

2011 Consumer Confidence/Water Quality Report

Clearfield City is proud to present its Water Quality Report for 2011. This report is mandated by Federal Regulations and contains important information regarding the quality of your drinking water. As part of the 1996 Safe Drinking Water Act passed by Congress, Clearfield City will provide an annual water quality report. This Water Quality Report is intended to inform you of the quality of the water in Clearfield City and how we might protect our drinking water resources.

The majority of the drinking water that the City purchases from Weber Basin Conservancy District begins as surface water from the headwaters of the Weber River. Water is directed into a large canal by a diversion dam. The water then flows through this canal whereupon it enters two large aqueducts. Several creeks along the Wasatch Front can also feed into this aqueduct system. From there, water is transported to the District's water treatment plant. After complete treatment, water is delivered to the City for distribution to businesses and individual users. On average, 75 percent of the water in our system comes from Weber Basin Conservancy District. The Water Quality Report for Weber Basin Conservancy District can be viewed at www.weberbasin.com. The remaining water comes from four City-owned underground wells. The underground wells provide a clean, safe drinking water source that does not require expensive treatment or distribution costs. The City owns and maintains 5 water storage tanks with a total combined capacity of 10 million gallons. Clearfield City is committed to providing an adequate supply of high quality, safe drinking water to the community.

You Can Help Prevent Water Pollution

Rain and snow melt filter through the ground to fill underground aquifers (natural underground water storage formations made of silts, sands, gravels, and cobbles.) Much of the water we drink is pumped from deep wells that tap into these aquifers. Paint, used motor oil, gasoline, or lawn and garden chemicals that you dispose of in the gutter or backyard also filter down through the ground – and pollute these aquifers. One gallon of gas can pollute 600,000 gallons of water, making it unsuitable for drinking. The water that enters into the ground and the storm water collection system eventually ends up in the drinking water system. Please don't spoil the water supply for yourself and everyone else! Dispose of paint, motor oil, and other chemicals in a proper and safe manner. You should only store the amount of chemicals, such as fertilizers, that you absolutely need. Storing a larger amount of chemical than needed increases the potential of a spill which could contaminate of the water supply. All chemicals should be stored in a dry area; preferably in an area that can contain any spills, and not allow the chemicals to come into contact with the storm water collection system or the ground. All chemical spills should be soaked up with an absorbent material and disposed of properly. You can call the Division of Environmental Health at (801) 536-4200 or the Davis County Health Department at (801) 525-5100 for the nearest location for hazardous waste disposal.

Anything you put into the gutter in front of your house will end up in the streams and lakes. The storm water collection system does not go to a treatment plant. Even things as common as grass clippings can cause a major problem when it comes to the pollution of our water. Always sweep up grass clippings and debris after mowing your yard. Washing cars in the driveway of your home also creates a potential for pollution of water.

The soaps, oils, or fuel that is rinsed off of your car onto an impervious surface such as concrete will eventually end up in the storm drain system. The best idea is to take your car to a commercial car wash which discharges into the sanitary sewer system. Only rain should go in the drain! If you notice something in the gutter or going into the storm drain that you think shouldn't be there, contact the Storm Water Manager at 801-525-4404 to report it.

A source water protection plan has been written for all groundwater sources in Clearfield City. Our Drinking Water Source Protection Plan is available for review to our customers at our shops office at 497 S Main. The source protection program has been developed to determine the protection zones for water sources and what safeguards must be made to protect the water from contaminants. It provides more information such as potential sources of contamination and our source protection areas. Weber Basin Water also has a written ground water source protection plan that is available for a nominal fee.

Potential for Contamination of the Water System by the Public

Large amounts of time and resources are used each year to protect the City's drinking water sources, distribution system, and storage facilities. However, even with the best infrastructure and practices, the quality of the water can be compromised by a single cross connection. A resulting backflow incident could cause poor water quality, taste and odor problems, and in extreme cases, illness or death.

A cross connection is any connection between the drinking water system and any other water source or substance. A cross connection makes it possible for untreated water, industrial fluid, gas or other substance to enter your drinking water through backflow. Backflow is any reversal of flow of water that could allow water or other substances that are not suitable for drinking into the drinking water system.

Cross connections can happen in any home, building or water system. Frequently, people are unaware of the inherent dangers of cross connections when they install plumbing. A cross connection can be as simple as a garden hose left sitting in a puddle that contains fertilizer or other yard chemicals. When connecting anything to the water system, you should be aware of any potential hazards that could be created and protect our drinking water by using an approved backflow preventer.

Examples of cross connections are a connection between drinking water pipes and secondary irrigation lines, improper installation of a water softener, and unprotected lawn irrigation/sprinkler systems. Every garden hose is a potential cross connection, and anything you attach to your garden hose could end up in the next glass of water you drink.

To prevent these occurrences, Clearfield City requires that all potential cross connections be protected with some type of approved backflow preventer. Protecting the quality of the water that we drink is a responsibility shared by the City and the people who use the water. If you are unsure what type of backflow preventer is appropriate for what you are doing, call the Public Works Department at 801-525-4418 and a certified backflow technician can assist you with the information you need. For more information about cross connections and backflow, contact the Division of Drinking Water at 801-536-4200 or visit <http://www.drinkingwater.utah.gov> you can also visit www.abpa.org .

Water Conservation

Water is a precious resource, and Clearfield City encourages our residents and business owners to conserve water. Landscaping with plants that are indigenous to the area is one way to cut back on water needs. Irrigation should always take place when there is the least chance for evaporation loss. Usually this means watering your yard at night when the sun is down and temperatures are cooler. For more information about water conservation visit the conservation link on Weber Basin's web page www.weberbasin.com.

YOUR DRINKING WATER

Tap water in the United States is among the safest and most closely monitored in the world. In fact, our water is over 10 times cleaner than it was in the 1970's. We are continually taking steps to ensure that we have a safe drinking water supply.

The Weber Basin Conservancy District has stated that at certain times of the year there may be odors and tastes in the water that result from mountain reservoirs and lakes "turning over." The water near the surface of the lakes gets cooler than the water near the bottom and they both mix, which produces a fishy or musty smell. Although the odors and tastes are unpleasant, the water is safe to drink. For more information, contact the District Offices at (801) 771-1677.

Clearfield City routinely monitors for contaminants and pollutants in our drinking water in accordance with Federal and State laws. The test results within this newsletter show the findings of our monitoring for the period of January 1 to December 31, 2011.

Violation Notice:

Clearfield City's test results show no violations in 2011, however we did receive a violation notice from the Division of Drinking Water because our above ground tank in the Freeport Center has a crack that shows signs of leaking. We are currently researching the best way to deal with this problem so that it can be taken care as quickly as possible and in the most efficient and cost-effective way.

Contaminants that may be present in source water include:

- Microbial contaminants (viruses and bacteria)
- Inorganic contaminants (salts and metals)
- Pesticides and herbicides
- Organic chemical contaminants
- Radioactive contaminants

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Sample Data

CLEARFIELD CITY SAMPLE DATA- RESULTS

Contaminant	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation
Disinfectants and By-Products						
Holoacetic Acids (HAA5)	23.1	0 to 23.1	none	60	ppb	N
Total Trihalomethanes (TThm)	33.6	0 to 33.6	None	80	ppb	N
Radiologic Contaminants						
Gross Alpha Excel. Radon & Uranium	2.3	2.3 to 2.3	0	15	pCi/L	N
Beta/photon emitters	2.3	2.3 to 2.3	0	4	Mrem/yr	N
Inorganic Contaminants						
Arsenic	.7	.7 to .7	0	10	ppb	N
Barium	.242	.242 to .242	2	2	ppm	N
Nitrate [measured as nitrogen]	1	.5 to 1	10	10	ppm	N
Selenium	.8	.8 to .8	50	50	ppb	N
Lead and Copper						
	MCLG	AL	90th percentile	#Sites Over AL	Units	Violation
Copper	1.3	1.3	.452	0	ppm	N
Lead	0	15	9.6	2	ppb	N
Lead	0	15	9.6	2	ppm	N
Contaminant	Likely source of Contamination					
copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.					
Lead	Corrosion of household plumbing systems; Erosion of natural deposits					
HAA5	By-product of chlorination					
TThm	By-product of chlorination					
Arsenic	Run off from orchards; Runoff from glass or electronics production wastes; erosion of natural deposits					
Barium	Discharge of drilling wastes, or metal refineries; erosion of natural deposits					
Nitrate	Runoff from fertilizers or leaching from septic systems; Erosion of natural deposits					
Selenium	Discharge form petroleum and metal refineries and mines; erosion of natural deposits					
Beta/photon emitters	Decay of natural and man-made deposits					
Gross Alpha emitters	Decay of natural deposits					

DEFINITIONS:

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 (nanogram/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.

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 NTS 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.

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.

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 WATER POSES A HEALTH RISK. MORE INFORMATION CAN BE OBTAINED BY CALLING THE ENVIRONMENTAL PROTECTION AGENCY'S SAFE DRINKING WATER HOTLINE (1-800-426-4791)

Clearfield City Council will hold its regular City Council meetings for the 2012 calendar year on the second and fourth Tuesday of each month. The regular meetings begin at 7:00 pm and are held in the Clearfield City Council Chambers located at 55 South State, 3rd Floor, Clearfield, Utah. For more information on City Council meetings visit www.clearfieldcity.org

For a copy of the Clearfield City Water Quality Report Contact the Public Works Staff or visit Clearfield City's web page www.clearfieldcity.org

Public Works Director Scott Hodge 801-525-4430
shodge@clearfieldcity.org

Operations Manager Kim Dabb 801-525-4401
kdabb@clearfieldcity.org

Water Superintendent Mark Baird 801-525-4418
mbaird@clearfieldcity.org

Storm Water Manager Dan Schuler 801-525-4404
dschuler@clearfieldcity.org

Streets Superintendent Brad Wheeler 801-525-4405
bwheeler@clearfieldcity.org

**Clearfield City Public Works
c/o 55 South State
Clearfield, Utah 84015**

Atención! Muy Importante!

Este reporte de Calidad del Agua potable contiene valiosa informacion sobre la calidad del agua que usted consume. Por favor, que alguien de su confianza se lo traduzca.