

# Consumer Confidence Report for Calendar Year 2019

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						
AZ 04-15497	Ehrenberg Impi	Ehrenberg Improvement District					
Contact Name and Title		Phone Number	E-mail Address				
Dennis Price, Manager/Board Clerk		928-923-9388	ehrenbergwater@airwaveme.net				

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 Dennis Price at 49100 Ehrenberg Rd. for additional opportunities 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):	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, 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 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, ADEQ 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.

#### **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 $ppm \times 1000 = ppb$ Picograms per liter (pg/L) $ppb \times 1000 = ppt$  $ppt \times 1000 = ppt$ 

## 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. EID 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 <a href="https://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a>.

#### Water Quality Data - Regulated Contaminants

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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)	π	Sample Month & Year	Likely Source of Contamination
Turbidity <sup>2</sup> (NTU)	N	0.86	0.080-0.860	TT	4-12-19	Soil runoff

<sup>&</sup>lt;sup>1</sup> **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.

<sup>&</sup>lt;sup>2</sup> **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	1.313	0.400-2.480	4	0	2019	Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	19.3 (RAA)	13.0-28.0	60	N/A	2019	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	54.0 (RAA)	38.0-68.0	80	N/A	2019	Byproduct of drinking water disinfection

Lead & Copper	MCL Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.52	0	1.3	1.3	6/2017	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	1.1	0	15	0	6/2017	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Beta/Photon Emitters (mrem/yr.)				4	0		Decay of natural and man- made deposits
Alpha Emitters (pCi/L)	N	4.0±0.9	4.0±0.9	15	0	2/2014	Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	<0.5	<0.5	5	0	2/2014	Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
			_	_		_	Runoff from fertilizer use; leaching from septic tanks,
Nitrate <sup>2</sup> (ppm)	N	0.33	0.33	10	10	3/22/19	sewage; erosion of natural deposits

<sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> **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	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
2,4-D (ppb)	N	<1.0	<1.0	70	70	2/17	Runoff from herbicide used on row crops
2,4,5-TP (a.k.a. Silvex) (ppb)	N	<0.2	<0.2	50	50	2/17	Residue of banned herbicide
Alachlor (ppb)	N	<0.1	<0.1	2	0	2/17	Runoff from herbicide used on row crops
Atrazine (ppb)	N	<0.05	<0.05	3	3	2/17	Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)	N	<20.0	<20.0	200	0	2/17	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	N	<0.5	<0.5	40	40	2/17	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	N	<0.1	<0.1	2	0	2/17	Residue of banned termiticide
Dalapon (ppb)	N	<1.0	<1.0	200	200	2/17	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	N	<0.6	<0.6	400	400	2/17	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	N	<0.6	<0.6	6	0	2/17	Discharge from rubber and chemical factories
Dibromochloropropane (ppt)	N	<10.0	<10.0	200	0	2/17	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	N	<0.2	<0.2	7	7	2/17	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	N	<0.4	<0.4	20	20	2/17	Runoff from herbicide use
Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq)	N	<5.0	<5.0	30	0	2/17	Emissions from waste incineration and other combustion; discharge from chemical factories
Endothall (ppb)	N	<5.0	<5.0	100	100	2/17	Runoff from herbicide use
Endrin (ppb)	N	<0.01	<0.01	2	2	2/17	Residue of banned insecticide
Ethylene dibromide (ppt)	N	<10.0	<10.0	50	0	2/17	Discharge from petroleum refineries
Glyphosate (ppb)	N	<6.0	<6.0	700	700	2/17	Runoff from herbicide use
Heptachlor (ppt) Heptachlor epoxide (ppt)	N N	<10.0 <10.0	<10.0 <10.0	400 200	0	2/17 2/17	Residue of banned termiticide Breakdown of heptachlor
Hexachlorobenzene (ppb)	N	<0.05	<0.05	1	0	2/17	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo pentadiene (ppb)	N	<0.05	<0.05	50	50	2/17	Discharge from chemical factories
Lindane (ppt)	N	<10.0	<10.0	200	200	2/17	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	N	<0.05	<0.05	40	40	2/17	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa,

Oxamyl (a.k.a. Vydate) (ppb)	N	<0.5	<0.5	200	200	2/17	Runoff/leaching from insecticide used on apples, potatoes and
Oxamyr (a.k.a. Vydate) (ppb)	11	<b>VO.0</b>	70.5	200	200	2/11	tomatoes
Pentachlorophenol (ppb)	N	<0.04	<0.04	1	0	2/17	Discharge from wood preserving factories
Picloram (ppb)	N	<0.1	<0.1	500	500	2/17	Herbicide runoff
Simazine (ppb)	N	<0.05	<0.05	4	4	2/17	Herbicide runoff
Toxaphene (ppb)	N	<0.5	<0.5	3	0	2/17	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Chemicals (VOC)	MCL Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Benzene (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from chemical plants and other industrial activities
(mono) Chlorobenzene (ppb)	N	<0.5	<0.5	100	100	3/2019	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	N	<0.5	<0.5	600	600	3/2019	Discharge from industrial chemical factories
para-Dichlorobenzene (ppb)	N	<0.5	<0.5	75	75	3/2019	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	N	<0.5	<0.5	7	7	3/2019	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	N	<0.5	<0.5	70	70	3/2019	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	N	<0.5	<0.5	100	100	3/2019	Discharge from industrial chemical factories
Dichloromethane (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from industrial chemical factories
Ethylbenzene (ppb)	N	<0.5	<0.5	700	700	3/2019	Discharge from petroleum refineries
Styrene (ppb)	N	<0.5	<0.5	100	100	2/2017 3/2019	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	N	<0.5	<0.5	70	70	3/2019	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	N	<0.5	<0.5	200	200	3/2019	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	N	<0.5	<0.5	5	3	3/2019	Discharge from industrial chemical factories
Trichloroethylene (ppb)	N	<0.5	<0.5	5	0	3/2019	Discharge from metal degreasing sites and other factories
Toluene (ppm)	N	<0.5	<0.5	1	1	3/2019	Discharge from petroleum factories
Vinyl Chloride (ppb)	N	<0.3	<0.3	2	0	3/2019	Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)	N	<0.5	<0.5	10	10	3/2019	Discharge from petroleum or chemical factories