

2010
Annual Drinking Water Quality Report
River Heights City

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the 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 three wells, Well #1, Well #2, and Well #3.

River Heights City has a Drinking Water Source Protection Plan that is available for review. It provides more information such as potential sources of contamination and our source protection areas. It has been determined we have a **low** susceptible level to potential sources of contamination. If you have any questions regarding source protection, contact the office to review our source protection plan.

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

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

If you have any questions about this report or concerning your water utility, please contact Clayten Nelson (435) 213-6948. 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 meetings. They are held on the second and fourth Tuesday of each month, at 6:30 pm at the City Office Building.

River Heights City routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2010. 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.

In the following 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:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

ND/Low - High - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

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 (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (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 (MCLG) - (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.

Date- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates “May” seem out of date.

Waivers (W)- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

TEST RESULTS							
Contaminant	Violation	Level Detected	Unit Measurement	MCLG	MCL	Date Sample	Likely Source of Contamination
Microbiological Contaminants							
1. Total Coliform Bacteria	N	0	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2010	Naturally present in the environment
2. Fecal coliform and <i>E. coli</i>	N	0	N/A	0	a routine sample and repeat	2010	Human and animal fecal waste
3.a. Turbidity for Ground Water	N	.1-.5	NTU	N/A	5	2010	Soil runoff
Radioactive Contaminants							
4. Alpha emitters	N	ND-5	pCi/l	0	15	2004	Erosion of natural deposits
5. Beta emitters*	N	ND-3	pCi/l	0	50	2004	Erosion of natural deposits
*Beta Particles: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles							
Inorganic Contaminants							
7. Antimony	N	ND	ppb	6	6	2010	Discharge from petroleum refineries: fire retardants:
8. Arsenic	N	700	ppt	N/A	10,000	2010	Erosion of natural deposits: runoff from
10. Barium	N	40-110	ppb	2000	2000	2010	Discharge of drilling wastes: discharge from
11. Beryllium	N	ND	ppb	4	4	2010	Discharge from metal refineries and coal-burning
12. Cadmium	N	ND	ppb	5	5	2010	Corrosion of galvanized pipes: erosion of natural
13. Chromium	N	ND	ppb	100	100	2010	Discharge from steel and pulp mills: erosion of
14. Copper 90% results	N	a.340	ppb	1300	AL=1300	2008	Corrosion of household plumbing systems: erosion
15. Cyanide	N	ND	ppb	200	200	2010	Discharge from steel/metal factories: discharge from

16. Fluoride	N	ND	ppb	4000	4000	2010	Erosion of natural deposits; water additive
17. Lead 90% results	N	a. 3	ppb	0	AL=15	2008	Corrosion of household plumbing systems; erosion
18. Mercury (inorganic)	N	ND	ppb	2	2	2010	Erosion of natural deposits; discharge from
19. Nitrate (as Nitrogen)	N	1800	ppb	10000	10000	2010	Runoff from fertilizer use; leaching from septic tanks
20. Nitrite (as Nitrogen)	N	ND	ppb	1000	1000	2010	Runoff from fertilizer use; leaching from septic tanks
21. Selenium	N	1600	ppt	50,000	50,000	2010	Discharge from petroleum and metal refineries;
22. Sodium	N	11.4	ppm	None set by EPA	None set by EPA	2010	Erosion of natural deposits; discharge from
23. Sulfate	N	15	ppm	500*	500	2010	Erosion of natural deposits; discharge from
24. Thallium	N	ND	ppb	1	2	2010	Leaching from ore-processing sites; discharge
25. TDS (Total Dissolved Solids)	N	346	ppm	1000**	1000**	2010	Erosion of natural deposits
*If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human							
Disinfection Bi-products							
TTHM [Total trihalomethanes]	N	ND	ppb	0	100	2010	By-product of drinking water disinfection
Haloacetic Acids	N	ND	ppb	60	n/a	2010	By-product of drinking water disinfection

In addition to the sampling outlined in the table above, we have also sampled for (21 Volatile Organic Chemicals, 28 Pesticides, 35 Unregulated Organic Chemicals and 10 Unregulated Pesticides). These additional chemicals were not detected. If you would like a list of the specific (Pesticides, Organic Chemicals) that we sampled for, please contact the city office.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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.

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.

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).

Please call our office if you have questions (435)752-2646.

We at River Heights City work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.