



**SALT LAKE CITY VA MEDICAL CENTER**

**2015 Annual Drinking Water Quality Report**



**WATER SYSTEM: *UTAH18173***

## *Annual Drinking Water Quality Report VA Medical Center - SLC 2015*

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 has been determined to be from surface water that we get from a continuous connection with Salt Lake City Water.

The Drinking Water Source Protection Plan for VA Medical Center -SLC is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources have been determined to have a low level of susceptibility from 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.

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.

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 Frank Chaidez at 801-582-1565. 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. Contact our office for meeting dates and locations.

VA Medical Center-SLC 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, 2015. 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.

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

**Cephalometric 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.

**Maximum Contaminant Level (MCL)** - 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)** - 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 outdated.

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	N	1	NIA	0	Presence of coliform bacteria in 5% of monthly samples	2015	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N	0	NIA	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2015	Human and animal fecal waste
Turbidity for Surface Water	N	0.089-7.2	NTU	NIA	0.5 in at least 95% of the samples and must never exceed 5.0	2015	Soil Runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)

<b>Inorganic Contaminants</b>							
Antimony	N	500	ppt	6,000	6000	2015	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	1,400	ppt	0	10,000	2015	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	105	ppb	2,000	2,000	2015	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	N	1	ppb	4	4	2015	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Carbon, Total Organic (TOC)	N	2,030	ppb	NA	TT	2015	Naturally present in the environment
Chromium	N	5	ppb	100	100	2015	Discharge from steel and pulp mills; erosion of natural deposits
Copper a. 90% results b. # of sites that exceed the AL	N	a.5-126 b.O	ppb	1,300	AL=1,300	2015	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide	N	2	ppb	200	200	2015	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	500	ppb	4,000	4,000	2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead a. 90% results b. # of sites that exceed the AL	N	a. 166-15,600 b. 1	ppt	0	AL=1,5000	2015	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N	200	ppt	2,000	2,000	2015	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel	N	10	ppb	10,000	10,000	2015	
Nitrate (as Nitrogen)	N	4,900	ppb	1,000	1,000	2015	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	2,200	ppt	50,000	50,000	2015	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	63,500	ppb	500,000	None set by EPA	2015	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	1-287	ppm	1,000	1,000	2015	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland

TDS (Total Dissolved solids)	N	10-3,640	ppm	2,000	2,000	2015	Erosion of natural deposits
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.							
Thallium	N	400	ppt	1,000	2,000	2015	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Radioactive Contaminants</b>							
Alpha emitters	N	7.1	pCi/l	0	15	2015	Erosion of natural deposits
Combined	N	0.5	pCi/l	0	5	2014	Erosion of natural deposits
Radium 226	N	0.05-0.3	pCi/l	0	5	2014	Erosion of natural deposits
Radium 228	N	0-4.4	pCi/l	0	5	2015	Erosion of natural deposits
<b>Volatile Organic Contaminants</b>							
Benzene	N	0.5	ppb	0	5	2015	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	N	1	ppb	0	5	2015	Discharge from chemical plants and other industrial activities
Chlorobenzene	N	0.5	ppb	100	100	2015	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	N	0.5	ppb	600	600	2015	Discharge from industrial chemical factories
p-Dichlorobenzene	N	0.5	ppb	75	75	2015	Discharge from industrial chemical factories
1,2 - Dichloroethane	N	.05	ppb	0	5	2015	Discharge from industrial chemical factories
1,1 - Dichloroethylene	N	0.5	ppb	7	7	2015	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	N	1	ppb	70	70	2015	Discharge from industrial chemical factories
trans - 1,2 - Dichloroethylene	N	0.5	ppb	100	100	2015	Discharge from industrial chemical factories
Dichloromethane	N	1	ppb	0	5	2015	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	N	0.5	ppb	0	5	2015	Discharge from industrial chemical factories
Ethylbenzene	N	0.5	ppb	700	700	2015	Discharge from petroleum refineries
Styrene	N	0.5	ppb	100	100	2015	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	N	0.5	ppb	0	5	2015	Discharge from factories and dry cleaners.
1,2,4-Trichlorobenzene	N	0.5	ppb	70	70	2015	Discharge from textile-finishing factories
1,1,1 - Trichloroethane	N	0.5	ppb	200	200	2015	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane	N	0.5	ppb	3	5	2015	Discharge from industrial chemical factories

Trichloroethylene	N	0.5	ppb	0	5	2015	Discharge from metal degreasing sites and other factories
Vinyl Chloride	N	0.5	ppb	0	2	2015	Leaching from PVC piping; discharge from plastics factories

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. VA Medical Center-SLC 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. If you are concerned about lead in your 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 <http://www.epa.gov/safewater/lead>.

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. In July 2015 we failed to test for coliform bacteria. Water quality may change without any visible indication due to unanticipated environmental factors. For this reason, we are required to sample for coliform bacteria on a monthly basis. This violation does not necessarily pose a health risk. We have reviewed why we failed to take our routine coliform bacteria tests and have taken steps to ensure that it will not happen again.

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or 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.

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 from their health care providers about drinking water.

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 VA Medical Center-SLC 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.