CITY OF AVENAL

"OASIS IN THE SUN GATEWAY TO THE COAST"

2023 Consumer Confidence Report

Water System Information

Water System Name: City of Avenal

Report Date: June 11, 2024

Type of Water Source in Use: Surface Water

Name and General Location of Source: California Aqueduct, Avenal cutoff road.

Drinking Water Source Assessment Information: The last assessment was conducted in April 2003. The source is considered most vulnerable to the following activities: vehicular traffic, recreational activities, influent drainages and storm water runoff.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: City Council meetings are held at the Avenal Theater on the 2nd and 4th Thursday of each month at 5:15 pm.

For More Information, Contact: Ronald Brumley, City of Avenal, Utilities Supervisor 559-386-5766

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, 2023 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 City of Avenal, 919 Skyline Blvd. Avenal, CA 93204 (559) 386-5766 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 City of Avenal 以获得中文的帮助: 919 Skyline Blvd. Avenal, CA 93204 (559) 386-5766

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa City of Avenal, 919 Skyline Blvd. Avenal, CA 93204 o tumawag sa (559) 386-5766 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 City of Avenal, 919 Skyline Blvd. Avenal, CA 93204 tại (559) 386-5766 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 City of Avenal, 919 Skyline Blvd. Avenal, CA 93204 ntawm (559) 386-5766 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 *E. coli* 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, 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, is 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 Lead and Copper

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

Lead and Copper	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	7/26/22-7/27/22	31	0	1	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	7/26/22-7/27-22	31	.533	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2. 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
Sodium (ppm)	10/20/23	42	42	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	10/19/23	97	97	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3. 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
Aluminum (mg/L)	10/20/23	81	81	1000	600	Erosion of natural deposits
Gross Alpha (pCi/L)	10/18/17	<3	<3	15	0	Certain minerals are radioactive and may emit forms of radiation known as photons and alpha radiation
Chemical or Constituent and reporting units	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
*TTHM's(total trihalomethanes) (ug/L)	1/10/23 to 10/3/23	56	30-56	80	N/A	Can be formed when chlorine used to disinfect drinking water reacts with naturally occurring organic matter
HAA5 (Sum of 5 haloacetic acids) (ug/L)	1/10/23 to 10/3/23	23	11-23	60	N/A	Can be formed when chlorine used to disinfect drinking water reacts with naturally occurring organic matter
Chloramines (mg/L)	1/3/23 to 12/26/23	1.87	0.2-3.0	4.0	4.0	Disinfectant added for the disinfection of drinking water
Chlorine (mg/L)	1/3/23 to 12/26/23	0.60	0.04-1.62	4.0	4.0	Disinfectant added for the disinfection of drinking water
Nitrate (mg/L)	10/18/23	0.76	0.76	10	10	Can occur from natural processes, and runoff or leakage from fertilized soil

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	Typical Source of Contaminant
Aluminum (ug/L)	10/20/23	81	81	50-200	Erosion of natural deposits
Chloride (mg/L)	10/18/23	63	63	250	Salty taste
Corrosivity (Langelier Index)	10/27/23	-1.8	-1.8	Non-corrosive	Metallic taste; corroded pipes/fixtures; staining
PH	10/19/23	6.8	6.8	6.5-8.5	Low PH: bitter metallic taste; corrosion. High PH: Slippery feel; soda taste; deposits
Conductivity @25C(uhmos/cm)	10/19/23	430	430	900	Caused by inorganic materials such as chlorides, alkalis, carbonate, sulfide compounds and dissolved salts.
Sulfate (mg/L)	10/18/23	55	55	250	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved solids (mg/L)	10/24/23	260	260	500	Runoff/leaching from natural deposits
Zinc (mg/L)	10/20/23	0.3	0.3	5	Runoff/leaching from natural deposits; industrial wastes

Table 5. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level
Molybdenum (ug/L)	2/10/14-1/15/15	2.3	18-2.7	N/A
Strontium(ug/L)	2/10/14-1/15/15	295	275-345	1500
Vanadium (ug/L)	2/10/14-1/15/15	2.8	2.2-3.4	15
Chlorate (ug/L)	2/10/14-1/15/15	398	210-660	800
HAA9 (ug/L)	5/7/19-11/5/19	35.34	25.17-49.2	N/A
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**
Potassium (mg/L)	10/19/23	3.5	N/A	N/A
Calcium (mg/L)	10/19/23	20	N/A	N/A
Magnesium (mg/L)	10/19/23	11	N/A	N/A

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).

Lead-Specific Language: 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. The City of Avenal 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 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.

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
DBP-TTHM	During the drought of 2021-2022 raw water the City of Avenal receives from the California aqueduct was of poor quality, causing the water treatment plant to have issues reducing the level of TTHM's. As the raw water quality improved the water plant was able to drop the level of TTHM's under the MCL. The 3rd quarter of 2021 was the first	All sites during 2023 were under the MCL limit. 4th quarter of 2022 was the last Locational Running Annual Average sample over the MCL	Maximized treatment capabilities combined with better raw water quality. A grant for technical assistance was received. The City of Avenal has since started working with Provost and Prichard, an engineering firm, on a plan to resolve the TTHM issue. Timeline for the development and	Some people who drink water containing TTHMs in excess of the MCL over many years may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer
	quarter the was out of compliance in over 4 years.		implementation of the plan is estimated to be July 2026.	

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique [(a)] (Type of approved filtration technology used)	Conventional Filtration (mixed media)
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.30 NTU in 95% of measurements in a month. 2 – Not exceed 0.30 NTU for more than eight consecutive hours. 3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.29
Number of violations of any surface water treatment requirements	0

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.