

**Chaparral City**  
Water Company

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Fountain Hills, AZ 85269-7870

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# YOUR 2011 WATER QUALITY REPORT



**Chaparral City**  
Water Company

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## Safety. Quality. Community. You'll hear these words spoken often around EPCOR.

As the owner of Chaparral City Water Company (CCWC), we want our employees to return home to their families each night, safe and sound. We're also committed to providing our communities with water that's both high quality and safe. That's why you're receiving this report.

Every year we'll send you a document like this one that details the results obtained from testing your water in state-certified drinking water analysis labs. And we'll tell you what that analysis means.

As a local employer, community member and your neighborhood utility provider, taking care of you and your still water supply is serious business.

We know that EPCOR's a new neighbor for you. Since acquiring Chaparral City Water Company on June 1, 2011, we've been enjoying getting to know you. In turn, I'd like to share a little bit about us.

For EPCOR, being a water and wastewater utility is more than providing a service. Your community is home to us too. You live here, our employees live here. The quality of life—and the quality of the water—is important to us at a personal level.

If you have any questions about this report, our customer care team is here to help: 1-877-669-3434. You can also learn more about being water wise at [epcor.com](http://epcor.com).

Thank you for caring about your water.



**Joe Gysel**  
President, EPCOR Water USA

## You want to know what's in the water you're drinking

And as your water service provider, we're committed to ensuring the quality and safety of that water. That's why each year you'll receive an annual water quality report from us. We hope it will help you understand your community's water a little better, what we're doing to protect it, and how you can help, too.

## What will I find in this report?

This report complies with state and U.S. Environmental Protection Agency (EPA) regulations.

In it you'll find information on:

- Where your water comes from
- Protecting your water
- What's in your water

The information in this report is compiled from data from state labs certified in drinking water analysis.

## Read this report – and share it!

Your first step in understanding your community's water is to read this report. But it's also important to share your learnings with others – especially those who do not receive a Chaparral water bill and may not receive this report directly.

If you're one of the following groups, please share the report with water users at your location: **Landlords, Businesses, Schools, Hospitals and other groups.**

## Questions?

**Chaparral Customer Care Center:**  
1-877-669-3434

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. 1-877-669-3434



# ABOUT YOUR WATER

## CHAPARRAL DISTRICT

### About your district

- Chaparral City Water Company (CCWC) provides water service to approximately 13,000 customers in the Town of Fountain Hills and portions of the City of Scottsdale.

### Where your water comes from

- CCWC obtains its water supply from Colorado River water delivered by the Central Arizona Project (CAP).
- One operating well, with groundwater coming from lower, middle and upper alluvial aquifers below the city of Fountain Hills.

### About your CAP water

The source of your surface water is Lake Pleasant and the Colorado River.

### Groundwater wells – and protecting them together

#### How we protect your groundwater

We protect the sources by ensuring proper well construction and system operations and management.

#### How you can help

Take hazardous household chemicals to hazardous material collection days and limit your pesticide and fertilizer use.

For information on household hazardous material collection days in your area: Arizona Department of Environmental Quality at 602-771-4459.

#### June 2011 water tests showed coliform bacteria exceeded maximum contaminant level; re-testing showed normal levels.

The United States Environmental Protection Agency (EPA) requires public notification when maximum contaminant levels are exceeded in drinking water. In 2011, customers were notified of the following test results and actions.

#### What happened?

On June 8, 2011, four water samples taken by Chaparral City Water Company showed higher than normal levels of total coliform bacteria. Immediate and subsequent re-testing showed normal levels.

#### What does this mean?

Total coliform bacteria were found in more water samples than allowed by the EPA. Maximum contaminant levels (MCL) state that no more than 5 percent of samples can test positive for total coliform in a given month. In June, 7.7 percent of samples (4 out of 52) tested positive for coliform. We took immediate action and determined there was no health risk.

#### What is total coliform?

Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

#### What actions did we take?

We immediately took additional water samples at the original sample site, upstream and downstream from the area. All samples were negative for any bacteria. Operating data was reviewed for the week prior and no issues had occurred at the water treatment plant. There were no pipe breaks or disruptions to the distribution system that may have caused the problem. We also double-checked our chlorine feed and reviewed our sampling and laboratory testing procedures. As no changes had been made to our operations in the past year, this was likely an isolated incident resulting from a sampling error.

#### How we are keeping your drinking water safe.

Chaparral City Water Company routinely monitors your drinking water to ensure it is safe. While we are mandated to collect 25 samples, we take 40 samples each month from the water system and test them in a state certified laboratory. In addition, chlorine is used in the water treatment process to kill bacteria, such as coliform. We also work closely with the Maricopa County Department of Environmental Quality.

For more information, please contact Chaparral City Water Company at 1-877-669-3434.

### Notice of source water assessment

Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water source(s) of the public water system, the Arizona Department of Water Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designated high risk indicates there may be additional source water protection measures that can be implemented at the local level. This does not imply that the source water is contaminated, nor does it mean that contamination is imminent. Rather, it simply states that land-use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

# WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

## Sources of drinking water



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 can acquire naturally occurring minerals. In some cases it can also acquire radioactive material and substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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 EPA's **Safe Drinking Water Hotline** at 1-800-426-4791.

## Ensuring your water is safe

To ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems.

To ensure bottled water is safe to drink, U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water.

## Substances that may be present in source water

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife.

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and Herbicides**, which may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

**Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

# WHAT YOU CAN EXPECT TO FIND IN YOUR WATER

## Special health information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/



CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **Safe Drinking Water Hotline** at **1-800-426-4791**.

## 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. CCWC is responsible for providing high quality drinking water, but cannot control the variety of material used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by running 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 minimized exposure is available from the **Safe Drinking Water Hotline** or at <http://www.epa.gov.safewater/lead>

## Questions?

U.S. EPA Safe Drinking Water Hotline:  
**1-800-426-4791**



# YOUR ROLE IN PROTECTING YOUR COMMUNITY'S WATER

## Backflow prevention

Under state law, you are responsible for testing and maintaining your backflow device in working order. EPCOR Water has a backflow prevention program that ensures proper installation and maintenance of thousands of backflow prevention devices throughout our system.

### What's a backflow device and what does it do?



Your backflow device is an essential tool in protecting the water supply from possible contamination.

Backflow prevention devices range from vacuum breakers on household hose bibs to

large commercial reduced-pressure principal devices found throughout our system.

These devices ensure hazards originating on customers' property and from temporary connections do not impair or alter the water in our water distribution system. Return of any water to our water distribution system after the water has been used for any purpose on the customer's premises or within the customer's piping system is unacceptable.

## Home water treatment units

Failure to perform maintenance on your home water treatment unit can result in poor water quality.

If you installed a home treatment system such as a water softener or reverse osmosis system to improve taste or odor, remember to follow the manufacturer's instructions on operation and maintenance. For more information,

contact the manufacturer of your treatment system for maintenance instructions or assistance.

## Tips for everyday pollution prevention

- **Use fertilizers and pesticides** sparingly and as directed by the manufacturer.
- **Pick up after your pet** and do not dispose of any waste in washes, canals or riverbeds.
- **Only wash your car on a lawn** or other unpaved surface, or use a commercial car wash.
- **Always use a nozzle** when using your garden hose around the home. Do not let the water free flow.
- **Maintain vehicles, machinery and equipment** to be free of leaks.
- **Sweep up dirt and debris**, rather than using a hose.
- **Minimize your purchase and use** of hazardous products. Dispose of unused quantities properly.



# DEFINITION OF TERMS

**gpg (grains per gallon):** Used to describe the dissolved hardness minerals contained in water and is a unit of weight that equals 1/7,000 of a pound.

**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 contaminants.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

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

**N/A:** Not Applicable.

**ND:** None Detected.

**NTU:** Nephelometric turbidity units.

**pCi/L (Picocuries per Liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

**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).

**ppt (Parts per Trillion):** One part substance per trillion parts water (or nanograms per liter).

**UCMR (Unregulated Contaminant Monitoring Rule):** Unregulated substances are measured, but maximum contaminant levels have not been established by the government.

**TTHM (Total Trihalomethanes):** Consist of Chloroform, Bromoform, Bromodichloromethane and Dibromochloromethane.

**HAA5 (Haloacetic Acids):** Consist of Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Bromoacetic Acid and Dibromoacetic Acid.

**SMCL (Secondary Maximum Contaminant Level):** Non-enforceable guidelines regulating contaminants that may cause cosmetic effects or aesthetic effects in drinking water.

**Total Dissolved Solids:** An overall indicator of the amount of minerals in water.

**MNR:** Monitored, not regulated.

# WHAT'S IN YOUR WATER

## How to read your water quality table

Below, you'll see an analysis of your drinking water. Here's how to read this table:

Start here and read across.	2011 or year prior.	The goal level for that substance (may be lower than allowed).	Highest level of substance allowed.	Highest amount that was found.	Highest and lowest amounts found.	"Yes" means the amount found is below gov't requirements.	Where substance usually originates.
Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources

## Your water quality table

Over the years, CCWC has taken thousands of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants in your drinking water. The following table shows only those contaminants that were detected in the water.

Aside from the June 2011 sampling (see page 4), all the substances listed here are under the Maximum Contaminant Level (MCL). We feel it is important to know exactly what was detected and how much of these substances were present in the water. Compliance (unless otherwise indicated) is based on the average level of concentration being below the MCL. The state allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though representative, is more than a year old.

### Regulated Substances Measured on the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Arsenic (ppb)	2011	0	10	9.2	2.2-9.2 <sup>1</sup>	yes	Erosion of natural deposits.
Barium (ppb)	2011	2000	2000	130	130	yes	Discharges of oil drilling wastes; erosion of natural deposits
Fluoride (ppm)	2011	4.0	4.0	1.6	1.6	yes	Erosion of natural deposits
Nitrate (as N) (ppm)	2011	10	10	1.6	0.20- 1.6	yes	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha Activity (pCi/L)	2011	N/A	15	4.2	2-4.2	yes	Erosion of natural deposits
Selenium (ppb)	2010	2	50	3	ND-3	yes	Petroleum and metal refineries, Natural erosion

# WHAT'S IN YOUR WATER

## Turbidity: A Measure of the Clarity of the Water at the Treatment Facility

Plant	Most Recent Sampling Year	MCLG	TT	Highest Single Measurement	Compliance Achieved	Typical Source
Highest single turbidity measurement (NTU)	2011	N/A	≤1	0.19	yes	Soil run-off
Lowest monthly percentage samples meeting 0.3 NTU (%)			≥ 95	100%	yes	

## Regulated Substances Measured in the Distribution System

Substance (units)	Most Recent Sampling Year	MRDLG/ MCLG	MRDL/ MCL	Range of Detection	Annual Average	Compliance Achieved	Typical Source of Constituent
TTHMs (ppb)	2011	N/A <sup>2</sup>	80	30-100	68	yes	Byproduct of drinking water chlorination
HAA <sub>5</sub> (ppb)	2011	N/A <sup>2</sup>	60	4.9-34	20	yes	Byproduct of drinking water disinfection
Chlorine [as Cl <sup>2</sup> ] (ppm)	2011	4.0	4.0	0.02-2.62	0.95	yes	Drinking water disinfectant added for treatment
Substance (units)	Most Recent Sampling Year	MCLG	MCL	Range of Detection	Highest Amount Detected	Compliance Achieved	Typical Source of Constituent
Total Coliform Bacteria (Present/Absent)	2011	0	≤ 2	0-4	4	no <sup>3</sup>	Naturally present in the environment

# WHAT'S IN YOUR WATER

## Tap Water Samples: Copper and Lead Results

Substance (units)	Most Recent Sampling Year	MCLG	Action Level	# of Samples	90th Percentile	# of Samples Above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2009	1.3	1.3	30	0.22	0	yes	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2009	0	15	30	2.8	0	yes	Corrosion of household plumbing systems; erosion of natural deposits

## Unregulated Substances Measured on the Water Leaving the Treatment Facility

Substance (units)	Year Sampled	Range of Detections	Typical Source
Sodium (ppm)	2011	97	Natural occurring element, Natural erosion

<sup>1</sup>**Arsenic:** Your drinking water meets EPA's standards. EPA's standards balance the current understanding of arsenic's possible health effects against the costs of removing arsenic 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.

<sup>2</sup>**TTHM/HAA<sub>5</sub>:** Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants: Trihalomethanes: bromodichloromethane (zero); bromoform (zero); chloroform (0.07mg/L); dibromochloromethane (0.06 mg/L). Haloacetic Acids: Dichloroacetic Acid (zero); Trichloroacetic Acid (0.02mg/L). Monochloroacetic Acid (0.07mg/L), Bromoacetic Acid and Dibromoacetic Acid are regulated with this group but have no MCLGs.

<sup>3</sup> See total coliform notice on page 4.

## Additional monitoring

Your water system has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standards set by the EPA. The purpose of monitoring these contaminants is to help the EPA decide whether the contaminants should have a standard. As our customer, you have a right to know that this data is available. If you are interested in examining the results, please contact our **Customer Care Center at 1-877-669-3434**.