its constituents, and the health risks associated with any contaminants.
Our water is safe to drink. *Please read on for a full explanation of the quality of our water.*

Source of our Water

The Naval Base Kitsap Bangor water system provides drinking water to over 15,000 people, drawing water from the Sea Level Aquifer through four groundwater source wells located on base. The depths of the wells range from 300 to 500 feet below the ground surface. Groundwater wells are safeguarded through wellhead protection efforts. All water facilities are monitored and patrolled. Access to the water system within the Naval Base Kitsap Bangor boundaries is secured and limited to water supply activities.

The water system is operated and maintained by experienced personnel certified by the state of Washington. Treatment of the installation water currently consists of:

- Chlorination for disinfection to control microbes that could be present in the water
- Addition of orthophosphate to reduce corrosion of lead and copper in plumbing

Information from EPA

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land and through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. These substances are referred to as contaminants by the Environmental Protection Agency (EPA).

Contaminants that may be present in source water include:

a. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
b. 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;
c. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
d. 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;
e. 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, the EPA and the Washington State Department of Health (WDOH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Washington State Department of Agriculture (WDOA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Insofar as the term "contaminant" refers to everything from naturally occurring minerals to synthetic organic chemicals, the mere 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 EPA's Safe Drinking water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, persons who have undergone an organ transplant, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control and Prevention (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 800-426-4791.

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Water Quality Summary

Your drinking water is regularly tested per applicable federal and state regulations for both the water source and the distribution system. The water system uses only EPA approved laboratory methods to analyze your drinking water. Samples are drawn from the wellhead, and designated sample sites in the distribution system by certified Water Shop personnel. The samples are then transported to an accredited laboratory where a full spectrum of water quality analyses is performed for the parameters listed below.

Sampling Schedule	
Parameter	Frequency
Coliform Monitoring [1]	Monthly
Lead and copper	Every 3 years
Asbestos	Every 9 years
Total Trihalomethane (THM)	Quarterly
Halo-Acetic Acids (HAA5)	Quarterly
Volatile Organic (VOC)	Every 3 years
Complete Inorganics (IOC)[2]	Every 9 years
Herbicides	Every 9 years
Pesticides	Every 9 years
Soil Fumigants	Every 3 years
Gross Alpha	Every 6 years.
Radium 228	Every 6 Years
Residual Chlorine	Continuous monitoring
Nitrates	Annually

[1] Parameters in this group include total coliform, fecal coliform, and heterotrophic bacteria.

[2] Parameters in this group include metals, nitrate, and asbestos.

Detected Contaminants

The Navy monitors various contaminants in the water supply to meet applicable regulations. In 2014, samples were taken and only a few substances were detected, all of which were below the maximum level allowed by EPA. The table below shows the latest test results, but only displays contaminants that were detected. All other test results were below the lab's detection limits, therefore below the applicable regulatory levels. Testing was completed in 2014 except as noted for radionuclide's, which follow a variable sampling schedule as noted in table above and as directed by the Department of Health.

Parameter	**Highest Level Allowed** (EPA's MCL)	**Ideal Goals** (EPA's MCLG)	**Highest Level Detected**	**Meets Standards**	**Potential Sources**
[1]Sodium	20 ppm	N/A	7.12 ppm	N/A	Erosion of natural deposits
Nitrate-N	10 ppm	N/A	0.12 ppm	Yes	Erosion of natural deposits
Radium 228	5 ppt	N/A	0.9 ppt (2009)	Yes	Erosion of natural deposits
Gross Alpha	15 ppt	N/A	1.8 ppt (2008)	Yes	Erosion of natural deposits
Copper	1.3 ppm (AL)	1.3 ppm	0.070 ppm (90^{th} percentile)[2]	Yes	Corrosion of household plumbing systems

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Parameter	Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Highest Level Detected	Meets Standards	Potential Sources
Lead	15 ppb (AL)	0	1.4 ppb (90^{th} percentile)[2]	Yes	Corrosion of household plumbing systems
Total Trihalomethanes	80 ppb	N/A	7.0 ppb average of 4 quarters results	Yes	By-product of drinking water disinfection
HAA(5)	60 ppb	N/A	1.5 ppb average of 4 quarters results	Yes	By-product of drinking water disinfection

[1] Although there is no MCL for sodium, EPA has established a recommended level of 20 mg/L as a level of concern for those consumers that may be restricted for daily sodium intake in their diets.

[2] Action level for these samples is based on a 90^{th} percentile. This is a statistical ranking that represents 90 percent of the samples were less than the value shown.

Definitions and Abbreviations

AL (Action Level) – The concentration of a contaminant, which, if exceeded, triggers treatment techniques or other requirements, which must be followed.

Level Detected – Laboratory analytical result for a contaminant; this value is evaluated against an MCL or AL to determine compliance.

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. Under the Safe Drinking Water Act, the EPA establishes these MCLs for compliance purposes.

MCLG (Maximum Contaminant Level Goal) – 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.

N/A – Not Applicable

ND – Not Detected. The compound was not detected above the Lab's Method Detection Limit

ppb – 1 part per billion (equivalent to one penny in $10,000,000).

ppm – 1 part per million (equivalent to one penny in $10,000).

ppt – 1 part per trillion (equivalent to one penny in $10,000,000,000).

Range – Represents the end values recorded from the highest and lowest analytical results of a reported contaminant.

Public Involvement

Drinking water system information may be obtained by contacting the Naval Base Kitsap Public Affairs Office, at 360-627-4031.