



City of Hermiston

2010 WATER QUALITY REPORT

The City of Hermiston is pleased to provide the annual Water Quality Report for calendar year 2010. Our goal has always been to provide the consumer with a safe, dependable supply of drinking water. The drinking water produced by the city is safe and meets or exceeds all federal and state requirements.

Water Sources and Treatment

Hermiston gets its water from several sources. Three are deep wells, one is a shallow well, and a surface water source—Lake Wallula on the Columbia River (also known as the McNary Pool).

The deep wells, the City's original and primary water source, draw water from a deep Columbia River Basalt aquifer. Well #2 and Well #4 are the primary deep wells connected to the central distribution system. Well #6 supplies the higher-elevation service area in the southeast part of the City. Well #5 draws water from a shallow alluvial aquifer. This well is also connected to the central distribution system. The entire water distribution system is interconnected.

The surface water source is drawn from Lake Wallula through a river intake and pump station at the Port of Umatilla near McNary Dam. It is pumped to the water treatment facility where it is filtered and disinfected for domestic use. Chlorine is added to all the sources of drinking water for disinfection to maintain system integrity.

System Improvements

The City continues to maintain and improve the water system. The maintenance and upgrades to the distribution system including flushing water mains, cleaning the water reservoirs, and upgrading the electronic and mechanical controls at the wells and water filtration plant are designed to enhance water quality, while simultaneously reducing costs associated with producing water. During 2010, the water department installed or accepted responsibility for more than 1,506 feet of new water mains, 6 new fire hydrants, and 55 new services.

Explanation of Contaminants

Drinking water, including bottled water, may be expected to contain at very 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). Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria.
- **Inorganic contaminants**, such as salts and metals, can occur naturally or result from urban stormwater runoff, industrial, mining, or farming.
- **Pesticides and Herbicides** come from sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic Chemical Contaminants**, including synthetic and

volatile organic chemicals, are byproducts of industrial processes and can also come from stormwater runoff.

- **Radioactive Contaminants** can occur naturally or be the result of mining activities.
- **Lead**, if present in elevated levels, can cause serious health problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Hermiston is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 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 Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Maximum Contaminant Levels (MCLs) are set at very stringent levels. For example, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/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 Water Drinking Hotline (800-426-4791).

2010 Water Quality Data

The City of Hermiston routinely monitors its water for contaminants in your drinking water according to federal and state laws. **The City of Hermiston tests for over 100 contaminants in drinking water. The contaminants listed in the table are the only contaminants detected during 2010.** Unless otherwise noted, the data in this table is from testing done in 2010.

How We Did

- Last year we had four late/non-reporting violations. These were due to confusion on reporting deadline dates, therefore causing a delay in the Oregon Health Authority receiving the data. All of the water samples were taken at the correct time and the results met or exceeded the State's standards. All of the violations have been returned to compliance. We have changed our policy and taken additional measures to ensure sampling data is received by the State's deadline.

If you have any questions about this report or concerning your water utility, please contact water superintendent Roy Bicknell at Public Works, 1100 NE 4th St Hermiston, OR 97838; Phone: 541-567-5521; Fax: 541-567-5530.

En Español *Esta informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.*

City of Hermiston 2010 Water Quality Table								
Substance (units of measure)	MCLG	MCL	Highest Detected Level	Range		Violation	Frequency of Test	Typical Source
				Low	High			
Physical								
Turbidity (NTU)	NA	TT	0.27	0.01	0.27	No	Every 4 hrs Report Monthly	Soil runoff
Turbidity (NTU) (lowest monthly % of samples meeting limit)	NA	TT	100	N/A	N/A	No		
Microbiological								
Total Coliform Bacteria	0	two or more positive	0	N/A	N/A	No	15 X per month	Naturally occurring in the environment
Fecal Coliform (E-coli)	0	samples/month	0	N/A	N/A	No	15 X per month	Human or animal fecal waste
Inorganic Compounds								
Barium (ppm)	0	2	0.021	0.021	0.021	No	Tested 06/10	Erosion of natural deposits
Fluoride (mg/l)	0	4	0.136	0.136	0.136	No	Tested 06/10	Erosion of natural deposits
Nitrate as N (mg/l)	0	10	0.249	ND	0.249	No	Tested 06/10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sulfate (mg/l)	0	N/A	45.9	ND	45.9	No	Tested 06/10	
Sodium (mg/l)	0	N/A	6.21	6.21	6.21	No	Tested 06/10	Erosion of natural deposits
Arsenic (mg/l)	0	0.01	0.001	ND	0.001	No	Tested 06/10	Erosion of natural deposits
Radioactive Substances								
Combined Radium226/228 pCi/L	0	5	0.88	N/A	0.88	No	Tested 06/10	Erosion of natural deposits
Gross Alpha pCi/L	0	15	5.74	5.74	5.74	No	Tested 07/10	Erosion of natural deposits
Gross Beta pCi/L	0	50	1.5	-0.2	1.4	No	Tested 06/08	Decay of natural and man-made deposits
Combined Uranium ug/l	0	30	8.19	8.19	8.19	No	Tested 06/10	Erosion of natural deposits
Volatile Organic Compounds (VOC's)								
			Highest annual Average	Range				
				Low	High			
HAA5 (mg/l)	NA	0.06	0.01466	0.001	0.053	No	quarterly	Byproduct of drinking water disinfection process
TTHM (mg/l)	NA	0.08	0.02624	0.005	0.051	No	quarterly	Byproduct of drinking water disinfection process
Total Organic Compounds (TOC's)								
TOC Raw	NA	TT	N/A	1.24	1.83	No	quarterly	Naturally present in the environment
TOC Treated	NA	TT	N/A	1.03	1.43	No	quarterly	Naturally present in the environment
Lead and Copper								
Substance units of measure	MCLG	Action Level	Amount Detected 90th% tile	Sites Above Action Level	Violation	Year Sampled	Typical Source	
Lead (mg/l) Action Level: 90% of the homes have less than 15 ppb	0	0.0155	ND	0	No	Tested 06/08	Naturally occurring in the environment	
Copper (mg/l) Action Level: 90% of the homes have less than 1.3 ppm	0	1.35	0.24	0	No	Tested 06/08	corrosion of plumbing in homes and buildings	

Notes:

MCLG = Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known expected risk to health.

MCLG's allow for a margin of safety.

TTHM's = Total Trihalomethanes

ppm = parts per million, or milligrams per liter (mg/l);

ppb = parts per billion, or micrograms per liter (mcg/l);

Action Level = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL = Maximum Contaminant Level: The highest level of a contaminant that

is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

N/A = Not Applicable

N/D = non-detect

pCi/L = Picocuries per liter: standard measurement of radioactivity in the environment.

TT = Treatment Technique -A process intended to reduce the level of a contaminant in the water.

¹Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask for advice from your health care provider.

²HAA5 has become an EPA water quality requirement in the year 2002 because high levels increase the risk of cancer.