

2022 Consumer Confidence Report

Water System Information

Water System Name: **Avila Valley Mutual Water Company (AVMWC)**

Report Date: **June 10, 2023**

Type of Water Source(s) in Use: **Surface Water and Groundwater Wells**

Name and General Location of Source(s): **Surface water sources are Lopez Lake Water Supply Project (Lopez) and Central Coast Water Authority (CCWA) Polonio Pass Water Treatment Plant. Groundwater wells (identified as Front Well and Back Well) are located in the apple orchard off of Bellevue Orchard Lane.**

Drinking Water Source Assessment Information: **A source assessment of the surface water sources was performed in 2001; Lopez Lake and Lopez Terminal Reservoir were found to be the most vulnerable to wastewater generation at the Lopez Recreation Area, livestock near the reservoirs, and a roadway that bisects the Terminal Reservoir. To date, these activities have not adversely impacted the WTP treated water quality. A copy of the assessment can be found at the San Luis Obispo County Public Works Department website or by contacting the Water Quality Laboratory at (805) 781-5111. Information on the State Water Project (CCWA) can be found at www.water.ca.gov/swp. Groundwater well source information is available from the SLO County Environmental Health Office.**

Time and Place of Regularly Scheduled Board Meetings for Public Participation: **Time and place of meetings varies; please contact Mitch Ardantz for meeting information at (805) 925-2478**

For More Information, Contact: **Mitch Ardantz at (805) 925-2478**

About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2022 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Avila Valley Mutual Water Company a 1010 East Grand Avenue, Arroyo Grande, CA 93420 o (805) 925-2478 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Avila Valley Mutual Water Company 以获得中文的帮助: 1010 East Grand Avenue, Arroyo Grande, CA 93420, (805) 925-2478.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Avila Valley Mutual Water Company, 1010 East Grand Avenue, Arroyo Grande, CA 93420 o tumawag sa (805) 925-2478 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Avila Valley Mutual Water Company tại 1010 East Grand Avenue, Arroyo Grande, CA 93420, (805) 925-2478 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Avila Valley Mutual Water Company ntawm 1010 East Grand Avenue, Arroyo Grande, CA 93420, (805) 925-2478 rau kev pab hauv lus Askiv.

Terms Used in This Report

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of 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. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	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)	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.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
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 picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

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, 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, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(In the year) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
AVMWC Lead (ppb)	2022	5	2.6	0	15	0.2	N/A – no schools within service area	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
AVMWC Copper (ppm)	2022	5	0.610	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
AVMWC Sodium (ppm)	6/9/2022	78.5	61 – 96	None	None	Salt present in the water and is generally naturally occurring
CCWA Sodium (ppm)	2022	76	N/A			
Lopez Sodium (ppm)	2022	40	N/A			
AVMWC Hardness (ppm)	6/9/2022	450	360 – 540	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
CCWA Hardness (ppm)	2022	127	104 – 158			
Lopez Hardness (ppm)	2022	438	410 – 470			

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
CCWA Aluminum (ppm)	2022	0.054	ND – 0.11	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Lopez Aluminum (ppm)	2022	ND	ND – 0.025			
AVMWC Arsenic – Raw Water (ppb)	2022 (various)	3.39	ND – 8.6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
AVMWC Arsenic – Treated Water (ppb)	2022 (various)	2.22	ND – 3.0			
Lopez Arsenic (ppb)	2022	5.3	3.4 – 6.0			
AVMWC Barium (ppm)	12/7/2022	0.16	0.14 – 0.18	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Lopez Barium (ppm)	2022	0.034	N/A			
AVMWC Free Chlorine Residual (ppm)*	2022 (various)	1.48	0.03 – 2.28	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	Drinking water disinfectant added for treatment
CCWA Total Chlorine Residual (ppm)	2022	2.80	0.21 – 3.70			
Lopez Free Chlorine Residual (ppm)¹	2022	4.41	4.28 – 4.55²			
Lopez Total Chlorine Residual (ppm)	2022	2.82	2.18 – 3.60			
Lopez Chlorite (ppm)	2022	0.568	0.28 – 0.86	1.0	0.05	Byproduct of drinking water disinfection
Lopez Chlorine Dioxide (ppb)	2022	136	ND – 390	[800 (as ClO ₂)]	[800 (as ClO ₂)]	Drinking water disinfectant added for treatment
AVMWC Fluoride (ppm)	12/7/2022	0.13	ND – 0.26	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lopez Fluoride (ppm)	2022	0.37	N/A			

Table 4. Detections of Contaminants with a Primary Drinking Water Standard, Continued

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
CCWA Gross Alpha Particle Activity (pCi/L)	2022	4.9	N/A	15	(0)	Erosion of natural deposits
Lopez Gross Alpha Particle Activity (pCi/L)	2022	3.0	1.08 – 4.92			
AVMWC Haloacetic Acids – HAA (ppb)	7/21/2022	32	N/A	60	N/A	Byproduct of drinking water disinfection
CCWA Haloacetic Acids – HAA (ppb)	2022	14	8.6 – 19.7			
Lopez Haloacetic Acids – HAA (ppb)	2022	22.2	15 – 36			
AVMWC Heterotrophic Plate Count – HPC – Raw Water (CFUs/ml)	2022 (various)	290.4	ND – 4,835	TT	N/A	Naturally present in the environment
AVMWC Heterotrophic Plate Count – HPC – Treated Water (CFUs/ml)	2022 (various)	10.0	ND – 83			
CCWA Heterotrophic Plate Count – HPC (CFUs/ml)	2022	2	ND – 98			
Lopez Heterotrophic Plate Count – HPC (CFU/ml)	2022	3.3	ND – 150			
AVMWC Nickel (ppb)	12/7/2022	3.35	2.8 – 3.9	100	12	Erosion of natural deposits; discharge from metal factories
CCWA Total Organic Carbon – TOC (ppm)	2022	2.9	1.9 – 4.5	TT	N/A	Various natural and manmade sources
AVMWC Total Trihalomethanes – TTHM (ppb)	7/21/2022	59	N/A	80	N/A	Byproduct of drinking water disinfection
CCWA Total Trihalomethanes – TTHM (ppb)	2022	52	43 – 69			
Lopez Total Trihalomethanes – TTHM (ppb)	2022	36.6	13 – 75			

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
CCWA Aluminum (ppb)	2022	5.4	ND – 11	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Lopez Aluminum (ppb)	2022	ND	ND – 25			
AVMWC Chloride (ppm)	6/9/2022	62	46 – 78	500	N/A	Runoff/leaching from natural deposits; seawater influence
CCWA Chloride (ppm)	2022	104	74 – 145			
Lopez Chloride (ppm)	2022	40	N/A			
AVMWC Color (units)	6/9/2022	25	10 – 40	15	N/A	Naturally-occurring organic materials
CCWA Color (units)	2022	ND	N/A			
Lopez Color (units)	2022	1	N/A			
AVMWC Iron – Raw Water (ppb)*	2022 (various)	1,113.6	ND – 2,300	300	N/A	Leaching from natural deposits; industrial wastes
AVMWC Iron – Treated Water (ppb)	2022 (various)	11.6	ND – 100			
AVMWC Manganese – Raw Water (ppb)*	2022 (various)	426.4	ND – 530	50	N/A	Leaching from natural deposits
AVMWC Manganese – Treated Water (ppb)	2022 (various)	3.4	ND – 28			
AVMWC Odor (TON)	6/9/2022	0.75	ND – 1.5	3	N/A	Naturally-occurring organic materials
Lopez Odor (TON)	2022	1.3	ND – 3.0			
AVMWC Specific Conductance (µS/cm)	6/9/2022	1,150	1,100 – 1,200	1,600	N/A	Substances that form ions when in water; seawater influence
CCWA Specific Conductance (µS/cm)	2022	701	585 – 937			
Lopez Specific Conductance (µS/cm)	2022	890	N/A			

Table 6. Detection of Contaminants with a Secondary Drinking Water Standard, Continued

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
AVMWC Sulfate (ppm)	6/9/2022	113	76 – 150	500	N/A	Runoff/leaching from natural deposits; seawater influence
CCWA Sulfate (ppm)	2022	96	N/A			
Lopez Sulfate (ppm)	2022	160	N/A			
AVMWC Total Dissolved Solids – TDS (ppm)	6/9/2022	710	630 – 790	1,000	N/A	Runoff/leaching from natural deposits
CCWA Total Dissolved Solids – TDS (ppm)	2022	380	N/A			
Lopez Total Dissolved Solids – TDS (ppm)	2022	610	N/A			
AVMWC Turbidity (NTU)	6/9/2022	26.5	19 – 34	5	N/A	Soil Runoff
CCWA Turbidity (NTU)	2022	0.06	ND – 0.25			
Lopez Turbidity (NTU)	2022	0.08	N/A			

Table 7. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
CCWA 2-Methylisoborneol (ppt)	2022	7.7	ND – 32	N/A	N/A
CCWA Hexavalent Chromium (ppb)	2022	0.067	N/A	³	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
CCWA Geosmin (ppt)	2022	0.3	ND – 2	N/A	N/A

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

¹Free chlorine was utilized from November 8, 2022 – November 29, 2022 as a routine maintenance procedure. This annual switchover of disinfectants helps to ensure water mains remain free of potentially harmful bacteria.

²Lopez WTP treated water was over 4.0 ppm on a single sample. MRDL regulations were met for Delivered [water] and Distribution samples.

³There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

Additional General Information on Drinking Water

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. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Avila Valley Mutual Water Company 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. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Iron and Manganese were found at levels that exceeded the secondary MCL (Maximum Contaminant Level) standards in samples collected prior to treatment. The secondary MCLs were set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high levels are most likely due to leaching from natural deposits and industrial wastes. The notification level for manganese is used to protect consumers from neurological effects. High levels of manganese in people have been shown to result in adverse effects to the nervous system. (The notification level for manganese is 500 ppb.) The results of iron and manganese samples collected following treatment were in compliance with the secondary MCL standards.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement**Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
AVMWC & Lopez Free Chlorine Residual	<p>Free chlorine was utilized by Lopez from November 8, 2022 – November 29, 2022 as a routine maintenance procedure. This annual switchover of disinfectants helps to ensure water mains remain free of potentially harmful bacteria. Lopez WTP treated water was over 4.0 ppm on a single sample. MRDL regulations were met for Delivered [water] and Distribution samples.</p> <p>During this timeframe, AVMWC staff recorded a chlorine residual that was lower than the required minimum of 0.20 mg/L. Staff suspects that changes in source water disinfection methods contributed to this occurrence.</p>	One Day	<p>Lopez WTP treated water was over 4.0 ppm on a single sample. MRDL regulations were met for Delivered [water] and Distribution samples.</p> <p>Staff adjusted the chlorine treatment system and collected distribution bacteriological samples to confirm that the water continued to be disinfected; results were non-detect for all coliforms, confirming that the water delivered to customers was disinfected appropriately.</p>	<p>Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose.</p> <p>Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.</p>