

# ***Annual Drinking Water Quality Report Cedar Highlands Subdivision - 2004***

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 sources are six springs.

The Drinking Water Source Protection Plan for Cedar Highlands Subdivision is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Potential contamination sources common in our protection areas are a few residential septic tanks. Our sources have a low susceptibility to potential contamination. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

This report shows our water quality and what it means to you our customer.

If you have any questions about this report or concerning your water utility, please contact Bob Havens at 702-275-2990 or 435-662-2990. 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 third Friday of each month at the Park located at 200 North and Main.

Cedar Highlands Subdivision 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 1<sup>st</sup> to December 31<sup>st</sup>, 2004. 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.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - 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.

**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 Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
1. Total Coliform Bacteria	N	0	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2004	Naturally present in the environment
2. Fecal coliform and <i>E.coli</i>	N	0	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2004	Human and animal fecal waste
3.a. Turbidity for Ground Water	N	.6	NTU	N/A	5	2003	Soil runoff
<b>Radioactive Contaminants</b>							
4. Alpha emitters	N	ND	pCi/l	0	15	2003	Erosion of natural deposits
5. Beta/photon emitters*	N	ND	pCi/L	0	50	2003	Decay of natural and man-made deposits.
*Beta/photon emitters: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta/photon emitters.							
<b>Inorganic Contaminants</b>							
7. Antimony	N	ND	ppb	6	6	2003	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic	N	1700	ppt	0	50*	2003	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
*This Arsenic MCL is effective until January 23, 2006. At that time, the Arsenic MCL will become 10 ppb (ug/l).							
10. Barium	N	70	ppb	2000	2000	2003	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
11. Beryllium	N	ND	ppb	4	4	2003	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	ND	ppb	5	5	2003	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	N	ND	ppb	100	100	2003	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper a. 90% results b. # of sites that exceed the AL	N	a.1240 b.0	ppb	1300	AL=1300	2003	Corrosion of household plumbing systems; erosion of natural deposits
15. Cyanide	N	ND	ppb	200	200	2003	Discharge from steel/metal factories; discharge from plastic and fertilizer factories

16. Fluoride	N	200	ppb	4000	4000	2003	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead a. 90% results b. # of sites that exceed the AL	N	a. ND b.0	ppb	0	AL=15	2003	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	N	ND	ppb	2	2	2003	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	N	860	ppb	10000	10000	2004	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	4800	ppt	50000	50000	2003	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Sodium	N	13	ppm	None set by EPA	None set by EPA	2003	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
23. Sulfate	N	38	ppm	500*	500	2003	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
24. Thallium	N	ND	ppb	1	2	2003	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
25. TDS (Total Dissolved Solids)	N	364	ppm	1000**	1000**	2003	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 consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used.

\*\*If TDS is greater than 1000 ppm the supplier shall demonstrate to the Utah Drinking Water Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source is available.

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.

A major source of concern for a possible cross connection event would be the numerous pipe breaks or new residential connections to the system we have experienced over the last two years. As a result of these experiences we are maintaining a chlorine residual in the water. In addition, in any case of increased turbidity we increase the chlorine residual and takes additional bacteriological tests. This ensures there will be no bacteriological problem in the system.

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).

We at Cedar Highlands Subdivision 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.

Cedar Highlands Subdivision  
PO Box 1921  
Cedar City, UT 84721-1921

Tuesday, May 17, 2005

Brett Shakespear  
CCR Compliance  
Division of Drinking Water  
P.O. Box 144830  
Salt Lake City, Utah 84114-4830

Dear Mr. Shakespear:

Subject: Consumer Confidence Report for Cedar Highlands Subdivision  
#11042

Enclosed is a copy of Cedar Highlands Subdivision's Consumer Confidence Report. It contains the water quality information for our water system for the calendar year 2004 or the most recent sample data.

We have delivered this report to our customers by posting it on the internet and notifying all customers of its availability.

If you have any questions, please contact me at 702-275-2990.

Sincerely,

Bob Havens  
Cedar Highlands Subdivision