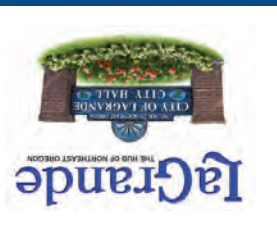


Water Quality Report

City of La Grande



2012



Cross Connections

Cross connections that could contaminate the public drinking water system are a major concern. A cross connection is "Any actual or potential connection between the potable water line and any pipe, vessel or machine containing a non-potable fluid, such that it is possible for the non-potable fluid to enter potable water system by backflow."

Typically, backflow contamination occurs when the water supply pressure drops below the downstream piping pressure. This can occur with a water main break or if there is a high demand for water, allowing any contamination to flow in reverse from the normal direction of flow into the water supply line by "back-pressure" or "back-siphonage."

Oregon State Health Department Rule # 333-61, and the City of La Grande Ordinance #3051, along with the City's Cross Connection Control Program, has minimum requirements for eliminating and protecting the drinking water through backflow prevention assemblies.

The City of La Grande, however, feels it is also necessary to inform you of a potential hazard that exists in relation to backflow prevention assemblies and your hot water heater.

Water heaters are installed with a temperature and pressure valve (T&P) that is designed to relieve excessive water temperature or pressure. Also aiding in the control of excessive heat and pressure is a condition known as thermal expansion which allows extremely hot water to backflow into water main lines, mixing with the cold water and dissipating the heat.

However, when a backflow prevention assembly is installed on a household water service line, by the customer or the city, the water cannot go back out into the water system. This leaves the T&P valve as the release route for the overheated water.

If the thermostat in a hot water heater becomes defective and allows the water temperature to increase to more than 212°F, and the T&P valve fails, your domestic water can become "superheated." Superheated water can cause water heaters to explode or can allow scalding steam to be released from faucets upon personal use.

This condition is rare, because the hot water heater thermostat and the T&P valve must both malfunction simultaneously. However, with the backflow prevention assembly in place, the potential hazard exists.

The City of La Grande recommends that the T&P valve be inspected periodically. Also, you can talk to a licensed plumber about other methods of protection such as a thermal expansion chambers and pressure relief toilet ball cock assemblies.

For more information on cross connection control and backflow assembly installation, contact the Cross Connection Specialist at (541) 962-1228 or dharsin@cityoflagrande.org

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ALL SOURCES OF DRINKING WATER

are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. Therefore, water tests are conducted annually to ensure safe drinking water for our community.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses, parasites, and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides, which may come from various 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. They can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can occur naturally or result from oil and gas production and mining activities.

While our drinking water meets the US Environmental Protection Agency's (EPA's) standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing the arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Maximum Contaminant Level (MCLs) are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

A CONSUMER'S GUIDE TO Water Conservation

Conservation of our natural resources is important and it can also keep more money in your pocket.

The average home uses 30 to 100 gallons per person each day. This amounts to 650 gallons per household daily. About half of this is used in the home, the rest is used for irrigation and other outside uses.

HERE ARE A FEW TIPS TO HELP YOU SAVE WATER AND MONEY.

- Use the dishwasher and washing machine only with full loads.
- Don't run water continuously for vegetables and dish washing.
- Don't let the water run while brushing your teeth or shaving.
- Use a broom to clean driveways, walks and patios.
- Take showers rather than baths, keep them short.
- Install low-flow toilet (1.6 gallon per flush).
- Install low-flow shower head.
- Water the lawn in the morning or evening to avoid evaporation.
- Plant native or drought-resistant grass and plants.
- Water trees slowly, infrequently to encourage deep rooting.
- Insulate water heater and pipes.
- Use a sponge and a bucket of water to wash the car.

Call La Grande Public Works at (541) 962-1325 for more conservation ideas.

City of La Grande Provides Exceptional Water for You



WE ARE PLEASED TO PROVIDE YOU WITH THIS YEAR'S ANNUAL WATER QUALITY REPORT.

We want to keep you informed about our water quality and the services we have provided for you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. The City of La Grande's water supply comes from five wells. Three of these wells are shallow alluvial wells that are supplied by the Grande Ronde aquifer and are known as Gekeler Well, Island City Well and Highway 30 Well. The other two are deep basalt wells supplied by the Ladd Creek aquifer and are known as the 2nd and H Well and the 12th Street Well.

The City will be faced with making significant improvements to its water system to comply with existing and future State and Federal water quality standards. In addition to the capital improvements that will be required, increases in the costs of operation and maintenance will also be incurred due to these standards. In order for these improvements to be accomplished, rates may need to be increased in the future through Council action. Please contact our City Recorder at (541) 962-1309 for the dates of our Council meetings if you wish to attend a City Council meeting. Council meetings are held monthly at 6:00 PM in the Council Chambers at City Hall, 1000 Adams Avenue, La Grande.

For more information about this report, or for any questions relating to your drinking water, please call Leland Mannor or Debbie Cornford at (541) 962-1325.



Photo by Chris Baxter / The Observer

How is My Water Monitored and Purified?

The City of La Grande must comply with regulations set forth by the Safe Drinking Water Act and, therefore, routinely monitors for constituents in your drinking water according to Federal and State laws. As a result, drinking water is the most regulated and controlled substance you can ingest—more than any food, drug or beverage. The table inside shows the results of our monitoring for the period of January 1, 2008 - December 31, 2012. During this time period, we tested each of our wells for over 179 different contaminants.

The distribution system received an additional 580 tests. This table shows only those substances we found in our water. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals and radioactive substances.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents.

It's important to remember that the presence of these constituents does not necessarily pose 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.



SAMPLING RESULTS

As you can see by the table below, our system had detections of low levels of some elements, but no violations. We are proud that your drinking water meets or exceeds all Federal and State requirements. The EPA has determined that your water IS SAFE at the levels detected.

WATER QUALITY REPORT FOR 2012 INORGANIC COMPOUNDS

Substance (Unit of Measure)	Year Sampled	Goal [MCLG]	Highest Level Allowed [MCL]	Highest Level Detected	Source of Substance	Violation
Arsenic (Mg/L)	2011	0	0.05	0.00345	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	No
Asbestos (MFL)	2011	7	7	<0.12	Decay of asbestos cement water	No
Barium (Mg/L)	2011	2	2	0.00512-0.0483	Discharge of drilling waste; discharge from metal refineries; erosion	No
Fluoride (Mg/L)	2011	4	4	0.120-0.239	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	No
Nitrate (as Nitrogen) (Mg/L)	2012	10	10	1.14	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No
Nitrite (as Nitrogen) (Mg/L)	2012	10	10	1.14	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No
Haloacetic Acids (Mg/L)	2012	0	0.06	None Detected	By-product of drinking water disinfection	No
Total Trihalomethanes (Mg/L)	2012	0	0.08	0.00533	By-product of drinking water disinfection	No
Total Coliform	2012	10 per month	0	Negative	Coliforms are bacteria that occur naturally in nature and are used as an indicator that other, potentially harmful bacteria might be present.	No

LEAD AND COPPER (Tap water samples were collected from 30 homes in the service area)

Substance (Unit of Measure)	Year Sampled	Goal [MCLG]	Highest Level Allowed [MCL]	Highest Level Detected	Source of Substance	Violation
Copper (ppm)	2011	1.3	1.3 AL	0.05590	Corrosion of household plumbing systems	No
Lead (ppb)	2011	0	15 AL	0.00326	Corrosion of household plumbing systems	No
Uranium	2008	0	0.03	<0.00063	Erosion of natural deposits	No

*UNIT DESCRIPTIONS: ppm (Parts per Million), ppb (Parts per Billion), mg/L (Milligrams per Liter)

MCLG Maximum Contaminant Level Goal: 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.

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.

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

EPA Environmental Protection Agency

CDC Center for Disease Control & Prevention

MESSAGE FROM THE 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. City of La Grande 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 2 minutes before using water for drinking or cooking. The flushed water can be gathered into a pitcher or pot and used later for watering plants. If you are concerned about lead in your drinking 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. 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 ways to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON THE INTERNET:

Visit these web sites for more information on water quality:

- American Water Works Association Water Wiser Efficiency Clearinghouse <http://www.waterwiser.org/>
- City of Albuquerque Water Conservation Office <http://www.cabq.gov/waterconservation/indoor.html>
- USGS Domestic Water Use <http://ga.water.usgs.gov/edu>