



2008 DRINKING WATER QUALITY REPORT

State Water System ID# 94900P

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The City of West Richland is committed to providing its residents with the highest quality of drinking water. We believe the best way to ensure your drinking water is safe and reliable is to provide you with accurate information. This 2008 Drinking Water Quality Report will explain where your drinking water comes from, what substances it contains, and the treatment process. The table included with this report compares your water to the Environmental Protection Agency (EPA) and Washington State Department of Health water quality standards.

DRINKING WATER QUALITY

In 2008 the tap water provided to you met all of the EPA and State primary drinking water health standards. However, in 2008, the State's Secondary Maximum Contaminant Level (SMCL) for fluoride was exceeded in one of the City's seven wells. SMCL's are based on aesthetics, which are non-health standards such as color, taste, and hardness. The tap water in your home is a mixture of several wells which dilute or lower the concentration of fluoride. Water quality tests are performed at the wellhead which produces the maximum contaminant concentrations. Samples are not taken from individual residences after the mixing process has occurred. Therefore, the City must assume that concentrations recorded at the wellhead could have reached citizens' water. EPA requires consumer notification of the risks associated with fluoride when a wellhead's fluoride level test results are over 2.0 milligrams per liter (mg/L).

Fluoride levels less than 2 mg/L are considered beneficial in preventing cavities. The notice provided in this report includes mandatory language required by the EPA. The intent is not to alarm citizens, but to educate you and your family of the risks associated with elevated levels of fluoride in drinking water. The City provides free fluoride tests upon request. For more information regarding the City of West Richland's drinking water, fluoride tests, or this report, please contact the City's Public Works Department at (509) 967-5434.

DRINKING WATER SOURCES

Seven City wells, ranging in depth from 250 feet to 1,200 feet, supply water to the City's estimated 11,180 residents and have the ability to cumulatively pump up to 5,285 gallons per minute. Water from these wells is treated with chlorine for protection against microbial contaminants and then stored in four reservoirs with a total capacity of 3.8 million gallons. All of our treatment methods are in accordance with EPA regulations. An inter-tie with the City of Richland's water system is capable of providing up to 750 gallons per minute or 1 million gallons of water per day, as needed during peak demand summer months.

The City is currently in the process of constructing a second inter-tie with the City of Richland to replace the existing inter-tie. A 24" waterline will be extended from the Dupertail St./Keene Road intersection in the spring of 2009 and a booster pump station will be designed to provide 2500 GPM (3.6 millions gallons of water per day). Construction of the booster pump station and operation of the second inter-tie is scheduled to be completed once construction funding can be secured in 2010.

PUBLIC PARTICIPATION

City Council meetings are held on the first and third Monday of each month at 7 p.m. in City Council Chambers (Library), 3803 W. Van Giesen. On occasion, items related to drinking water are discussed. These meetings are open to the public or can be seen live on Channel 5. Information can also be found on the City Website at www.westrichland.org.

EPA STANDARDS

The following paragraph is not necessarily representative of the City's drinking water, rather it is provided as general information about substances that may be present in both bottled and tap water. The sources of drinking water for both tap 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. It also can become polluted by domestic, recreational, or industrial activities.

Substances that may be present in source water include: Microbial substances, Inorganic substances, Pesticide and Herbicides, Organic substances, and Radioactive substances.

To ensure tap water is safe to drink, EPA prescribes regulations limiting the amount of certain substances in water provided by public water systems. The Food and Drug Administration regulations establish limits for substances in bottled water that 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. 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).

HEALTH INFORMATION

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 (1-800-426-4791).

WATER SOFTENER INFORMATION

Many homeowners have, or plan to install water softeners in their home. Water Softener Companies will ask for the Hardness, Total Dissolved Solids (TDS), and Iron content of your water. The City water tests resulted in the following: TDS = 212 to 505 mg/l, Hardness = 20.3 to 308 mg/l, and Iron = None Detected to 0.10 mg/l. The Hardness range converts to 1.2 to 18 grains per gallon (GPG). Purchasing a home hardness kit or testing by a water softener representative is recommended for accurate results for specific areas of the City. Contact a local water softener representative for more information on testing and water softeners. Installation of a water softener requires a plumbing permit from the City Building Department. Contact (509) 967-5902 for more information.

WATER QUALITY DATA

The table below lists all the drinking water substances we detected during the 2008 calendar year. The presence of these substances in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2008. The State requires us to monitor for certain substances less than once per year because the concentrations of these substances are not expected to vary significantly from year to year.

Substance	Range of Detected Substance	Highest Level Detected	Highest Level Allowed (EPA's MCL)	State Reporting Level (SRL)	Ideal Goals (MCLG) [MRDLG]	Typical Source Of Substance
MICROBIOLOGICAL						
Total Coliform Bacteria	0 of 208 samples	0	Presence detected in more than one sample/ month	Any Presence	0	Naturally present in the environment
RADIOLOGICAL						
Gross Alpha Emitters*	0.30 – 4.12 pCi/L*	4.12 pCi/L	15 pCi/L	Above 0 pCi/L	0	Erosion of natural deposits
Gross Beta Emitters*	1.44 – 12.52 pCi/L*	12.52 pCi/L	50 pCi/L	Above 0 pCi/L	0	Decay of natural and man-made deposits
Radium 228*	0.24 -0.79 pCi/L*	0.79 pCi/L	5 pCi/L (combined)	Above 0 pCi/L	0	
INORGANIC SUBSTANCES (IOCs)						
Arsenic	ND – 5 ppb	5 ppb	10 ppb	2 ppb	1 ppb	Erosion of natural deposits
Cadmium	ND – 3 ppb	3 ppb	5 ppb	2 ppb	5 ppb	
Fluoride	0.36–3.0 ppm	3.0 ppm	4 ppm	0.2 ppm	4 ppm	
Chromium	ND – 0.03 ppm*	0.03 ppm	0.1 ppm	0.01 ppm	0.1 ppm	
Barium	ND – 0.10 ppm*	0.10 ppm	2 ppm	0.10 ppm	2 ppm	Fertilizer and septic tanks
Nitrate – Nitrogen	ND – 2.74 ppm	2.74 ppm	10 ppm	0.5 ppm	10 ppm	
SYNTHETIC ORGANIC SUBSTANCES (SOCs)						
DCPA	ND-1.2 ppb	1.2 ppb	70 ppb (Health Advisory Level)	0.1 ppb	N/A	Pre-emergent herbicide (annual grass and broadleaf weeds)
DISINFECTION BYPRODUCTS						
Trihalomethanes	4.0 – 17.2 ppb	17.2 ppb	80 ppb	0.5 ppb	N/A	By-product of drinking water disinfection
Haloacetic Acids	ND – 20.4 ppb	20.4 ppb	60 ppb	1 ppb		
Chlorine	0.54 ppm running average	1.38 ppm	MRDL=4		MRDLG=4	
Substance	Range of Detected Substance	90th Percent Reported	EPA Action Level	State Reporting Level (SRL)	Site Exceeding Action Level	Typical Source Of Substance
LEAD AND COPPER						
Lead*	0.003– 0.014 ppm	0.014 ppm	0.015 ppm	0.002 ppm	0 of 28 test sites	Corrosion of household systems; Erosion of natural deposits
Copper*	< 0.2 ppm	N/A	1.3 ppm	0.2 ppm	0 of 28 test sites	

***Samples not taken in 2008**

Note: The Washington State Department of Health has reduced the monitoring requirements for synthetic organic chemicals (SOCs) because the sources are not at risk of contamination.

Terms and abbreviations used above:

- **Maximum Contaminant Level (MCL):** The highest level of a substance that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG):** The level of a substance in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants (e.g. chlorine, chloramines, chlorine dioxide)
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Picocuries per liter (pCi/L):** A standard measurement of radioactivity in the environment. ** The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.
- **Action Level (AL):** The concentration of a substance which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **State Reporting Level (SRL):** Indicates minimum reporting level required by the Washington State Department of Health.
- **NTU:** a measure of the cloudiness of water
- **ppb:** parts per billion or microgram per liter
- **ppm:** parts per million or milligrams per liter
- **mg/l:** milligrams per liter
- **N/A:** not applicable
- **ND:** not detectable at testing limit

EPA FLUORIDE SMCL EXCEEDANCE NOTICE IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ELEVATED FLUORIDE LEVELS DETECTED AT ONE OF THE CITY'S EIGHT WELLS

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by Well #7 has a fluoride concentration of 3.00ppm.

Dental fluorosis in its moderate or severe forms may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please contact Roscoe Slade, Public Works Director, City of West Richland, at 967-5434. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home treatment units, you may call NSF International at 1-877-8-NSF-HELP (www.nsf.org).

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.