



Consumer Confidence Report for Calendar Year 2023

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

Public Water System ID Number		Public Water System Name	
AZ04-15497		Ehrenberg Improvement District	
Contact Name and Title		Phone Number	E-mail Address
Mike Lauborough, Manager		(928) 923-9388	ehrenbergwater@gmail.com
<p>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 <u>Mike Lauborough, EID</u> at <u>(928) 923-9388</u> for additional opportunity and meeting dates and times.</p>			

Drinking Water Sources

The source of drinking water is the Colorado River. 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.

In order to ensure that tap water is safe to drink, the 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 tap water which must provide the same protection for public health.

Our water source(s):	Colorado River (Surface Water)
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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 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 call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Source Water Assessment

Based on the information currently available on the hydrogeologic settings of and the adjacent land uses that are in the specified 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.

Definitions

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

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria was present

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

Nephelometric Turbidity Units (NTU): A measure of water clarity

Million fibers per liter (MFL)

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)

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

ppb x 1000 = ppt

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 Ehrenberg Improvement District** 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
E. Coli	N	0	N/A	0	0	Human and animal fecal waste
Fecal Indicator (coliphage, enterococci and/or E. coli)	N	0	N/A	0	0	Human and animal fecal waste
Surface Water Treatment Rule	TT Violation Y or N	Highest Level Detected	% Range (Low-High)	TT	Sample Month & Year	Likely Source of Contamination
Turbidity ² (NTU)	N	0.143	0.014-0.143	TT	12/2023	Soil runoff

¹ **Total organic carbon (TOC)** has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THM) and haloacetic acids (HAA). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

² **Turbidity** is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. We monitor it because it is a good indicator of the quality of water. High turbidity can hinder the effectiveness of disinfectants. 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.

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/Chloramine (ppm)	N	1.250	0.03-2.91	4	0	12/2023	Water additive used to control microbes

Disinfection By-Products	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	13	6-18	60	N/A	JAN-DEC 2023	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	57	36-70	80	N/A	JAN-DEC 2023	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90 th Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.18	0	1.3	1.3	8/2023	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	1.5	0	15	0	8/2023	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha Emitters (pCi/L)	N	3.8	N/A	15	0	5/2022	Erosion of natural deposits
Synthetic Organic Chemicals (SOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
We sampled for 30 different Synthetic Organic Chemicals in 2023 and all results were "Not Detected"							
Volatile Organic Chemicals (VOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
We sampled for 21 different Synthetic Organic Chemicals in 2023 and all results were "Not Detected"							
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Arsenic ¹ (ppb)	N	1.9	N/A	10	0	5/2020	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.12	N/A	2	2	5/2020	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.28	N/A	4	4	5/2020	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate ² (ppm)	N	0.39	N/A	10	10	4/2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	94	N/A	N/A	N/A	5/2021	Erosion of natural deposits

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 continues to research the health effects of low levels of arsenic.

Water Quality Table – Unregulated Contaminants

Your drinking water was sampled for the presence and concentration of 29 different per- and polyfluoroalkyl substances, some known by the acronyms PFAS, PFOA, PFNA, PFHxS, PFBS, and GenX, a group of contaminants in the final stages of becoming regulated by the EPA. PFAS are man-made chemicals that are resistant to heat, water, and oil. They have been used since the 1940s to manufacture various consumer products, including fire-fighting foam and stain resistant, water-resistant, and nonstick items. Many PFAS do not break down easily and can build up in people, animals, and the environment over time. Scientific studies have shown that exposure to certain PFAS can be harmful to people and animals, depending on the level and duration of [exposure](#).

To learn more about this group of chemicals, we encourage you to read the ADEQ-provided "PFAS 101 Fact Sheet" and to visit the ADEQ website at <https://www.azdeq.gov/pfas-resources>

Per- and Polyfluoroalkyl Substances	Highest Level Detected	Range of All Samples	Proposed MCL
PFOA (in parts per trillion)	N/D	N/A	4.0 ppt
PFOS (in parts per trillion)	N/D	N/A	4.0 ppt
PFNA (in parts per trillion)	N/D	N/A	N/A*
PFHxS (in parts per trillion)	N/D	N/A	N/A*
PFBS (in parts per trillion)	N/D	N/A	N/A*
GenX (in parts per trillion)	N/D	N/A	N/A*
Calculated Hazard Index (HI)	0		1 (no units)

* EPA is proposing a Hazard Index MCL to limit any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. The Hazard Index considers the different toxicities of PFNA, GenX Chemicals, PFHxS, and PFBS. For these PFAS, water systems would use a hazard index calculation to determine if the combined levels of these PFAS in the drinking water at that system pose a potential risk and require action (Source: EPA Fact Sheet: Understanding the PFAS National Primary Drinking Water Proposal Hazard Index).

Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
Late Reporting	We sampled on time, but reported results for Disinfection Byproducts and Chlorine residuals late to ADEQ	April-June 2023	We submitted all data to ADEQ July 13th