

Jefferson County PUD#1 Tri-Area Drinking Water Report 2004

Reporting

To comply with the Safe Drinking Water Act amendments, Jefferson County PUD #1 is issuing this annual report on water quality monitoring performed during the past year. The purpose of the report is to educate consumers about their drinking water and the need to protect this precious resource.

Your Water Sources

The Sparling Well, at the corner of Rhody Dr. and Kennedy St. in Port Hadlock provides most of the ground water supply for Port Hadlock, Chimacum and Irondale. Treatment is required to remove iron and manganese. A second well, the Kively well, supplements the system during peak demand. A replacement well for the Kively, the "New Kively well" was brought online in 2004. Water quality information for the New Kively well will be included in next year's report.

Potential Contaminants

In order to ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water 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 (1-800-426-4791).*

<p>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.</p>	<p>Contaminants that may be present in the source water include:</p> <ul style="list-style-type: none"> Microbial contaminants, such as viruses, protozoans, and bacteria, which may come from 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, 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 can also come from gas stations, urban stormwater runoff, and septic systems. Radioactive contaminants, which can be naturally occurring.
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Tri-Area Annual Water Quality Analysis (2003)

The EPA regulates monitoring of over 80 contaminants. Presence of contaminants in the water does not necessarily suggest the water poses a health risk. In 2003, no contaminant exceeded a maximum contaminant level. Data presented in this table is from testing done January 1- December 31, 2003 only. The State requires us to monitor for certain contaminants less than once per year because concentrations of these contaminants are not expected to vary significantly from year to year based on previous results.

EPA Regulated Primary Contaminants – Disinfection By-Products

Source	Organic Chemical Contaminant	MCL	MCLG	Range of Results	Violation	Typical Source of Contaminant
Sparling well	Total Trihalomethanes (TTHMs) (ppb)	100	N.A.	9.8 - 35.3	No	By-product of drinking water chlorination
Sparling well	Halo-Acetic Acids (ppb)	60	N.A.	6.1 - 7.2	No	By-product of drinking water chlorination

The PUD uses chlorine as a disinfectant in the Tri-Area system. When chlorine encounters organic compounds, particularly within the distribution system it can form Trihalomethanes (THM's) and haloacetic acids which can cause kidney and liver problems as well as cancer with significant exposure over time.

EPA Regulated Primary Contaminants – Lead and Copper

Source	Inorganic Chemical Contaminant	AL	Range of Results (ppm)	Number of Samples above action level	Typical Source of Contaminant
Tri-Area System (households)	Lead (ppm)	0.015	<0.002 – 0.018	one sample in 20	Corrosion of household plumbing systems
Tri-Area System (households)	Copper (ppm)	1.3	<0.2 – 0.6	0 sample in 20	Corrosion of household plumbing systems

There is no detectable lead or copper in your source water, however some homes have old metal pipes that can leach lead and copper into home plumbing. Drinking water containing copper in excess of the action level over a relatively short time can cause gastrointestinal distress and over prolonged exposure over the action level, kidney and liver damage. Lead is considerably more toxic than copper and can cause neurological and developmental problems in children and kidney problems and high blood pressure in adults. If you have lead and or copper problems it is advisable to leave your water running 30 seconds before using it for drinking or cooking.

Current Operations

There were no treatment or distribution violations this past year. In 2003 a new well was drilled to replace the older, less efficient Kively well. The new well was brought online in early 2004.

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 the 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 (1-800-426-4791).

Specific Health Concerns

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. 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.

Definitions:

<p>Action Level (AL): The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.</p> <p>Maximum Contaminant Level (MCL): 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.</p>	<p>Maximum Contaminant Level Goal (MCLG): 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.</p> <p>ppm: Parts per million or grams per liter.</p> <p>ppb: parts per million</p> <p>n/a: Not applicable</p> <p>Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.</p>
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Public Comment

The public is invited to participate in decisions that affect drinking water through the Jefferson County PUD #1 Board of Commissioners (BOC). The BOC meets on the first and third Wednesdays of each month at 5:00 PM at the office in Port Hadlock. The address is 230 Chimacum Road.

More Information

The water provided to Port Hadlock, Irondale, and Chimacum by Jefferson County PUD#1 meets or exceeds all EPA and State drinking water health standards. We are happy to answer any questions you may have about our drinking water and have available complete list of compounds we test for. Contact us at 385-5800 or email us at jeffpud@olympen.com. Check out our webpage at www.jeffpud.org.