



Washington City

Public Works

Annual Drinking Water Report 2007

Washington City Public Works Department
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Washington City, Utah 84780
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washingtoncity.org/pubworks

Annual Drinking
Water Quality Report
-2007-

Washington City Treatment Plant
4250 East Telegraph
Washington, UT 84780

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 is both ground water and surface water. Our ground water comes from 8 wells and our surface water comes from the Quail Creek reservoir which is treated through the Quail Creek Water Treatment Plant.

SOURCE PROTECTION PLAN

The Drinking Water Source Protection Plan for Washington City Treatment Plant 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 Potential contamination sources common in our protection areas are septic tanks, roads and residential areas. Our source(s) 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.

CROSS CONNECTION CONTROL

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.

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

QUESTIONS

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 Michael Shaw at 435- 656-6317.

PLEASE ATTEND

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 They are held on 2nd and 4th Wednesday of each month at 5:30pm in the city council chambers. Please call the office for additional information.

Washington City Treatment Plant 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, 2007. 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.

CONSTITUENT 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:

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) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking 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.

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-dated.

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	VIOL. Y/N	LEVEL DETECTED	UNIT MEAS.	MCLG	MCL	DATE SAMPLED	LIKELY SOURCE OF CONTAMINATION
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform Bacteria	N	ND	N/A	0	*See Below	2007	Naturally present in the environment
*Presence of coliform bacteria in 5% of monthly samples							
Fecal coliform and E.coli	N	ND	N/A	0	**See Below	2007	Human and animal fecal waste
**If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive							
Turbidity for Ground Water	N	0	NTU	N/A	5	2007	Soil Runoff
Turbidity for Surface Water	N	0-1	NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0	2007	Soil Runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)
RADIOLOGICAL CONTAMINANTS							
Alpha emitters	N	ND-6	pCi/l	0	15	2007	Erosion of natural deposits
Radium-228	N	0-1	pCi/l	0	5	2007	Erosion of natural deposits
INORGANIC CONTAMINANTS							
Antimony	N	ND-500	ppb	6	6	2007	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	ND	ppb	0	10	2007	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	87-90	ppb	2000	2000	2007	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Carbon, Total Organic (TOC)	N	1-4	ppm	NA	TT	2007	Naturally present in the environment
Chromium	N	2-4	ppb	100	100	2007	Discharge from steel and pulp mills; erosion of natural deposits
Copper- 90% results	N	ND-98	ppb	1300	AL=1300	2007	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	200	ppb	4000	4000	2007	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Lead- 90% results	N	ND-4	ppb	0	AL=15	2007	Corrosion of household plumbing systems, erosion of natural deposits
Nickel	N	5-9	ppb	100	100	2007	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate (as Nitrogen)	N	300	ppb	10000	10000	2006	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	700-3000	ppb	50,000	50,000	2007	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	10-54	ppm	20	None set by EPA	2007	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	30-260	ppm	1000	1000	2007	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
Total Dissolved Solids (TDS)	N	227-675	ppm	2000	2000	2007	Erosion of natural deposits
DISINFECTION BY-PRODUCTS							
Haloacetic Acids (HAA5)	N	7-8	ppb	0	60	2007	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	N	ND-27	ppb	0	80	2007	By-product of drinking water disinfection

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.

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. 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 Washington City Treatment Plant 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.

Washington City Treatment Plant
4250 East Telegraph
Washington City, Utah 84780

July 31, 2008

Brett Shakespear
CCR Compliance
Division of Drinking Water
P.O. Box 144830
Salt Lake City, Utah 84114-4830
Phone: 801-536-4198
Fax: 801-536-4211

Dear Mr. Shakespear:

Subject: Consumer Confidence Report for Washington City Treatment Plant Water System
Name system No.27021

Enclosed is a copy of Washington City Treatment Plant's Consumer Confidence Report. It contains the water quality information for our water system for the calendar year 2007 or the most recent sample data.

We have delivered this report to our customers by:

- Posting the CCR on our Internet at this web address: www.washingtoncity.org
- We let the water customers know that the CCR is available for review upon request at the City Hall office through the utility billing.
- The CCR is made available at the City Hall office.

If you have any questions, please contact me at 435-656-6317.

Sincerely,

Michael Shaw
Director of Public Works
Washington City