EPCOR WATER

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YOUR 2012 WATER QUALITY REPORT

PARADISE VALLEY DISTRICT

PWS ID 407056

A MESSAGE FROM JOE

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

At EPCOR Water, providing our communities with high-quality, safe, reliable water—and protecting it for future generations—is an important part of what we do every day.

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'll tell you what that analysis means.

In 2012, the water that EPCOR Water provided to you surpassed or met all federal and state primary drinking water quality regulations.

We're proud of this record, and we're dedicated to upholding these results.

For EPCOR, being a water and wastewater utility is more than providing a service and being your neighborhood utility provider. Your community is our home, too, and the quality of life—and the quality of the water—is important to us at a personal level. For EPCOR, taking care of you and your water supply is serious business.

If you have any 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.

We invite you to learn more about your water and being water wise at epcor.com. And we thank you for caring about your water.

Sincerely,

Joe Gysel
President, EPCOR Water USA

ABOUT THIS REPORT

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, 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 an EPCOR 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?

EPCOR Water Customer Care:
1-800-383-0834

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. **1-800-383-0834**

ABOUT YOUR WATER
PARADISE VALLEY DISTRICT

About your district

- EPCOR provides water service to approximately 4,900 billed customers.

Where your water comes from

- Groundwater in the northern portion of the West Salt River Valley Sub-basin, bordering the Phoenix Mountains.

Groundwater wells – and protecting them together

About the West Salt River Valley (WSRV) Sub-Basin

- A broad, gently sloping alluvial plain, drained by the Gila and Salt Rivers.
- Groundwater is pumped from the deeper portion of the valley fill deposits known as the Middle and Lower Alluvial Units.
- 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 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: **Town of Paradise Valley at 480-348-3695** or **Earth911.org**.

Notice of Source Water Assessment

In 2004 the Arizona Department of Environmental Quality completed a source water assessment for the seven wells used by EPCOR-Paradise Valley. 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 two wells had no adjacent land uses, four wells had ten adjacent land uses that posed a low risk to the source and each well also had one adjacent land use that posed a high risk, and one well had one adjacent land use that posed a high risk.

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**.

For more information please contact **ADEQ** at **602-771-4560** or visit **www.azdeq.gov/environ/water/dw/swap.html**.

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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.

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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 2011 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.

Ways you can conserve water

- Replace your showerhead and faucets with newer aerated models.
- Take a short, 5-minute shower instead of a bath.
- Don't let the water run when you're brushing your teeth or shaving.
- Clean vegetables in a partially filled sink rather than under a continuously running tap.
- Wash only full loads of laundry and don't overload your machine.
- Select a high-efficiency water tank.
- Choose plants, shrubs and trees that require little irrigation and that fit in with the landscape to minimize pruning.

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.

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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.

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How to read your water quality table

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

Substance (units)	Year Sampled	MCLG	MCL	Highest Amount Detected	Range of Detections	Compliance Achieved	Typical Sources
Start here and read across.	2012 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.

Your water quality table

The data shown in the water quality tables below are results from commercial laboratories certified in drinking water analysis by the State of Arizona Department of Health Services. The table shows what substances were detected in your drinking water during 2012 or the last required sampling period.

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)	2012	0	10	9	7 –9[1]	yes	Erosion of natural deposits
Barium (ppb)	2012	200	200	20	10 – 20	yes	Erosion of natural deposits
Chromium (ppb)	2012	100	100	28	27 – 28	yes	Erosion of natural deposits
Fluoride (ppm)	2012	4.0	4.0	0.5	0.4 – 0.5	yes	Erosion of natural deposits
Nitrate (ppm)	2012	10	10	4.17	3.99 – 4.17	yes	Fertilizer runoff; septic tank leaching; animal boarding
Alpha emitters(pCi/L)	2012	0	15	5.1	3.4 – 5.1	yes	Erosion of natural deposits
Selenium (ppb)	2012	50	50	7	ND – 7	yes	Erosion of natural deposits

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WHAT'S IN YOUR WATER

Lead and Copper Results

Substance (units)	Year Sampled	Action Level	Number of Samples	90th Percentile	# of Samples Above Action Level	Compliance Achieved	Typical Sources
Lead (ppb)	2011	15	30	3	0	yes	Corrosion of household plumbing; erosion of natural deposits
Copper (ppm)	2011	1.3	30	0.12	0	yes	Corrosion of household plumbing; erosion of natural deposits

Regulated substances Measured in the Distribution System

Substance (units)	Year Sampled	MCLG/ MRDLG	MCL/ MRDL	Annual Average	Range of Detections	Compliance Achieved	Typical Source
TTHM (ppb)	2012	NA[2]	80	9.7	2.6 – 23.2	yes	By-product of drinking water disinfection
HAA5 (ppb)	2012	NA[2]	60	1.9	1.0 – 2.4	yes	By-product of drinking water disinfection
Chlorine residuals (ppm)	2012	4	4.0	1.05	0.52 – 1.40	yes	Water additive used to control microbes

Unregulated Substances Measured at entry to the Distribution System (Option: Secondary Substances)

Substance (units)	Year Sampled	Average Results	Range Low-High	Typical Source
Hardness (grains/gallon)	2012	16.2	8.2 – 19.9	Natural Calcium/magnesium content
pH (units)	2012	8.0	7.7 – 8.7	pH is a measure of the acid/base properties
Iron (ppm)	2010	0.03	0.01 – 0.05	Natural content and water treatment chemicals
Sodium (ppm)	2012	54	50 – 59	Natural content
Chloride (ppm)	2010	100	89 – 113	Natural content
Sulfate (ppm)	2010	37	32.5 – 42.3	Natural content
Magnesium(ppm)	2010	34.5	34 – 35	Natural content

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Unregulated Substances

Substance (units)	Year Sampled	Average Results	Range of Detections	Typical Source
Boron (ppm)	2010	0.125	0.120 – 0.130	Natural Erosion
Molybdenum (ppm)	2010	0.001	0.001	Natural Erosion
Strontium (ppm)	2010	0.665	0.650 – 0.680	Natural Erosion
Silica (ppm)	2010	30	30 – 31	Natural Erosion

[1]Arsenic: The EPCOR arsenic removal facility continues to produce water with arsenic levels below the current federal and state standards. 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 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.

[2]TTHM/HAA_5: 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 (0.07 mg/L); dibromochloromethane (0.06 mg/L). Haloacetic acids: dichoroacetic acid (zero); 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, 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.