

DRINKING WATER QUALITY REPORT

JACKSON PARK HOUSING COMPLEX/NAVAL HOSPITAL BREMERTON

JUNE 2004

The Navy owns and operates a Public Water Supply System that serves both Naval Hospital Bremerton (NHB) and the Jackson Park Housing Complex (JPHC). Water is initially supplied by the City of Bremerton and is fed into the Navy's distribution system through the JPHC. The distribution system runs through the JPHC and then feeds the NHB complex, which is comprised of ten buildings and a 300,000-gallon above ground storage tank.

SOURCE OF OUR WATER SUPPLIES:

Surface water from the Union River Reservoir and groundwater from production wells located in the Bremerton area provide the supply for Bremerton's water. Bremerton owns and protects the 3000-acre watershed surrounding the Union River supply. Access to the watershed is secured, patrolled, and limited to water supply and forestry management activities. Groundwater wells are also monitored and patrolled.

WATER QUALITY STANDARDS AND TREATMENT:

The Washington State Department of Health has determined that Bremerton's water source in the Union River is of such high quality that the City is not required to install a filtration facility as long as all water quality, operational and watershed protection requirements are met. Treatment of Bremerton's water currently consists of chlorine to kill any harmful bacteria that might be present in the water and sodium hydroxide for corrosion control. Corrosion control treatment is required to prevent Bremerton's water from leaching lead from customer's household plumbing. Sampling results confirm that this treatment has been successful in achieving corrosion control.

Sources of drinking water include rivers, 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 materials, and can pick up substance resulting from the presence of animal or human activity. Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacterial, which may come from sewage treatment plants, septic systems, agricultural livestock, or wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.

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 EPA's Safe drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. USEPA/Centers for Disease Control (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 (1-800-426-4791). Please note that the City of Bremerton has tested for Cryptosporidium since 1994 and has never detected this organism in the water source.

DEFINITIONS OF TERMS USED IN THIS REPORT:

ppm is parts per million

ppb is parts per billion

Action level is the concentration of contaminant that if exceeded, triggers treatment or other requirements a water system must follow.

MCLG (Maximum Contaminant Level) 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 and are not enforceable under the law but are a target that water suppliers should shoot for in their filtration, treatment, and pollution prevention efforts.

MCL (Maximum Contaminant Level) 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. MCLs are enforceable standards and take into account the public water systems ability to detect and remove contaminants using suitable filtration, treatment, and pollution prevention efforts.

NTU (Nephelometric Turbidity Unit). Turbidity is the measurement of clarity of the water. Monitoring turbidity is a good indicator of water quality.

Treatment technique is a required process intended to reduce the level of a contaminant. Bremerton's surface supply is shut off when turbidity increases above set points.

Action Level is the concentration of a contaminant that, if more than 10% of samples exceed, triggers treatment or other requirements that a water system must follow.

WATER QUALITY SUMMARY/ CITY OF BREMERTON:

Your drinking water is regularly tested in accordance with all federal and state regulations for over 50 compounds in the water source and in the distribution system. Last year the City of Bremerton conducted over 1,000 tests for the compounds listed below. Only those compounds detected in the sampling results for the Calendar Year (CY) 2003 are listed in the water quality summary.

All results meet standards and are below levels allowed by federal and state agencies. The amounts of a compound that are allowed in drinking water are so small they are measured in parts per million – equivalent to one penny in \$10,000, or in parts per billion – equivalent to one penny in \$10,000,000.

Compound	Highest Level Allowed EPA's MCL	Highest Level Detected In 2003	Ranges of Levels Detected In 2003	Ideal Goals EPA's MCLG	Potential Sources	Meets Standard
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REGULATED AT THE WATER SOURCE

Turbidity	Treatment Technique	1.52 NTU's	0.30 – 1.52 NTUs	N/A	Soil Runoff	Yes
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REGULATED IN THE DISTRIBUTION SYSTEM

Total Coliform	Presence of Coliform in less than 5% of monthly samples	1%	0 – 1%	0	Naturally occurs in the environment	Yes
Trihalomethanes	80 ppb	45.0 ppb average	2.3 – 68.9 ppb	N/A	By product of drinking water chlorination	Yes
Haloacetic Acids	60 ppb	28.4 ppb average	0 – 65.5 ppb	N/A	Same as above	Yes
Chlorine	4 ppm	0.68 ppm average	0.47 – 0.95 ppm	0	Additive used to control microbes	Yes

REGULATED AT THE CUSTOMER'S TAP FOR JPHC/NHB (LEAD AND COPPER)

Compound	Action Level***	Highest Level detected in CY 2003	Ranges of levels detected in CY 2003	EPA MCLG	Potential Sources of Contamination	Meets Standard
Lead	0.015 ppm	0.011 ppm	<0.002 – 0.011 ppm	0	Natural deposits and corrosion of household plumbing	Yes
Copper	1.3 ppm	<0.2 ppm	<0.2 ppm	1.3 ppm	Natural deposits and corrosion of household plumbing; leaching of wood preservatives	Yes

*****Action Levels: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.**

Lead and copper monitoring is intended to emphasize the greatest risk to public health. In other words, monitoring is designed to determine the highest concentrations to which high risk segments of the population are exposed. For lead and copper, the health effects of lead in children represent the greatest risk. Therefore, priority is placed upon monitoring at single family homes, where children are most likely to live.

It is unusual to find significant levels of lead or copper contaminating a water source. However, the corrosion of ordinary plumbing materials can lead to the accumulation of lead and copper in water after it enters the distribution system. Water that is considered 'soft' or 'acidic' tends to be corrosive and more likely to leach lead and copper from pipes, solder, and other plumbing fixtures.

Public water systems are responsible to address corrosiveness of the water served to customers. The regulation of lead and copper is based on treating water to be less corrosive to the distribution system and to customers plumbing. In 1999, the City of Bremerton installed a corrosion control system that reduced the corrosivity of the water supplied to the distribution system. A constant flow of water is important in order to reduce the leaching of lead and copper from the customer's tap or plumbing fixtures. 'Action' levels have been set for lead and copper at the following levels:

- Lead - .015 ppm
- Copper – 1.3 ppm

If lead or copper exceeds an ‘action level’ in more than ten percent of consumer tap samples, then steps must be taken to reduce the contaminant. A corrosion control system is one step that can be taken to address the leaching of lead and copper.

Sampling done in the JPHC and at the Naval Hospital during CY 2003 did not exceed the Action Level for Lead and Copper. A total of 20 Samples are required by the Drinking Water Permit for our Water System. Eighteen of these samples are taken in the JPHC and two samples in the Hospital/Barracks. The largest numbers of samples are taken in the JPHC since monitoring is intended to target single family homes where children are the highest risk segment of the population.

The Hospital has collected many samples since the Lead and Copper Rule went into effect in 1991. The results, however, are inconclusive since the samples were taken from areas that were not in use or under construction. Lead levels were elevated since the water had been stagnant. Areas of high water usage in the Hospital have yielded negative results. In June 2003, lead and copper sampling was done at the main Hospital (HP01) and the Barracks (HP05). Both were well below the ‘Action Levels’. The sampling was done in high drinking water usage areas. The Hospital is presently undertaking a Corrosion Control Study with the purpose of supplementing the treatment currently being done by the City of Bremerton. The intent is to increase the flow and usage of water within the Hospital in order to allow the corrosion control treatment methods to reduce the leaching of lead and copper in the plumbing fixtures. In addition to the Corrosion Control system, drinking water fountains have been replaced with those manufactured with “lead free” components. The results have been encouraging and bottled water has been removed in areas that have met the Environmental Protection Agency standards.

The Drinking Water supplied by the City of Bremerton continues to be of the highest quality. In addition, Naval Hospital Bremerton and Naval Base Kitsap will continue to insure that the water supplied to JPHC and the Hospital is of the highest quality possible. Our Water System is operated and maintained by experienced personnel certified by the Washington State Department of Health.

Additional information can be obtained by contacting the following individuals:

For questions regarding Jackson Park Housing Complex:

Beverly Pavlicek
Naval Base Kitsap
(360) 476-6614

Ms. Lisa Rama
Public Affairs Officer
Naval Base Kitsap
(360) 476-0444

For questions regarding Naval Hospital Bremerton:

Ray Frederick
Naval Hospital Bremerton
(360) 475-4710