

# YOUR 2014 WATER QUALITY REPORT



**ANTHEM DISTRICT**

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

**EPCOR**

**WATER**

# ABOUT THIS REPORT

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

For EPCOR, being your water and wastewater utility is more than providing a service. We take great pride in being your neighborhood utility, and the quality of life and the quality of the water is important to us at a personal level.

Providing high-quality, safe, reliable water—and protecting it for future generations—is an important part of what we do every day. That's a responsibility we don't take for granted, and that's why you're receiving this report.

Each year we send you a summary of the results obtained from testing your water in state-certified drinking water analysis labs. And we tell you what that analysis means.

If you have questions about this report, our Customer Care team is here to help 24 hours a day, seven days a week. You can call us at 1-800-383-0834 or email us at [mywater@epcor.com](mailto:mywater@epcor.com).

Thank you for caring about your water and for helping us to protect and manage the water we deliver to you. We invite you to learn more about your community's water and being water wise at [epcor.com](http://epcor.com).

Sincerely,



**Joe Gysel**  
President, EPCOR Water (USA) Inc.

## 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**

The information in this report is compiled from data from labs 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.

## QUESTIONS?

**EPCOR Water 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.

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

# ABOUT YOUR WATER

## ANTHEM DISTRICT

### ABOUT YOUR DISTRICT

- EPCOR provides service to approximately 8,900 water and wastewater customers in the Anthem district.

### WHERE YOUR WATER COMES FROM

- The Colorado River via the Central Arizona Project (CAP)
- City of Phoenix
- 2 wells

#### About your CAP water

- Primarily Colorado River water delivered from Lake Havasu via the CAP Canal to Lake Pleasant
- Anthem water is removed from the CAP Canal downstream of Lake Pleasant
- Water delivered to this system is a mix of Colorado River and Lake Pleasant water that also contains Agua Fria River water
- Water is delivered to Anthem via an eight-mile long pipeline from the CAP Canal
- The Anthem Water Treatment Plant is a microfiltration plant designed to meet current and future water quality requirements

#### City of Phoenix

- The interconnect with the City of Phoenix is supplied by the Union Hills Water Treatment Plant and/or the Lake Pleasant Water Treatment Plant, which also receives and treats water from the CAP Canal.

### 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**.

## NOTICE OF SOURCE WATER ASSESSMENT

In 2004, the Arizona Department of Environmental Quality completed a source water assessment for the two wells and one surface water intake used by EPCOR-Anthem. 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. Electronic copies are available from ADEQ at [dml@azdeq.gov](mailto:dml@azdeq.gov). For more information please contact ADEQ at 602-771-4641 or visit [www.azdeq.gov/environ/water/dw/swap.html](http://www.azdeq.gov/environ/water/dw/swap.html).

## GROUNDWATER WELLS – AND PROTECTING THEM TOGETHER

- Two wells supply groundwater pumped from the Northern Salt River Valley
- This area is comprised of alluvium and bedrock
- The alluvium is unconsolidated silt, sand and gravel
- The bedrock material is conglomerate, volcanic and granite in nature, with much of the conglomerate overlaid by basaltic lava flows
- Sources of groundwater include: Natural recharge from flood flows in streams and along mountain fronts and incidental recharge from agricultural and urban irrigation, canals, effluent and artificial lakes

### How we protect your groundwater

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

### 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.org](http://Earth911.org).

# 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 Hotline at 1-800-426-4791.

## DID YOU KNOW?

- Only 1% of the water on Earth is available for human use. Nearly 97% is salty or undrinkable and 2% is locked in ice caps and glaciers.  
- EPA.GOV
- Turning off the tap while you brush your teeth can save up to 4 gallons of water each time you brush your teeth.  
- EPA.GOV
- Bottled water is up to 1,000 times more expensive and has less stringent regulation compared to tap water.  
- DIFFER.COM

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

### Lead

EPCOR monitored the water for lead and copper in 2014 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 you weren't part of the representative sampling and are concerned

about elevated lead levels in your home's water, you may wish to flush your tap for 30 seconds to 2 minutes before using the water. 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 **EPA's Safe Drinking Water Hotline** or at: <http://www.epa.gov/safewater/lead>.



## IMPORTANT SYSTEM INFORMATION

All public water systems are required to monitor drinking water for specific contaminants on a regular basis and EPCOR regularly monitors the water for over 90 regulated contaminants. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 2011-2013 compliance period, only one out of two required dioxin samples were collected, and during the 2008-2013 compliance period one out of two required samples for radionuclides were collected. Once the missed monitoring events were identified, additional compliance samples were collected and analyzed and all results met state and federal water quality standards. Even though this was not an emergency and follow-up compliance samples verified that your drinking water met all health and safety standards, as our customers you have a right to know what happened, what you should do, and what we did to correct the situation.

### What should you do:

There is nothing you need to do at this time.

### What does this mean?

We did not complete sampling in the required time-frame for dioxin and radionuclides and, as a result, we cannot be sure of the quality of the drinking water during that time period.

### What is being done?

To ensure missed monitoring events do not occur in the future, EPCOR has instituted increased quality assurance/quality control procedures.

## 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 water treatment system such as a water softener or reverse osmosis system, please 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. Additional information about home water treatment systems is available from the **Arizona Water Quality Association** at 480-947-9850 or by writing to 6819 E. Diamond St., Scottsdale, AZ 85257.

# FREQUENTLY ASKED QUESTIONS

## WHAT IS THE WHITE OR COLORED DEPOSIT ON MY DISHES OR FAUCETS?

In most cases, the deposits or sediments left behind after water evaporates are calcium carbonate. The amount of calcium in the water is referred to as hardness. Cleaning with white vinegar can help to dissolve and remove deposits. Using a commercial conditioner, liquid detergents or the “air-dry” option in dishwashers can help to decrease the calcium carbonate found on dishes.

## ARE THE DEPOSITS OR HARD WATER HARMFUL?

Hardness and/or the deposits left by hard water don't pose a health concern and can be beneficial to our customers' health. We don't treat drinking water for water hardness that can result in hard water deposits.

## WHAT IS THE LEVEL OF HARDNESS IN MY WATER?

The hardness in your water is approximately 16 grains per gallon (gpg).

The degrees of water hardness are as follows:

### Degree of water hardness range (gpg)

Soft	Less than 1
Slightly Hard	1.0 to 3.4
Moderately Hard	3.5 to 6.9
Hard	7.0 to 10.4
Very Hard	Greater than 10.5

## WHY IS CHLORINE ADDED TO MY DRINKING WATER?

Chlorine is added to your water for your protection and is used as a disinfectant to ensure that harmful organisms, such as bacteria and viruses, are destroyed in the treatment process.

## ARE THERE OTHER WAYS TO REMOVE THE CHLORINE TASTE OR SMELL FROM MY WATER?

To remove the taste of chlorine from your water, try these tips:

- Place water in a glass container in the refrigerator overnight, uncovered. This will let the chlorine dissipate
- Bring your water to a rolling boil for five minutes and let it stand to cool
- Add a slice of lemon or a few drops of lemon juice to your glass of drinking water



## WILL MY HOME TREATMENT DEVICE REMOVE CHLORINE?

Some home treatment devices can remove chlorine. Once chlorine is removed, the water should be treated like any other beverage product and used as quickly as possible. We recommend that you follow the manufacturer's instructions for maintaining the device to ensure water quality.

# DEFINITION OF TERMS

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

**ppb (Parts per Billion):** One part substance per billion parts water (or micrograms 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 or aesthetic effects in drinking water.

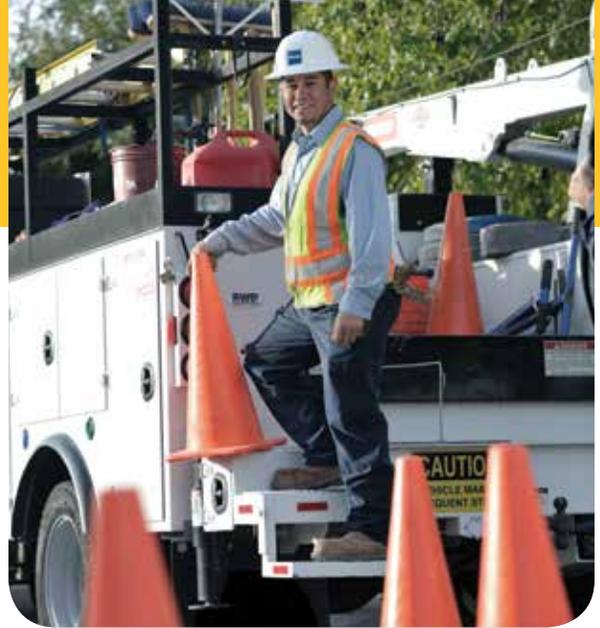
**Total Dissolved Solids:** An overall indicator of the amount of minerals in water.

**MNR:** Monitored, not regulated.

**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 that 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).

# 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	2014 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 2014 or the last required sampling period within the last five years.

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

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Arsenic (ppb)	2014	0	10	3.0	2.6 - 3.0	YES	Erosion of natural deposits
Barium (ppm)	2014	2	2	0.11	0.11	YES	Erosion of natural deposits
Chromium (ppb)	2014	100	100	9	ND - 9	YES	Erosion of natural deposits
Fluoride (ppm)	2014	4.0	4.0	0.43	0.40 - 0.43	YES	Erosion of natural deposits
Nitrate (ppm)	2014	10	10	0.27	0.24 - 0.27	YES	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2014	50	50	3.8	3.0 - 3.8	YES	Erosion of natural deposits
Sodium (ppm)	2014	NA	NA	92	91 - 92	YES	Erosion of natural deposits
Gross alpha excluding radon and uranium (pCi/L)	2014	0	15	3.8	3.7 - 3.8	YES	Erosion of natural deposits; Certain minerals contain/emit this radiation form
Combined Radium 226/228	2014	0	5	0.4	0.4	YES	Erosion of natural deposits; Certain minerals contain/emit this radiation form

# WHAT'S IN YOUR WATER

## Turbidity<sup>1</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	2014	1 NTU	0.07 NTU	YES	Soil run-off
% Monthly samples < 0.3 NTU (%)	2014	95% of samples < 0.3 NTU	100%	YES	Soil run-off

## Regulated Substances Measured in the Water 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)	2014	NA <sup>2</sup>	80	69.7	43 - 67	YES	By-product of drinking water disinfection
HAA5 (ppb)	2014	NA <sup>2</sup>	60	28	15 - 32	YES	By-product of drinking water disinfection
Chlorine residual (ppm)	2014	4	4.0	0.53	0.03 - 1.43	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)	2014	1.3	1.3	30	0.61	0	YES	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2014	0	15	30	1.6	0	YES	Corrosion of household plumbing systems; erosion of natural deposits

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

Substance (units)	Year Sampled	Range of Detections	Typical Sources
Calcium (ppm)	2014	70	Erosion of natural deposits
Hardness (grains/gallon)	2014	16.4	Natural Calcium/Magnesium content
Magnesium (ppm)	2014	26	Erosion of natural deposits
pH (standard units)	2014	7.5 - 8.5	pH is a measure of acid/base properties

# WHAT'S IN YOUR WATER

## Unregulated Contaminant Monitoring Rule Substances Measured at the Treatment Facility and in the Distribution System

Substance (units)	Year Sampled	Range of Detections	Typical Sources
Chlorate (ppb)	2014	23 - 110	By-product of drinking water disinfection
Chromium VI (ppb)	2014	ND - 1.4	Erosion of natural deposits
Molybdenum (ppb)	2014	ND - 4.6	Erosion of natural deposits
Strontium (ppm)	2014	0.7 - 1.1	Erosion of natural deposits
Vanadium (ppb)	2014	1.5 - 12.2	Erosion of natural deposits
1,4 Dioxane (ppb)	2014	ND - 0.08	Discharge from industrial chemical factories

**Year Sampled:** The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

**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.

**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 (0.3 mg/L). Monochloroacetic acid, bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs.

## 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).



**WATER**

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

 Printed on recycled paper; each ton of recycled paper saves 7,000 gallons of water.