



CITY OF HOQUIAM - DRINKING WATER QUALITY REPORT - 2012

SOURCE OF HOQUIAM'S WATER

The City of Hoquiam's raw water source is a blend of surface waters from Davis Creek and the West Fork of the Hoquiam River, located north of town in the Hoquiam Watershed. Protecting groundwater and preventing pollution is the top priority in our watershed, which is also managed for timber production. To ensure these goals, human entry is restricted & no industrial uses occur within its boundaries. The City carefully monitors water quality and quantity in the water shed and reports testing as required by the Washington State Department of Health and EPA guidelines.

TREATMENT OF HOQUIAM'S WATER

Water is diverted out of Davis Creek and the West Fork of the Hoquiam River to the direct filtration water treatment plant located at 881 U.S. Highway 101 where we treat it to remove contaminants. Chlorine is added for disinfection and aluminum sulfate is added as the main coagulant.

The water then goes to a flocculation mixing basin. The addition of these substances causes small particles to adhere to one another (called "floc") making the water condition easier to filter. The water is then filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges. Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Sodium hydroxide is added for pH adjustment of the filtered water to slightly increase the pH of the water. The entire treatment process is continuously and closely monitored. State Certified water treatment plant operators staff the plant 365 days per year. Filtered water is pumped 6-miles via a transmission pipeline to the storage reservoirs located on Beacon and College Hills. From the two reservoirs, the filtered water is transferred into the distribution system for delivery to you, the customer.



A MESSAGE FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA)

If present, elevated levels of lead can cause serious health problems, especially for 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 Hoquiam 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 thirty (30) seconds to two (2) 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 <http://www.epa.gov/safewater/lead>.

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 the 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).

Some people may be more vulnerable to contaminants that exist in drinking water supplies 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 provider. 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).

WHAT AFFECTS OUR WATER QUALITY

The sources of drinking water (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, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture livestock operations, and wild life.
- **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.
- **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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the Washington State Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



CROSS CONNECTION CONTROL

The City is working to eliminate the threat of accidental contamination to the water system through residential and commercial “cross-connections”. A cross-connection is a point in a plumbing system where the City’s drinking water supply is connected to a non-potable source, such as an in ground irrigation system. This interconnection becomes a hazard when reduced water pressure causes a “backflow” condition. Water pressure can drop, for example, when there is a water main break, a fire that requires large quantities of water, a system pump failure, or very high demand for water.

The Washington State Department of Health regulations (WAC 246-290-490) require the City of Hoquiam to protect our drinking water system from contamination. The City’s goal is to maintain a strong cross-connection control program to protect the purity of our drinking water. To achieve this, the City routinely conducts surveys of all water system connections throughout the City’s service area. Through these surveys, the Water Department determines which type of backflow protection, if any, is necessary to protect the water system.

HOW DO I GET INVOLVED

Except for dates that conflict on national holidays, the Hoquiam City Council meets the second and fourth Mondays of each month. The meetings are held in the Council Chambers, Room 201, Hoquiam City Hall, 609 8th Street, at 7:00 p.m. The Council meetings are open to the public and all citizens are encouraged to attend and comment. Citizens may also visit or contact the Public Works Department at Hoquiam City Hall for assistance or call 360-637-6017 or email at bshay@cityofhoquiam.com.

WATER CONSERVATION

With the warm summer months on the way, conserving water is vital to ensuring there is enough water for everyone who depends on it during the high demand season. Here are some tips to help you reduce your consumption around the house:

- Replace your “water guzzling” toilet (3.5 to 7 gallons per flush) with a water-efficient model that uses 1.6 gallons of water or less per flush;
- Turn off the faucet while shaving, brushing teeth, shampooing hair or lathering face and hands;
- Take shorter showers and save up to 2.5 gallons per minute;
- Periodically check for leaks and fix them promptly. A leaky faucet can waste 3,280 gallons of water per year, most commonly due to worn washers;
- Capture water from the faucet while it is heating up and use the leftover water for pets or watering plants; chill drinking water with ice or by storing in the refrigerator instead of running the tap;
- Replace your worn-out toilet flapper valve with a water-efficient model. Check for toilet leaks by placing food coloring in the toilet tank. Wait 15 minutes and if dye appears on toilet bowl, you have a leak! Toilet tank leaks can waste more than 50 gallons of water per day;
- Wash full loads in your dishwasher and washing machines;
- Install a water-efficient washing machine. Uses up to 40% less water than standard models.
- Install water-saving aerators in your kitchen and bathroom sinks and save up to 1.5 gallons of water per minute!

For information on the water-efficient machines and equipment listed above and for other water savings tips and ideas, visit www.epa.gov/watersense

WATER QUALITY MONITORING TEST RESULTS

The samples collected for these contaminants were found to meet all applicable EPA and Department of Health standards. The water quality information presented in the table are the most commonly inquired on and is from the most recent round of testing done in accordance with the regulations. All data shown were collected during the last calendar year unless otherwise noted in the table.

Individual tests were conducted by Water Management Laboratories, Inc., a certified Washington State Department of Health testing lab.

INORGANIC CHEMICALS

SUBSTANCE	MCL	MCLG	DETECTED LEVEL	VIOLATIONS	SAMPLE DATE	MAJOR SOURCES IN DRINKING WATER
Arsenic (ppm)	10	0	1	NO	4/12/11	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Fluoride (ppm)	4	4	.2	NO	4/12/11	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Iron (ppm)	3	N/A	1	NO	4/12/11	Erosion of natural deposits.
Manganese (ppm)	5	N/A	1	NO	4/12/11	Erosion of natural deposits.
Mercury (ppb)	2	2	.2	NO	4/12/11	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (ppm)	10	10	.2	NO	4/12/11	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Sodium (ppm)*	N/A	N/A	5	N/A	4/12/11	Erosion of natural deposits.

Note: All samples collected at the Water Treatment Plant.

* The EPA recommends less than 20mg of sodium per liter of water for people whose daily sodium intake is restricted.

LEAD AND COPPER MONITORING

SUBSTANCE	MCL	MCLG	DETECTED LEVEL 90th percentile	VIOLATIONS	SAMPLE DATE	MAJOR SOURCES IN DRINKING WATER
Copper (ppm)	AL=1.3	1.3	.55	NO	9/17/09	Corrosion of household plumbing products; erosion of natural deposits.
Lead (ppb)	AL=15	0	9	NO	9/2/09	Corrosion of household plumbing products; erosion of natural deposits.

Note: All samples were collected for lead and copper analyses from 20 homes through out the distribution system. Zero samples exceeded the Action Level.

DISINFECTION BYPRODUCTS

SUBSTANCE	MCL	MCLG	DETECTED LEVEL AVERAGE	RANGE OF DETECTIONS	VIOLATIONS	SAMPLE DATE	MAJOR SOURCES IN DRINKING WATER
Chlorine Residual (ppm)	4	4	.82	.25-1.4	NO	Daily 2011	Measure of disinfectant added to water.
Haloacetic Acids (HAAs) (ppb)	60	N/A	29	20.7-61.3	NO	4 times yearly 2011	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	38	36.7-56.9	NO	4 times yearly 2011	By-product of drinking water disinfection.

Note: All samples collected in the distribution system.

WATER QUALITY TABLE DEFINITIONS

AL (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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants. (e.g. chlorine, chloramines, chlorine dioxide).

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A (Not Applicable) EPA has not established MCLGs for these substances.

PPB (Parts per Billion) Parts per billion is equivalent to micrograms per liter (µg/L).

PPM (Parts per Million) Parts per million is equivalent to milligrams per liter (mg/L).

WATER SYSTEM FLUSHING

The Hoquiam Water Department has established a preventative maintenance program to annually clean waterlines and check the operation of fire hydrants throughout the distribution system. Water Department crews operate fire hydrants and blow-offs to create high velocity flows that scour and clean the inside of waterlines. This activity, often called “flushing”, is a common utility practice used to improve water quality and maintain the distribution system. Minerals and other materials that accumulate in the lines are removed by flushing. This material is not harmful to your health but it can temporarily cause discolored water.

You may notice discolored water or a change in water pressure when flushing is conducted in your area. When flushing is taking place, we recommend that customers check to ensure tap water is running clear before using it for drinking, cooking or clothes washing. Customers who experience some coloring or sediment in their water should let the water flow from their faucets for a short time. (5 minutes). Flushing your household or business faucet after Water Department crews have completed their work should clear up any “stirred up” water.

Flushing activities begin each spring and because the distribution system contains about 60 miles of pipe, it takes one month to complete the flushing. The flushing schedule notice is posted in the Daily World a week prior to the start date of the flushing program. The flushing schedule will also be posted on the City website and Facebook site.

WATER USE EFFICIENCY (WUE)

Hoquiam adopted a water conservation goal as a result of Washington State’s 2007 Water Use Efficiency Rule (WUE). The rule requires that the City’s goal be re-established at a minimum of every six years, and that progress towards the goal be reported annually to the State and to City customers. In 2008, the City set goals to reduce annual distribution system leakage from 16% in 2007 to less than 10% by 2015. In 2011 the annual distribution system leakage goal was attained at 2% due to an aggressive leak repair program and meter replacement program.



CITY AND STATE CONTACT INFORMATION

Hoquiam Water Department Public Water System (PWS) Identification Number: 343501

Hoquiam Water Department: Operates the water system, conducts water quality testing, and protects the city’s water supply. Contact Al Telecky at 360-532-5700 ext. 236. After Hour Emergencies/ Weekends/ Holidays 360-533-8935. Email: atelecky@cityofhoquiam.com

Hoquiam Utility Billing (Finance) Department: To arrange a change of water service billing, or for general billing questions call 360-532-5700 ext. 233 or 248. Email: achapman@cityofhoquiam.com

Washington State Department of Health: Enforces national and state health standards. Visit the State drinking water web site, www.doh.wa.gov/ehp/dw/ or call the Southwest Regional Drinking Water Office at 360-236-3030.

U.S. Environmental Protection Agency (EPA): Sets national standards for more than 100 potential drinking water contaminants under the Safe Drinking Water Act. Visit the EPA’S drinking water web site, www.epa.gov/safewater or call the EPA’s Safe Drinking Water Hotline at 800-426-4791.

Este informe contiene informacion muy importante. Tradduscolo o hable con alguien que lo entienda bien.

**The City of Hoquiam is an Equal
Opportunity Provider**

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