

## *Annual Drinking Water Quality Report 2014*

### City of Independence

This report was written 07-27-15

#### **Este reporte es disponible en Español en la Presidencia municipal.**

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water; we have seven wells that we draw water from.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

The City of Independence routinely monitors for contaminants in your drinking water according to Federal and State laws (The City of Independence is guided by Oregon Health Authority for monitoring). These results of our monitoring are for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2014. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Maximum Contaminant Level* - (mandatory language) The "Maximum Allowed" (MCL) is 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.

*Maximum Contaminant Level Goal* - (mandatory language) The "Goal"(MCLG) is 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's 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.

Contaminant		Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
HAA5 Halo Acidics		N	ND	ppb	na	.06	This is a byproduct of water chlorination
73. TTHM's Total trihalomethanes		N	.00693	ppb	na	.08	This is a byproduct of water chlorination
Inorganic Contaminant		Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
16. Fluoride		N	1.4	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
19. Nitrate (as Nitrogen)		N	2.59	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium		N	ND	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Inorganic Contaminant	Units	Goal	Action Level (AL)	90 <sup>th</sup> Percentile	Homes Exceeding AL	Complies?	Source of Contaminant
14. Copper	ppm	1.3	1.35	1.3	0	Yes	Corrosion of household plumbing
17. Lead	Mg/L	0	.0155	.0033	0	Yes	Corrosion of household plumbing
Volatile Organic Contaminant		Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
None							
Synthetic Organic Contaminant		Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
None							

(14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

(16) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(17) Lead. 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.

(19) Nitrate. 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.

(21) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(73) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

As you can see by the table, our system did not have any violations for exceeding the MCL. All samples tested within acceptable levels. We have learned through our monitoring and testing that some contaminants have been detected, but did not exceed maximum contaminant levels. We're proud that your drinking water meets or exceeds all Federal and State requirements.

The City of Independence is required to test for many different categories of contaminants throughout the year; these categories include Bacteriological, Volatile Organic, Inorganic, Radiological, Halo Acidics, SOC's and Total Trihalomethanes. There are several dozen separate contaminants we test for; out of these, we had 5 contaminants detected; all 5 were at or below the Maximum Contaminant Levels.

The 90<sup>th</sup> percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customers' taps most likely to contain these substances based on when the house was built. The EPA determined that if the sample results exceeded the Action Level (AL), the City must take action in reducing the risk of leaching of lead and/or copper. As you can see by the table above, your water was at the action level for copper, but it was not exceeded. Our next testing for lead and copper is scheduled for 2018.

Nitrates 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 advice from your health care provider.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

**Sodium:** EPA and Oregon Health Division set standards for sodium at 20mg/l for water utilities. The sodium level for the City of Independence is approximately 20-25mg/l. At this level, take into account diet or health reasons; if needed, consult your physician.

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. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. We also have a city water master plan available at City Hall for review; this plan was updated as of March, 2015. We have practiced well-head protection, and a water conservation program is adopted, if needed.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The City of Independence Water Department works around the clock to provide the highest water quality as efficiently as possible to every tap. We ask that all our customers help us protect our water sources.

If you have any questions about this report or concerning your water utility, please contact Matt Carpenter or Nick Esch at 503-838-4781. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings; contact City Hall for dates and times.

Thank you for your time and interest  
Independence Public Works