



Annual Drinking Water Quality Report *Spanish Fork City Water Department*

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water sources are 1) Springs: we use four springs to serve our City. They are the Upper Crab Creek Spring, the Lower Crab Creek Spring, Cold Springs, and Malcolm Springs. 2) Wells: there are 2 wells that provide water for the culinary system, the Canyon Elementary Well and Canyon Road Well.

While we have received above normal precipitation during the past year, Spanish Fork City encourages everyone to continue to help conserve water and use water wisely. It is important for each of us to look at our water use habits and make changes if necessary.

Spanish Fork City has a Drinking Water Source Protection Zone Delineation Report that is available for review to our customers at our office. It provides more information such as potential sources of contamination, our source protection areas, and management strategies to protect our drinking water. Potential contamination sources common in our protection areas are septic tanks, roads, industrial areas, and agricultural areas. Our wells and springs have a low susceptibility to potential contamination.

This report is a requirement of the USEPA for all community culinary water systems. 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 call (801) 804-4550. 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 City Council meetings. They are held on the first and third Tuesday of each month at 6:00 pm at the City Office Building, 40 South Main Street, Spanish Fork, Utah.

Spanish Fork City routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The table on page two shows the results of our monitoring for the period of January 1 to December 31, 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:

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) - 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) - measure of the clarity of water. Turbidity in excess of 5 NTU is 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							
The data presented in this report is from the most recent testing done in accordance with the regulations, not all sample results are from 2010.							
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
MICROBIOLOGICAL CONTAMINANTS							
1. Turbidity for Ground Water	N	.03 – 3.5	NTU	NA	5	May 2010	Soil Runoff
RADIOACTIVE CONTAMINANTS							
2. Alpha Emitters	N	1.0 - 4.6	pCi/l	0	15	April 2010	Erosion of natural deposits
3. Beta Emitters*	N	1.1- 4.0	pCi/l	0	50	April 2010	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 particle.							
INORGANIC CONTAMINANTS							
4. Asbestos	N	ND	MFL	7	7	Sept 2010	Decay of asbestos cement water mains; erosion of natural deposits
5. Barium	N	21- 131	ppb	2000	2000	April 2007	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
6. Fluoride	N	200-400	ppb	4000	4000	April 2007	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
7. Mercury	N	300	ppt	2000	2000	April 2007	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
8. Nitrate (as Nitrogen)	N	300 - 500	ppb	10000	10000	April 2007	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
9. Sodium	N	4 - 49	ppm	No MCLor MCLG has been established by EPA		April 2007	Erosion of natural deposits; discharge from refineries and factories; runoff

							from landfills.
10. Sulfate	N	16 - 178	ppm	500*	500	April 2007	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
11. TDS (Total Dissolved Solids)	N	216 - 544	ppm	1000**	1000**	April 2007	Erosion of natural deposits
12. Antimony	N	1-4	ppb	6	6	April 2007	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
13. Selenium	N	2-4	ppb	50	50	April 2007	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
<p>*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.</p> <p>**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.</p>							

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 and organic chemicals that we sampled for, please call (801) 804-4453.

Microbiological Contaminants

Total Coliform: Coliforms are bacteria that are naturally present in the environment. They are used as an indicator that other, potentially-harmful, bacteria may be present.

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

Nitrate in drinking water at levels above 10,000 ppb is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Cryptosporidium

We are required to test our sources of drinking water, as well as our treated tap water, for the presence of Cryptosporidium. Cryptosporidium is a microbial parasite which is found in surface water throughout the United States. When ingested Cryptosporidium can cause gastrointestinal distress for otherwise healthy people and more serious illness or death for people with weak immune systems. We did not find any Cryptosporidium in our source (untreated) water or finished (treated) water. Therefore, we don't believe that you need to worry about these results.

Nitrates

As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

The City of Spanish Fork had one violation in 2010. We had neglected to test for Nitrates for one of our pump stations. As soon as we realized our mistake we took corrective action to correct our oversight. We have put an annual calendar together that tells us when our samples are to be taken to ensure that this will not happen again. 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.

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 at (801) 804-4500, if you have questions. We at Spanish Fork 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.

If you received this report and are not connected to Spanish Fork City water, you can disregard this report.