



2024

Annual Water Quality Report

January 1 - December 31, 2024

SAHUARITA
Water Company





Welcome, Sahuarita Water Company™ (SWC) is pleased to present to you our annual Water Quality Report for 2024. Every year, SWC invests in the water system and its employees to ensure that drinking water delivered to your home meets or exceeds Safe Drinking Water Standards. The data presented in this report are from the most recent testing done in accordance with Pima County, State of Arizona, and United States Environmental Protection Agency (USEPA) regulations.

This report is designed to help you, the water user, make informed decisions regarding your drinking water. We hope you will find this Water Quality Report informative, above all, we want to maintain your confidence in our efforts to provide you with safe drinking.

This Report Contains Information About:

- Your drinking water source
- Information about drinking water and expected drinking water contaminants
- Water treatment
- Recommendations for “At-Risk” populations
- Technical and regulatory terms and abbreviations
- Detected contaminants table
- Detailed information on detected contaminants
- Drinking water rule violations
- Where to get more information
- The Unregulated Contaminant Monitoring Rule



Your Drinking Water Source

Sahuarita Water is a private water company who has been providing water service to residents of Rancho Sahuarita and Rancho Resort since 2000. Current service extends to over 17,000 residents living in about 6,000 homes. SWC also provides water to the Marketplace, Sahuarita Unified School District and Town of Sahuarita Municipal Complex.

SWC's water supply is 100% ground water and comes from three deep wells located in the Rancho Sahuarita area. This water is drawn from the Tucson Basin aquifer, a part of the Santa Cruz River Watershed. In our region, water is withdrawn from the aquifer by private wells, municipal, agricultural and industrial users.

The source water assessment completed by ADEQ in 2003 provided our system with a low-risk designation. Based on the information currently available on the hydrogeologic settings and of the adjacent land uses that are in the specific proximity of the drinking water source(s) of this public water system, the department has given a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.

Further source water assessment documentation can be obtained by contacting ADEQ Records Center to obtain a copy: <http://www.azdeq.gov/records-center>

The Purpose of Report

This Annual Water Quality Report, also known as a Consumer Confidence Report, is intended to provide you with accurate and understandable information on the quality of the water delivered by Sahuarita Water Co. (PWSIDAZ0410-312) and to characterize the risks, if any, from exposure to contaminants detected in your drinking water.

Questions

For more information regarding this annual report or for information about your drinking water, contact Sahuarita Water Company at 520-399-1105. While we do not hold regular meetings, you are welcome to call SWC with your questions or concerns about your water quality.

Español

Spanish (Español):
Este informe contiene información muy importante sobre la calidad de su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para obtener más información de este reporte, llame al (520) 399-1105.

Recommendations for “At-Risk” Populations

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, persons 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. United States Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).



General Information

About Drinking Water

All 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 the water poses a health risk. 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. Contaminants that may be present in source water include:

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

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

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

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) regulates the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Water Quality Data

Terms and Abbreviations

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

Action Level - "Action Level" means the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

Maximum Contaminant Level (MCL) - "Maximum Contaminant Level" or "MCL" means 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.

Maximum Contaminant Level Goal (MCLG) - "Maximum Contaminant Level Goal" or "MCLG" means 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.

Maximum Residual Disinfectant Level (MRDL) - "Maximum Residual Disinfectant Level" or "MRDL" means 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.

Maximum Residual Disinfectant Level Goal (MRDLG) - "Maximum Residual Disinfectant Level Goal" or "MRDLG" means 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.

Parts Per Billion (ppb) - One ppb equals one microgram per liter. For example, one part per billion equals 6 tablespoons of water in Sahuarita Lake.

Parts Per Million (ppm) - One ppm equals one milligram per liter or 1,000 times more than a ppb. One part per million equals one M&M® in a ton of M&Ms®.

Picocuries Per Liter (pCi/L) - The measure of radioactivity in water specifically, the quantity of radioactive material in one liter of water which produces 2.22 nuclear disintegrations per minute.

Entry Point into the Distribution System (EPDS) - All water sources are monitored at the EPDS. This point is after any required treatment but before the first customer service.



Detailed Water Quality Data

Inorganic Contaminants							
	Sample Date	Avg/Max Detected	Range	MCL	MCLG	Violation	Major Sources
Arsenic	2024-4Q	8.1	7.5-8.7	10.0 ppb	None	No	Erosion of natural deposits
Sodium	Jan 24, 2022	69	N/A	None	None	Unregulated	Erosion of natural deposits
Fluoride	Jan 24, 2022	0.8	.5-1.4	4.0 ppm	2.0 ppm	No	Erosion of natural deposits
Nitrate	Jan 11, 2024	2.3	N/A	10 ppm	10 ppm	No	Erosion of natural deposits; Runoff from fertilizer use; Leaching
Disinfectants							
	Sample Date	Avg/Max Detected	Range	MCL	MCLG	Violation	Major Sources
Chlorine	Continuous	1	.46 - 1	MRDL = 4	MRDLG = 4	No	Water additive used to control microbes
Disinfection By-Products							
	Sample Date	Avg/Max Detected	Range	MCL	MCLG	Violation	Major Sources
Trihalomethanes	Jun 20, 2024	4.4	1.2-4.4 ppb	80ppb	80ppb	No	By-product of drinking water chlorination.
Radiochemical Contaminants							
Combined Uranium	Jan 24, 2022	2.0 +/- 0.6 ppb	N/A	30.0 ppb	0 ppb	No	Erosion of Natural Deposits
Alpha Emitters	Jan 24, 2022	3.6 +/- 0.7 pCi/L	N/A	15.0 pCi/L	0 pCi/L	No	Erosion of Natural Deposits
Microbiological Contaminants							
	Months with Coliform Detections	# of Positive Samples for Month	Total # of Samples Collected per Month	MCL	MCLG	Violation	Major Sources
Total Coliform	None	0	20	No more than one positive monthly	0	No	Naturally present in the environment
Lead And Copper							
	Sample Date	Maximum Results	90th Percentile Value	Action Level MCL Not Applicable	MCLG	Violation	Major Sources
Lead	7/19-22/2022	1.4 ppb	.56 ppb	15 ppb	0 ppb	No	Corrosion of household plumbing
Copper	7/19-22/2022	0.41 ppm	0.34 ppm	1.3 ppm	1.3 ppm	No	Corrosion of household plumbing



SWC routinely monitors for contaminants in your drinking water in accordance with Federal and State laws. The State of Arizona requires SWC to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination.

In 2024, SWC collected over 240 samples for analysis of total coliform bacteria. In addition, samples were collected for analysis of organic and inorganic contaminants as well as lead and copper. As a result of diligent operation and monitoring of the water system, there were no violations in 2024.

Detailed Information on Detected Contaminants

Arsenic – Arsenic occurs naturally in rocks, soil, water, air, plants, and animals. It's also released through volcanic activity, erosion, forest fires, and human actions. About 90% of industrial arsenic in the U.S. is used as a wood preservative, but it's also found in paints, dyes, metals, drugs, soaps, and semiconductors. Agriculture, mining, and smelting further contribute to environmental arsenic. Higher levels are often found in groundwater versus surface water. Western states tend to have more systems exceeding 10 ppb.

In 2006, USEPA lowered the arsenic standard in drinking water from 50 ppb to 10 ppb. While your water meets this standard, it contains low levels of arsenic. USEPA's limit balances health risk and treatment costs. Long-term exposure to arsenic above the MCL may cause skin damage, circulatory issues, and increased cancer risk.

Combined Uranium – A radioactive element naturally found in rocks and soils. Long-term consumption of water exceeding USEPA's uranium standard may increase cancer risk.

Alpha Emitters – Some naturally occurring minerals emit alpha radiation. Long-term exposure above USEPA's standard may raise cancer risk.

Copper – A metal found in natural deposits and household plumbing. Since copper contamination often results from corrosion of home pipes, it cannot be directly treated by water systems. USEPA requires utilities to control water corrosiveness if copper levels exceed the Action Level.

Fluoride – While SWC does not add fluoride, many communities do to promote dental health. USEPA's enforceable limit is 4 ppm (exceeding this may lead to bone disease). A secondary standard of 2 ppm is set to protect against dental fluorosis, a condition that can cause staining or pitting of permanent teeth in children under nine.

Lead – A metal found in natural deposits, often used in plumbing materials. The biggest risk comes from paint chips and dust, but water can also be a source. In children, lead exposure can cause developmental delays and learning problems; in adults, it may increase blood pressure and lead to kidney issues. Lead typically enters drinking water through home plumbing. To reduce exposure, flush taps for 30 seconds to 2 minutes before use. For more information, visit www.epa.gov/safewater/lead.

Nitrate – Nitrates and nitrites are nitrogen-oxygen compounds primarily used in fertilizers. SWC water complies with safety standards.

Short-term effects: Excessive nitrate can be dangerous, especially for infants, leading to reduced oxygen in the blood (symptoms include shortness of breath and bluish skin). Long-term effects: May include diuresis, starchy deposits, and spleen damage with prolonged exposure above the MCL.

Total Coliforms – Naturally present bacteria used as an indicator for the possible presence of harmful microorganisms.



Unregulated Contaminant Monitoring Rule (UCMR5)

In 2024 Sahuarita Water Company participated in unregulated contaminant monitoring as required by the Federal Safe Drinking Water Act. Unregulated contaminants are those for which the USEPA has not established drinking water standards. The results are monitored to assist the USEPA in determining the occurrence and concentrations of these contaminants in drinking water and whether future regulation is warranted. If the USEPA determines that a regulation is warranted for a certain contaminant, SWC will take whatever steps necessary to comply with the new requirement.

The presence of a contaminant does not necessarily equate to a health risk. It is the concentration of the contaminant that is the deciding factor in determining whether there are health implications.

Unregulated Contaminants			
Per- and Polyfluoroalkyl Substances	Highest Level Detected	Range of All Samples	Proposed MCL
PFOA (in parts per trillion)	<3.8	N/A	4.0 ppt
PFOS (in parts per trillion)	<3.8	N/A	4.0 ppt
PFNA (in parts per trillion)	<3.8	N/A	N/A
PFHxS (in parts per trillion)	<2.8	N/A	N/A
PFBS (in parts per trillion)	<2.8	N/A	N/A
GenX (in parts per trillion)	<4.7	N/A	N/A
Calculated Hazard Index (HI)	1		1 (no units)

One Metal	Detected (Y/N)	Maximum Results	Range of All Samples (Low-High)	MRL (ppb)	Analytical Methods
Lithium (ppb)*	Y	119	N/A	9 µg/L	EPA 200.7, SM 3120 B, ASTM D1976-22

For more information on UCMR 5 testing, visit: <https://www.epa.gov/dwucmr#ucmr>

