City of Goodyear Water Quality Report 2012

The City of Goodyear is proud to present its annual water quality report. This edition covers all testing completed in 2012. Please see the chart on the next page which shows all test results.

The City of Goodyear is dedicated to providing quality drinking water that meets or exceeds all regulatory requirements for our customers south of Interstate 10. The City of Goodyear vigilantly safeguards its water supplies and once again is proud to report that our compliance with all state and federal drinking water regulations continues to remain exemplary.

We are continually striving to adopt innovative improvement methods for delivering the best quality drinking water to your tap in the most cost-effective manner. As new challenges arise, we will remain vigilant in providing quality drinking water at an affordable price, protecting source water, conserving treated water, and educating the community, while continuing to serve the needs of all the water customers of the City of Goodyear.

PWS #07-094

Continuing our commitment to water quality

For more information about water quality in Goodyear, please call Linda Shapcott, Environmental Compliance Supervisor at 623-882-7565 or City of Goodyear Environmental Services at 623-932-3010

Para español: 623-882-7511

P.O. Box 5100
Goodyear, AZ 85338

Goodyear residents north of I-10 receive water services and a Water Quality Report from Liberty Utilities.

2012 Water Quality Data

regulated substance	year sampled	units	MCL	MCLG	City of Goodyear PWS #07-094 detected	low	high	Liberty Utilities PWS #07-046 year sampled	detected	low	high	violation	major sources in drinking water
Disinfectants and Disinfectant By-Products													
Chlorine (as Cl2)	2012	ppm	mrdl=4	mrdlg=4	0.37	0.04	1.38	2012	0.53	0.47	0.60	no	Water additive used to control microbes
Haloacetic Acid (HAA5)	2012	ppb	60	n/a	2.6	n/d	5.3	2012	2.4	n/d	6.0	no	By-product of drinking water chlorination
Trihalomethane (total)	2012	ppb	80	n/a	17.5	3.3	42	2012	16.9	2.7	44.1	no	By-product of drinking water chlorination
Inorganics													
Arsenic	2012	ppb	10	0	6.4	n/d	8.6	2012	7.8	2.6	9.3	no	Erosion of natural deposits; runoffs from orchards; runoffs from glass and electronics production wastes
Nitrate	2012	ppm	10	10	8.6	2.6	8.6	2012	9.91	3.8	9.91	no	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	2010	ppm	2	2	0.14	0.026	0.14	2010	0.7	0.05	0.7	no	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium (optional)	2010	ppm	n/a	n/a	170	67	170	2010	202	0.95	202	no	Erosion of natural deposits; leaching
Fluoride*	2012	ppm	4	4	0.88	<0.40	0.88	2010	1.07	0.37	1.07	no	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories
Selenium	2010	ppm	50	50	n/d	n/d	n/d	2010	36	2.1	36	no	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Chromium	2010	ppm	100	100	14	4.3	14	2010	11	5	11	no	Discharge from steel and pulp mills; erosion of natural deposits
Microbiological													
Total Coliforms	2012	% positive samples	5% positive monthly samples	0	0	n/a	n/a	2012	0	n/a	n/a	no	Naturally present in the environment
Volatile Organics													
Trichloroethylene	2012	ppb	5	0	1.5	0.83	1.5	n/a	n/a	n/a	n/a	no	Discharge from metal degreasing sites and other factories
Xylenes	2010	ppm	10	10	0.0052	n/d	0.0052	n/a	n/a	n/a	n/a	no	Discharge from petroleum refineries; discharge from chemical factories
Ethylbenzene	2010	ppb	700	700	0.84	n/d	0.84	n/a	n/a	n/a	n/a	no	Discharge from petroleum refineries
Radionuclides													
Gross Alpha	2012	pCi/l	15	0	1.6+/-0.7	0.7+/-0.4	1.6+/-0.7	2012	7.3	3.3	7.3	no	Erosion of natural deposits
Radium 226	2012	pCi/l						2012	0.3	n/d	0.3	no	Erosion of natural deposits

Lead and Copper - City of Goodyear

substance	year sampled	units	action level	MCLG	amount detected 90th percentile	homes above action level	violation	typical source
Copper	2010	ppm	1.3	1.3	0.21	0	no	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
Lead	2010	ppb	15	0	<1	0	no	Corrosion of household plumbing; erosion of natural deposits

Lead and Copper - Liberty Utilities

substance	year sampled	units	action level	MCLG	amount detected 90th percentile	homes above action level	violation	typical source
Copper	2010	ppm	1.3	1.3	0.3	0	no	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
Lead	2010	ppb	15	0	4	0	no	Corrosion of household plumbing; erosion of natural deposits

Action Level:
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level):
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.

MCLG (Maximum Contaminant Level Goal):
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.

MRDL (Maximum Residual Disinfectant Level):
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.

MRDLG (Maximum Residual Disinfectant Level Goal):
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 contamination.

n/a: not applicable

n/d: not detected

pCi/l (picocuries per liter)

ppb (parts per billion):
One part substance per billion parts water (or micrograms per liter).

ppm (parts per million):
One part substance per million parts water (or milligrams per liter).

***** Goodyear does not fluoridate the drinking water; it is naturally occuring in the groundwater.

Important Facts About Drinking Water

The Source of Your Water

The City of Goodyear's drinking water source is 100% groundwater. The City has production wells, storage facilities, and pressure booster stations. The underground aquifer from which the City receives its water is called the West Salt Valley Sub-Basin. The City of Goodyear also purchases water from Liberty Utilities, which draws from the same West Salt Valley Sub-Basin aquifer.

The aquifer's depth ranges from 100 to 1,000 feet from the surface. With 10 well sites (four of which include storage tanks) and five booster stations, Goodyear's operating system has a storage capacity of 11.1 million gallons.

Health Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems.

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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as cancer patients 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.

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. City of Goodyear is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components used in each residence. 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 two 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 at 800-426-4791 or www.epa.gov/safewater/lead.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate in drinking water at levels above 10 ppm 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.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants, call EPA Safe Water Drinking Hotline at 800-426-4791.

Fluoride in Drinking Water

The Environmental Protection Agency (EPA) requires that the information below be included in the Water Quality Report because a new well source has a fluoride concentration of 2.2 mg/l.

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine years of age should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this potential cosmetic dental problem.

For more information about fluoride in water, please call Linda Shapcott, Environmental Compliance Supervisor at 623-882-7565. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, call NSF International at 1-877-8-NSF-HELP.

ARIZONA Goodyear