



## CHAPARRAL CITY

2019

# WATER QUALITY REPORT

[epcor.com](http://epcor.com)

PWS ID AZ0407017

**EPCOR**

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



### **Water. It's life.**

At EPCOR, we're committed to providing you safe, quality, reliable drinking water every day. It's our mission, and it's an honor. Water fuels our daily routine, quenches our thirst and breathes life into our meals.

But we can't take it for granted. Our water system needs a steward, one who's there behind the scenes 24 hours a day, 7 days a week to manage, maintain and invest in it.

EPCOR takes this responsibility seriously. From daily water quality checks that ensure safety and quality to investing in your water system, we're ensuring that water will be available for years to come, whether your water source is deep underground or from rivers and lakes.

In addition to monitoring the water that comes out of your tap, we're also maintaining and improving the miles of pipelines, water mains, wells and hydrants that make up your water system. We're ensuring that water isn't wasted, and that it's a resource that will be there for the long term.

Because every drop matters.

Sincerely,

**Joe Gysel**

President, EPCOR USA, Inc.



### **QUESTIONS?**

#### **EPCOR Customer Care:**

**1-800-383-0834 • [mywater@epcor.com](mailto:mywater@epcor.com)**

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

## **YOU WANT TO KNOW WHAT'S IN THE WATER YOU'RE DRINKING**

As your water service provider, we're committed to ensuring the quality and safety of that water. That's why you are receiving this annual water quality report from us. We hope it will help you understand your community's water a little better and what we're doing to protect it.

### **WHAT WILL I FIND IN THIS REPORT?**

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

In it you'll find information on:

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

Information in this report is compiled, in part, from analytical data generated by laboratories certified in drinking water analysis.

### **READ THIS REPORT – AND SHARE IT!**

Reading this report and understanding your community's water is the first step. But it's also important to share this information with those who might not receive it directly. If you're a landlord, business, school or hospital, please share this report with water users in your community.



# ABOUT YOUR WATER

## CHAPARRAL CITY

### ABOUT YOUR DISTRICT

- EPCOR provides water service to approximately 13,700 service connections in the Town of Fountain Hills and portions of the City of Scottsdale.

### WHERE YOUR WATER COMES FROM

- Colorado River water delivered by the Central Arizona Project (CAP).
- Groundwater pumped from the aquifer below the Town of Fountain Hills.

#### About your CAP water

- Primarily Colorado River water delivered from Lake Havasu via the CAP Canal.
- Your water is a mix of Colorado River and Lake Pleasant water which receives water from the Agua Fria River.

#### Additional Information About The Groundwater In Your Area

Sources of groundwater recharge include natural recharge from stream flows and along mountain fronts, incidental recharge from agricultural and urban uses and intentional recharge at constructed recharge facilities.

#### How We Protect Groundwater Together

Both groundwater and the associated pumping and delivery facilities are part of a complex system that needs not just monitoring, but also maintenance. From pipelines to water mains, wells to hydrants, we're ensuring that the groundwater supply is protected and accessible.

#### How You Can Help

Properly dispose of hazardous household chemicals on hazardous material collection days and limit your pesticide and fertilizer use. For information on household hazardous material collection days in your area, contact the **Arizona Department of Environmental Quality** at **602-771-2300** or **Earth911.com**.

The quality of your water depends on the source water itself as well as factors such as the geology and biology of the area where the water came from. For some elements that are known to have an effect on the aesthetics of the water quality parameters, the EPA has established guidance levels known as secondary maximum contaminant level standards (SMCLs). When levels of these contaminants are found to be above the SMCLs, they may impact the aesthetic quality of the water (e.g., color, taste and odor). Although aesthetic water qualities may vary, your water meets all state and federal regulatory standards and is safe to use for all drinking water purposes. Secondary contaminants include, but are not limited to, manganese, iron and total dissolved solids (TDS).

### NOTICE OF SOURCE WATER ASSESSMENT

In 2004, the Arizona Department of Environmental Quality (ADEQ) completed a source water assessment for the two wells and one surface water intake used by EPCOR. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. These risks include, but are not limited to, gas stations, landfills, dry cleaners, agriculture fields, wastewater treatment plants and mining activities. Once ADEQ identified the adjacent land uses, they were ranked as to their potential to affect the water sources. The results of the assessment were that the two wells had no adjacent land uses in the vicinity, and the surface water intake had one adjacent land use that posed a high risk to the source. The complete assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 W. Washington, Phoenix, AZ 85007, between the hours of 8 a.m. and 5 p.m. For more information please contact **ADEQ** at **602-771-2300**.

### GETTING INVOLVED

Consulting with the community is important to us. If you have a question, concern or suggestion about your local water system, please contact our Customer Care team at **1-800-383-0834**.

# 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 land surfaces 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 Information Hotline** at **1-800-426-4791**.

## 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**, 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.

## 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 **EPA's Safe Drinking Water Information Hotline** at **1-800-426-4791**.

### Lead

EPCOR monitored the water for lead and copper in 2019 at 30 residences throughout the community and met the federal lead and copper standards. The 30 houses sampled were representative of the types of houses throughout the system. If your house was sampled you would have received the analysis results. 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. EPCOR is responsible for providing highquality drinking water, but cannot control the variety of materials used in plumbing components. 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 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 minimize exposure is available from the **Safe Drinking Water Information Hotline** or at **[www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)**.



## 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.

# DEFINITION OF TERMS

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

**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.

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

**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.

**MNR:** Monitored, not regulated.

**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.

**NA:** Not Applicable.

**ND:** None Detected.

**NTU:** Nephelometric turbidity units.

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

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



**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).

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

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

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

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

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

# WHAT'S IN YOUR WATER

## HOW TO READ YOUR WATER QUALITY TABLE

Below, you'll see an analysis of your drinking water. Here's an example of how to read these tables:



Start here and read across	2019 or year prior	The goal level for that substance	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

The data shown in the tables below are results from commercial laboratories certified in drinking water analysis by the Arizona Department of Health Services.

The table shows what substances were detected in your drinking water during 2019 or the last required sampling period within the last five years.

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

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
*Arsenic (ppb)	2019	0	10	13 <sup>1</sup>	2.1 - 13 <sup>1</sup>	NO	Erosion of natural deposits
Barium (ppm)	2019	2	2	0.12	0.015 - 0.12	YES	Erosion of natural deposits
Fluoride (ppm)	2019	4.0	4.0	1.53	0.35 - 1.53	YES	Erosion of natural deposits
Nitrate (ppm)	2019	10	10	3.2	0.2 - 3.2	YES	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	2019	NA	NA	89	46 - 89	YES	Erosion of natural deposits
Chromium (ppb)	2019	100	100	12	ND - 12	YES	Erosion of natural deposits
Selenium (ppb)	2019	50	50	8.6	3.3 - 8.6	YES	Erosion of natural deposits
Gross Alpha excluding radon and uranium (pCi/L)	2019	0	15	4.7	2.0 - 4.7	YES	Erosion of natural deposits

# WHAT'S IN YOUR WATER

## Turbidity<sup>2</sup> – A Measure of the Clarity of the Water at the Treatment Facility

Plant	Year Sampled	TT	Highest Single Measurement	Compliance Achieved	Typical Sources
Highest single turbidity measurement	2019	1 NTU	0.19 <sup>2</sup>	YES	Soil run-off
% Monthly samples < 0.3 NTU (%)	2019	95% of samples < 0.3 NTU	100%	YES	Soil run-off

## Regulated Substances Measured in the Distribution System

Substance (units)	Year Sampled	MCLG/MRDLG	MCL/MRDL	Highest Running Annual Average	Range of Detections	Compliance Achieved	Typical Sources
TTHMs (ppb)	2019	NA <sup>3</sup>	80	77.2	26.4 - 119 <sup>4</sup>	YES	By-product of drinking water disinfection
HAA5 (ppb)	2019	NA <sup>3</sup>	60	21.2	ND - 33.3	YES	By-product of drinking water disinfection
Free Chlorine (ppm)	2019	4	4.0	0.76	0.53 - 0.76	YES	Water additive used to control microbes

## Tap Water Samples: Lead and Copper Results

Substance (units)	Year Sampled	MCLG	Action Level	Number of Samples	90th Percentile	Number of Samples Above Action Level	Compliance Achieved	Typical Sources
Copper (ppm)	2019	1.3	1.3	30	0.21	0	YES	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2019	0	15	30	8.1	1	YES	Corrosion of household plumbing systems; erosion of natural deposits

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

Substance (units)	Year Sampled	Range of Detections	Typical Sources
Hardness (grains/gallon)	2014	16.4	Natural calcium and magnesium content
pH (units)	2014	7.5 - 8.8	pH is a measure of the acid/base properties

# WHAT'S IN YOUR WATER

**<sup>1</sup>Arsenic:** Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**<sup>2</sup>Turbidity** has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

**<sup>3</sup>TTHM/HAA5:** Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants: Trihalomethanes: bromodichloromethane (0.0 mg/L); bromoform (0.0 mg/L); chloroform (0.07 mg/L); dibromochloromethane (0.06 mg/L). Haloacetic acids: dichloroacetic acid (0.0 mg/L); trichloroacetic acid (0.02 mg/L). Monochloroacetic acid (0.07 mg/L), bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs.

**<sup>4</sup>TTHM/HAA5:** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems, and may have an increased risk of getting cancer.

Under the surface water treatment rule, EPCOR is required to collect monthly total organic carbon (TOC) samples from both raw and finished treated surface water. Overall TOC reduction is utilized as an indicator for treatment effectiveness. In February 2019, TOC samples were not collected as required by rule. EPCOR updated internal data review procedures to prevent any similar future missed monitoring events.

## ADDITIONAL MONITORING

In addition to the parameters listed in this table, other parameters were monitored for, including regulated pesticides, herbicides, petroleum by-products and metals. None of those parameters were detected in the water. If you have any questions about this report or your drinking water, please call our **Customer Care** team at **1-800-383-0834**.

EPCOR encourages feedback related to the quality of water that is provided to you. Please feel free to submit comments to us directly at [mywater@epcor.com](mailto:mywater@epcor.com). You may also provide feedback to the Arizona Corporation Commission (ACC).

## \*IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

At EPCOR Water, we're committed to providing water and water service you can count on. We test water in our systems daily, and adhere to stringent Federal and local guidelines, including checking at various stages of its cycle — from wells and canals to the tap itself — to ensure that the water you receive is safe. It's a process our water quality experts repeat over 21,000 times a year to make sure water meets drinking water standards and to monitor for contaminants.

### Why am I receiving this information?

We routinely monitor the presence of drinking water contaminants. A test result for a sample collected on December 31, 2019 showed that one of three sample locations exceeded the standard, or maximum contaminant level (MCL), for arsenic. The standard for arsenic is 10 parts per billion (ppb). The average level of arsenic over the last three years for this sample location is 7 ppb, with results ranging from 2 ppb to 13 ppb. The latter result represents the sample that was collected in December 2019. You are receiving this letter, in accordance with ADEQ requirements, to let you know of recent test results.

### What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours. However, \*some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with circulatory system, and many have an increased risk of getting cancer.

### Do I need to do anything?

No, there is nothing you need to do. You do not need to boil your water or take other corrective actions. If you have specific health concerns, consult your doctor.

### What occurred and what is being done?

In the second half of December, 2019 the Chaparral water production system was run in a manner that varied from normal operations during the rest of the year. During this period both groundwater wells were in production and the volume of water produced from the Shea Surface Water Treatment Plant was reduced commensurately. Review of available data indicates the arsenic exceedance at Reservoir 2, on December 31st was a result of this higher than normal proportion of groundwater to surface water in the eastern portions of the water distribution system. After receiving analytical results indicating an elevated level of arsenic, EPCOR immediately took corrective actions to adjust the ratio of treated surface water to well water that feeds into Reservoir 2. An arsenic result of 8 ppb from a sample collected in January 2020 confirmed that both the operational changes were effective and that the water again meets the arsenic standard.

\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly such as people in apartments, nursing homes, schools and businesses. You can do this by posting this notice in a public place or distributing copies by hand or mail.

We regret any inconvenience this notice may cause you. Our Water Quality experts are available to answer your questions by phone at 623-445-2406 or by email at [mywater@epcor.com](mailto:mywater@epcor.com).

This notice is being sent to you by EPCOR specific to the Chaparral/Fountain Hills water system (PWS ID# AZ0407017).

Date distributed: February 12, 2020





**IMPORTANT  
INFORMATION  
ABOUT YOUR  
WATER SERVICE**

**EPCOR**

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Suite 300  
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