



Consumer Confidence Report for Calendar Year 2020

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		
AZ0412009	Valle Verde Water Company - East		
Contact Name and Title	Phone Number	E-mail Address	
Elle Schaumberg, Compliance Manager	602-795-8276	Compliance@southwesternutility.com	
<p>We want our valued customers to be informed about their water quality. If you would like to learn more, please contact Jason Long at 520-431-7723.</p>			

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 pick up 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):	Three wells that withdraw water from within the Santa Cruz River Watershed and a consecutive connection with the City of Nogales (AZ0412004).
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Consecutive Connection Sources

A public water system that received 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 AZ0412004 – City of Nogales provides us a consecutive connection source of water.

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 hydrogeological 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 hydrogeological conditions exist that make the source water susceptible to possible future contamination.

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) ppm x 1000 = ppb

ppq: Parts per quadrillion or Picograms per liter (pg/L) 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. Valle Verde Water Company - East 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.

Water Quality Data – Regulated Contaminants

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 (From GWR source) (coliphage, enterococci and/or E. coli)	N	0	N/A	0	0	Human and animal fecal waste	
<p>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.</p> <p>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.</p>							
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	0.57 ppm	0.33 – 1.38	4	0	12/2020	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	2.80 ppb	2.80	60	N/A	08/2020	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	7.10 ppb	3.10 – 7.10	80	N/A	01/2020 – 12/2020	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90th Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.36 ppm	0	1.3	1.3	07/2018	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	2.70 ppb	0	15	0	07/2018	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) <i>(This is Gross Alpha 4000)</i>	N	4.70 pCi/L	4.40 – 4.70	15	0	10/2018	Erosion of natural deposits
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	9.50 ppb	4.60 – 9.50	10	0	02/2015 – 06/2015	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.22 ppm	0.0077 – 0.22	2	2	02/2015 – 06/2015	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.66 ppm	0.25 – 0.66	4	4	02/2015 – 06/2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate ² (ppm)	N	1.50 ppm	1.50	10	10	04/2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	44 ppm	22 – 44	N/A	N/A	10/2018	Erosion of natural deposits
<p>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.</p> <p>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.</p>							
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
Tetrachloroethylene (ppb)	N	0.08 ppb	ND – 0.65	5	0	01/2020 04/2020 08/2020 12/2020	Discharge from factories and dry cleaners

Valle Verde Water Company – East has a consecutive connection with the City of Nogales (PWS 12-004).

City of Nogales

Water Quality Data – Regulated Contaminants

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 <small>(From GWR source) (coliphage, enterococci and/or E. coli)</small>	N	0	N/A	0	0	Human and animal fecal waste	
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	0.42 ppm	0.37 – 0.51	4	0	12/2020	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	2.00 ppb	ND – 5.30	60	N/A	01/2020 04/2020 07/2020 10/2020	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	19.00 ppb	0.65 – 32.00	80	N/A	01/2020 04/2020 07/2020 10/2020	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	0.20 ppm	0	1.3	1.3	09/2018	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	1.00 ppb	0	15	0	09/2018	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) <small>(This is Gross Alpha 4000)</small>	N	3.45 pCi/L	1.30 – 5.50	15	0	03/2020 05/2020 08/2020 12/2020	Erosion of natural deposits
Uranium (ug/L)	N	7.20 ug/L	7.20	30	0	05/2020	Erosion of natural deposits
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	7.00 ppb	4.00 – 9.30	10	0	03/2020 06/2020 09/2020 12/2020	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Fluoride (ppm)	N	0.51 ppm	ND – 0.51	4	4	11/2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate ² (ppm)	N	2.50 ppm	2.40 – 2.50	10	10	10/2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	27 ppm	26 – 27	N/A	N/A	11/2018	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.

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.

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
p-Dichlorobenzene (ppb)	N	0.13 ppb	ND – 0.51	75	75	2020	Discharge from factories and dry cleaners

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

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
Monitoring	Failure to monitor 1,1,1-Trichloroethane and 1,1,2-Trichloroethane in January 2018	December 2020	System was returned to compliance when 1,1,1-Trichloroethane and 1,1,2-Trichloroethane samples were submitted to ADEQ in December 2020
Monitoring	Failure to monitor 1,1-Dichloroethylene	December 2020	System was returned to compliance when 1,1-Dichloroethylene samples were submitted to ADEQ in December 2020

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.