

SOUTH Salt Lake PUBLIC WORKS 2012 water quality report

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 have been determined to come from groundwater, and it is purchased from Jordan Valley Water Conservancy District and also from three wells.

The Drinking Water Source Protection Plan for South Salt Lake 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 from sources. We have developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.



Water Storage Tips:

Why It's Important To Store Safe Water

When a disaster has been forecasted or does occur, people will be rushing frantically to prepare. What happens when you discover there isn't one bottle of water left at any market or convenience store? You and many others will be in a real panic.

After a natural disaster, people can become subject to waterborne illnesses when their water supply becomes polluted. If unprepared, they can be forced to find and drink water that is unsafe to consume.

How To Store Emergency Water

- If you have safety concerns or questions regarding water you are using either for drinking or storage, follow one of these two options:
- Add 1/8th teaspoon per gallon of household chlorine bleach (nonscented, no additional ingredients).
- Purify water by bringing it to a rolling boil for 1 to 3 minutes (5-7 minutes at high altitudes).
- Store containers away from sunlight, using safe edible grade containers only.
- Water stored in containers can eventually get stale. Rotate and replace with fresh/updated water every year.
- Do not place stored water in direct contact or close proximity to toxic substances, gasoline, paints, household cleaners, etc.

Basic Emergency Water Storage Guidelines:

- One gallon of water per person per day, for drinking and sanitation.
- Children, nursing mothers, and sick people may need more water.
- If you live in a warm weather climate, more water may be necessary.
- Store water tightly in clean plastic containers such as soft drink bottles.
- Keep at least a three-day supply of water per person with a goal of building to a two-week supply or more.

When a major-scale disaster does happen, your personal emergency water storage could save your life. For those that are not prepared with water, it will be pure chaos. Emergency water filters and a good supply of drinking water in storage containers is an absolute necessity.

It is possible to survive weeks without food but only days without water. Your focus on water survival and emergency preparedness should begin with information on how to store water, and how to be prepared with filtered and purified drinking water.

Test Results

South Salt Lake 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, 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.

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	N	ND	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2012	Naturally present in the environment
Fecal coliform and E.coli	N	ND	N/A	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	2012	Human and animal fecal waste
Turbidity for Ground Water	N	0.23	NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0	2011	Soil runoff

Inorganic Contaminants

Arsenic	N	0-4	ppb	0	10	2012	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	ND-203	ppb	2000	2000	2012	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium	N	ND-120	ppt	5	5	2012	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Carbon, Total Organic (TOC)	N	ND-2800	ppb	NA	TT	2012	Naturally present in the environment
Copper a.90% results b.# of sites that exceed the AL	N	a.318-558 b.0	ppt	1300000	AL=1300000	2011	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	300-900	ppb	4000	4000	2012	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.3 b.0	ppt	0	AL=15	2012	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	N	ND-200	ppt	2000	2000	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen)	N	ND-1	ppb	10000	10000	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	800-2100	ppb	50	50	2012	Discharge from petroleum and

Table Definitions

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:

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.

(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.

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.

Significant Physical Deficiency

Quote SIG from IPS	Survey Date	Action Plan
300 East Replacement Well, Screen on the air vac is broken	08/07/2012	Corrected

Chlorine Residual Monitoring

We periodically monitor for a Chlorine Residual in the distribution system to meet all regulatory requirements. In the final (quarter) 2012 we failed to take the required samples. Testing for a Chlorine Residual is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.

Disinfection By-Products Monitoring

We periodically monitor for Disinfection By-Products in the distribution system to meet all regulatory requirements. In 2012 we failed to take the required samples. Testing for a Chlorine Residual is used to ensure that the public is provided with safe drinking water. This violation does not necessarily pose a health risk. We have reviewed why we failed to take the required samples and will take steps to ensure that it will not happen again.



Sodium	N	5400-59000	ppb	None set by EPA	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	6-240	ppm	1000	2012	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved solids)	N	14-616	ppm	2000	2012	Erosion of natural deposits

Disinfection By-products

THM [Total trihalomethanes]	N	1-74	ppb	80	2011	By-product of drinking water disinfection
Haloacetic Acids	N	1-54	ppb	60	2011	By-product of drinking water disinfection
Chlorine	N	250	ppm	4	2011	Water additive used to control microbes

Radioactive Contaminants

Alpha emitters	N	ND-20.2	pCi/l	15	2012	Erosion of natural deposits
Combined	N	ND-3.0	pCi/l	5	2012	Erosion of natural deposits
Radium 226	N	ND-0.70	pCi/l	5	2012	Erosion of natural deposits
Radium 228	N	ND-2.30	pCi/l	5	2012	Erosion of natural deposits
Gross-Beta	N	9-8.0	pCi/l	50	2012	Erosion of natural deposits
Uranium	N	5-12.0	pCi/l	30	2012	Erosion of natural deposits

Unregulated Contaminants

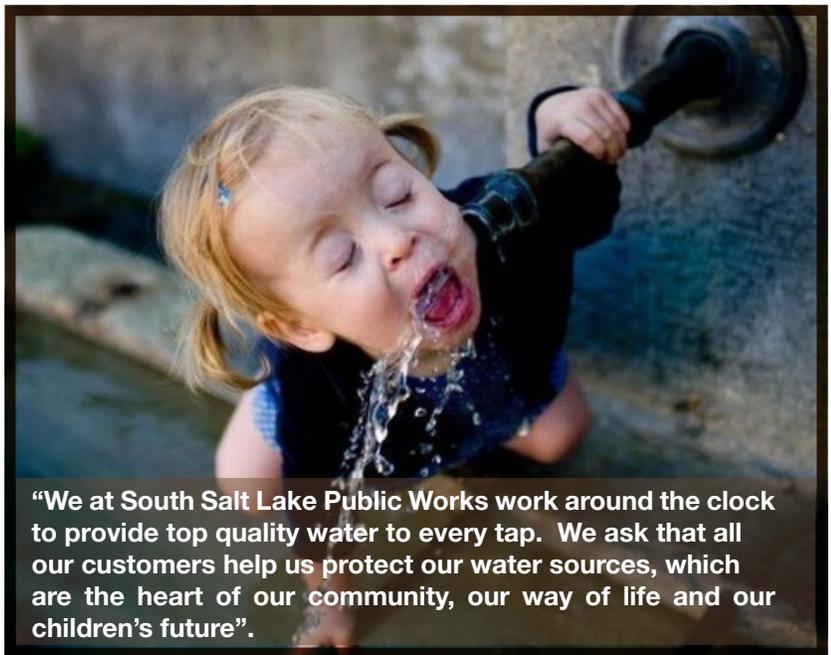
Bromodichloromethane	N	600	ppb	Unregulated	2012	By-product of drinking water disinfection
Chloride	N	9-61	ppm	Unregulated	2012	Erosion of natural deposits
Chloroform	N	2000-3600	ppb	Unregulated	2012	By-product of drinking water disinfection
Manganese	N	ND-5	ppb	Unregulated	2012	Erosion of natural deposits
pH	N	6.74-8.54		Unregulated	2012	Various Sources
Alkalinity Bicarbonate	N	60-194	ppm	Unregulated	2012	Naturally Occurring
Alkalinity CO2	N	45-144	ppm	Unregulated	2012	Naturally occurring.
Alkalinity Total	N	15-159	ppm	Unregulated	2012	Naturally occurring.
Bromide	N	ND-200	ppt	Unregulated	2012	Naturally Occurring
Calcium	N	12-186	ppm	Unregulated	2012	Naturally Occurring
Geosmin	N	ND-5	ppt	Unregulated	2012	Naturally Occurring
Hardness, Total	N	18-259	ppm	Unregulated	2012	Naturally Occurring
Magnesium	N	2700-22300	ppb	Unregulated	2012	Naturally Occurring
Molybdenum	N	800	ppt	Unregulated	2012	Naturally Occurring
Orthophosphates	N	ND-10	ppb	Unregulated	2012	Naturally Occurring
Potassium	N	1200-2800	ppb	Unregulated	2012	Naturally Occurring
Silica	N	11200	ppb	Unregulated	2009	Naturally Occurring

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.

SAFE

Lead

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. South Salt Lake 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 at South Salt Lake Public Works 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”.

Information on the Potential for Health Concerns Relating to Drinking Water

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).

Source Protection

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 we 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.

Improper 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.

Proper connection



Questions

If you have any questions about this report or concerning your water utility, please contact **Melvin Taylor** at **801-412-3201**. 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 2nd and 4th Wednesday of every month at 7:00 PM at 220 East Morris AVE on the second floor in the council chambers

The mission of the Water Division is to promote the public health and welfare by providing safe, clean, drinking water to the residents of the City of South Salt Lake that complies with all City, State, and Federal Regulations.

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