Consumer Confidence Report for Calendar Year 2023

Este informe contiene informactión muy importante sobre el aqua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.

Public Water System ID Number	Public Water System Name						
AZ0410112	City of Tucson Main System						
Contact Name and Title		Phone Number	E-mail Address				
Water Quality & Pressure Concerns		520-791-5945	QualityAndPressure@tucsonaz.gov				

We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact **Tucson Water Public Information Office at 520-791-4331** for additional opportunity and meeting dates and times.

Drinking Water Sources

The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source(s): Groundwater wells.

Consecutive Connection Sources

A public water system that receives some or all of its finished water from one or more wholesale systems by means of a direct connection or through the distribution system of one or more consecutive systems. Systems that purchase water from another system report regulated contaminants detected from the source water supply in a separate table.

PWS # AZ0410092, Marana Municipal provides us an emergency consecutive connection source of water. Tucson Water did not purchased water from Marana Municipal in 2023.

Drinking Water Contaminants

Microbial Contaminants: Such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants: Such as salts and metals that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides: Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources.

Organic Chemical Contaminants: Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants: That can be naturally occurring or be the result of oil and gas production and mining activities.

Vulnerable Population

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 water poses a health risk. 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants visit the EPA *Safe Drinking Water website* at www.epa.gov/sdwa.

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 this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on 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.

Further source water assessment documentation can be obtained by contacting ADEQ.

Definitions

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

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method.

Millirems per year (MREM): A measure of radiation absorbed by the body.

Not Applicable (NA): Sampling was not completed by regulation or was not required.

Not Detected (ND or <): Not detectable at reporting limit.

Picocuries per liter (pCi/L): Measure of the radioactivity in water.

ppm: Parts per million or Milligrams per liter (mg/L)

ppb: Parts per billion or Micrograms per liter (µg/L)

ppt: Parts per trillion or Nanograms per liter (ng/L) ppm x 1000 = ppbppb x 1000 = ppt

ppq: Parts per quadrillion or Picograms per liter (pg/L) ppt x = 1000 = ppq

Lead Informational Statement:

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. **The City of Tucson Main Public Water System AZ0410112** is responsible for providing high quality 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Microbiological (RTCR)	TT Violation Y or N	Number of Positive Samples	Positive Sample(s) Month & Year	MCL	MCLG	Likely Source of Contamination
Fecal Indicator ¹ (From GWR source) (coliphage, enterococci and/or E. coli)	N	1	8/2023	0	0	Human and animal fecal waste

¹ E.Coli was detected at one groundwater rule source well which was raw untreated water. E.Coli was not detected in the distribution system. The well was immediately turned off, super-chlorinated, and re-tested. Follow-up sampling indicated no detectable concentrations of E.Coli. No violations were issued.

Disinfectants	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Sample Month & Year	Likely Source of Contamination
Chlorine (ppm)	N	1.00	0.91 – 1.34	4	4	2023	Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	2.1	ND – 3.1	60	N/A	2023	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	15.5	3.0 – 26.7	80	N/A	2023	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90 th Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Year	Likely Source of Contamination
Copper (ppm)	N	0.135	0	1.3	1.3	2023	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	0.65	0	15	0	2023	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Alpha Emitters (pCi/L) (This is Gross Alpha 4000)	N	7.4	ND – 7.4	15	0	2023	Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	1.6	ND – 1.6	5	0	2023	Erosion of natural deposits
Uranium (ug/L)	N	16	2 16	30	0	2023	Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Arsenic¹ (ppb)	N	3.14	1.98 – 3.14	10	0	2023	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.07	0.05 – 0.07	2	2	2023	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.47	0.17 – 0.47	4	4	2023	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate² (ppm)	N	7.1	ND – 7.1	10	10	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)							Discharge from petroleum and metal refineries; erosion
Зетепшті (рры)	N	1.6	ND – 1.6	50	50	2023	of natural deposits; discharge from mines

¹ **Arsenic** is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water and continuing to research the health effects of low levels of arsenic.

² **Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Synthetic Organic Chemicals (SOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Atrazine (ppb)	Ν	0.1	ND - 0.1	3	3	2023	Runoff from herbicide used

							on row crops
Volatile Organic Chemicals (VOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Xylenes (ppm)	N	0.005	ND - 0.005	10	10	2023	Discharge from petroleum or chemical factories

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, 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.