

# *Annual Drinking Water Quality Report*

## *The Water We Drink*

### Ashley Valley Water and Sewer Improvement District

We're pleased to present to you this year's Annual 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 Ashley Springs. The spring receives its water from the Dry Fork Creek, which sinks into a lime stone formation and resurfaces in the Ashley Spring.

I'm pleased to report that our drinking water meets federal and state requirements.

If you have any questions about this report or Questions concerning your water utility, please contact David Hatch at 789-9400. 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 board meetings. They are held on the third Tuesday of each month at 12:00 noon at the district office.

Ashley Valley Water and Sewer Improvement District 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>, 2012 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.

**Ashley Valley Water and Sewer Improvement District 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, such as septic tanks, roads, homes, etc. If you have any questions regarding source protection, contact the office to review our source protection plan. Our source is in a remote location, and there are no potential contamination sources in the protection zones, so we consider our source to have a low susceptibility to potential contamination events. We have also developed management strategies to further protect our sources from contamination.**

**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.

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

**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.

**Colony Forming Unit (CFU)** -

**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**- 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>							
Total Coliform Bacteria	No	0	CFU	0	Presence of Coliform bacteria in 5% of monthly samples	2012	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	No	ND	CFU	0	A routine sample and repeat sample are total Coliform positive, and one is also fecal Coliform or <i>E. coli</i> positive	2012	Human and animal fecal waste
Turbidity for Surface Water	No	.28/.02	NTU	N/A	0.3 in at least 95% of the samples and must never exceed 1.0	2012	Soil Runoff (highest single measurement & the Lowest Monthly percentage of samples meeting the turbidity limits)

### RADIOACTIVE CONTAMINANTS

Alpha Emitters	No	1.7	pCi/L	0	15	2012	Erosion of natural deposits
Beta Emitters	No	4.0	pCi/L	0	50	2012	Decay of natural and man-made deposits
Radium 228	No	.42	pCi/L	0	5	2012	Erosion of natural deposits
Combined Radium	No	1.27	pCi/L	0	5	2012	Erosion of natural deposits

### Inorganic Contaminants

Barium	No	110	ppb	2000	2000	2009	Discharge of drilling wastes ;discharge from metal refineries; erosion of natural deposits
Copper a. 90% results b.# of sites that exceed the AL	No	15.9/415	ppb	1300	AL=1300	2012	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives
Lead	No	0 / 3.1	ppb	2000	2000	2012	Corrosion of household plumbing systems, erosion of natural deposits

Sodium	No	1.8	ppm	2000	2000	2009	Erosion of natural deposits
Nitrate (as Nitrogen)	No	300	ppb	10000	10000	2012	Runoff from fertilizer use; leaching for septic tank, sewage: erosion of natural deposits
Sulfate	No	5	ppm	500	500	2009	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
Selenium	No	700	ppt	50000	50000	2009	Erosion of natural deposits

**VOLATILE ORGANIC CONTAMINANTS**

TTHM (Total trihalomethanes)	No	13.2	ppb	0	80	2012	By-product of drinking water chlorination
Haloacetic Acid (HAA5)	No	16.6	ppb	0	60	2012	By-product of drinking water chlorination
Total Organic Carbon	No	1.1	ppm	0	N / A	2012	Naturally occurring plant matter

The following constituents are regulated more closely, Arsenic, Lead, Nitrate, Radon and Cryptosporidium. Notice of any detection is required.

**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. Our system has been granted use waivers for these chemicals. If you would like a list of the specific (Pesticides, Organic Chemicals) that we sampled for, please contact David Hatch at 789-9400.**

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 manmade. 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.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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.

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. Call 789-9400 ask for Ken or Chris. Ashley Valley Water and Sewer operators 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.