2023 Annual Drinking Water Quality Report

SPRINGVILLE PUBLIC UTILITY DISTRICT

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 – December 31, 2023 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. Our water source is from the Tule River. Treatment is provided by an in-line filtration plant using coagulation, flocculation, sedimentation, dual media filters and chlorination. This treatment is classified as an alternative technology by State Water Resources Control Board-Division of Drinking Water. A permanent alternative Tule River supply diversion facility is also in operation.

A source water assessment was conducted for the surface water source of the Springville Public Utility District water system in February 2003. The water source is considered most vulnerable to the following activities not associated with any detected contaminants: recent burn areas, recreational areas, and septic systems – low density. The District also completed a sanitary survey report which was updated in 2014. A copy of the complete assessment and survey report may be viewed at: Springville Public Utility District, 35559 Hwy 190, Springville, CA 93265. If you would like a summary of the assessment or survey report sent to you or if you have any questions about this report or concerning your water utility, please contact Mr. Jim Peacher, Chief Plant Operator at 559/539-2869.

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 2nd Monday of every month at 6:00 p.m., at the Springville Public Utility District office located at 35559 Highway 190, in Springville.

The following are definitions of some of the TERMS USED IN THIS REPORT:

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 (USEPA).

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.

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, MRDLs and treatment techniques (TT) for contaminants that affect health along with their monitoring and reporting requirements.

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.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

N/A: Not applicable
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 picograms per liter (pg/L)
pCi/L: picocuries per liter (a measure of radioactivity)

In general, sources of drinking water (both tap water and bottled water) may 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.

Constituents that may be present in source water to contamination levels 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 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (State Water Board/DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. US Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that must provide the same protection for public health.

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. Springville Public Utility 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. 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 or at http://www.epa.gov/lead.

The tables below and on the following page list all the drinking water constituents that were detected during the most recent samplings for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The State Water Board/DDW allows us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are therefore more than one year old.

SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique	Turbidity Performance Standards (TPS) *	Lowest monthly percentage of samples that met the TPS	Number of Months in Violation	Highest single measurement during the year
In-line Filtration Treatment with Chlorination	Turbidity of the filtered water must be less than or equal to 0.1 NTU in 95% of measurements in a month. Turbidity of the filtered water must not exceed 1.0 NTU.	22.5% (August)	5 (a)	0.324

* Turbidity (measured in NTU) is a measurement of the cloudiness of water and is an indicator of filtration performance. Filtration which meets performance standards is demonstrated by meeting turbidity requirements.

(a) The State Water Board/DDW issued a citation (Citation no. 03-12-23C-022) on October 19, 2023.

TT Violation	Explanation	Length	Steps taken to Correct the Violation	Health Effects
Turbidity Performance Standard (TPS)	Excessive runoff in the Tule River caused a change in water quality that resulted in the reduced effectiveness of the chemical treatment and in-line filtration process.	Five (5) months	Turbidity measurements failed to comply with the TPS for the months of May, June, July, August and September, 2023. The District monitored chlorine levels and adjusted them as needed. Untreated and treated water samples were tested for the presence of coliform bacteria. The District continued to add chemicals to reduce turbidity. The filters were inspected and cleaned. The system returned to compliance on September 14, 2023.The District completed public notification on November 1, 2023.	Turbidity has no health effects. However, high levels of 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.

SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants			MCL	MCLG	Typical Source of Contamination
Water Supply (Distribution System)	**Highest No. of detections**	**No. of Months in violation**			
E. coli	(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.

E. Coli/Fecal Coliform: E. coli/Fecal coliforms are bacteria whose presence indicate that water may be contaminated with human or animal wastes.

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

The District collects 2 samples each month in the water supply (distribution) system.

RADIOACTIVE CONTAMINANTS

Chemical or Constituent (and reporting units)	MCL	PHG (MCLG)	Sample Date	Level Detected	Range	Typical Source of Contamination
Gross Alpha Activity (pCi/L)	15	N/A	2023	4.19	N/A	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	2023	3.0	N/A	Erosion of natural deposits

TEST RESULTS (A)

Lead and Copper Rule	No. of samples collected	PHG	Action Level	90th percentile level detected	No. Sites Exceeding Action Level	Number of Schools Requesting Lead Sampling	Typical Source of Contamination
Lead (ppb) (2022)	10	0.2	15	ND	0	1 (Completed in 2019)	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) (2022)	10	0.3	1.3	0.060	0	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Constituent	MCL	PHG [MCLG]	Sample Date	Level Detected	Typical Source of Contamination
Aluminum (ppm)	1	0.6	9/19/23	0.36	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	10	0.004	9/19/23	2.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1	2	9/19/23	0.13	Discharges of oil drilling wastes; erosion of natural deposits
Fluoride (ppm)	2	1	9/19/23	0.14	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Constituent	MCL	Sample Date	Level Detected	Typical Source of Contamination
Aluminum (ppm)	0.30	9/19/23	**0.36 (B)**	Erosion of natural deposits; residue from some surface water treatment processes
Chloride (ppm)	500	9/19/23	6	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	9/19/23	15	Naturally-occurring organic materials
Iron (ppb)	300	9/19/23	**510 (B)**	Leaching from natural deposits; industrial wastes
Manganese (ppb)	50	9/19/23	49	Leaching from natural deposits
Specific Conductance (µS/cm)	1600	9/19/23	320	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	9/19/23	4.7	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	1000	9/19/23	230	Runoff/leaching from natural deposits
Turbidity (Units)	5	9/19/23	4.00	Soil runoff

DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS

Chemical or Constituent (and reporting units)	MCL [MRDL]	PHG	MCLG [MRDLG]	Sample Date	Running Annual Average	Range	Major Sources in Drinking Water
TTHM [Total Trihalomethanes] (ppb)	80	N/A	N/A	2023	41.2 to 54.3	41.2 to 54.3(C)	Byproduct of drinking water chlorination
HAA5 [Haloacetic Acids](ppb)	60	N/A	N/A	2023	37.7 to 47.8	37.7 to 47.8 (D)	Byproduct of drinking water disinfection
Chlorine as Cl_2 (ppm)	[4.0]	N/A	[4]	2023	0.92	0.22 to **8.29 (E)**	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or stomach discomfort

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Constituent	MCL	PHG [MCLG]	Sample Date	Level Detected	Typical Source of Contamination
Hardness (ppm)	None	None	9/19/23	130	Generally found in ground and surface water
Sodium (ppm)	None	None	9/19/23	13	Generally found in ground and surface water

Springville Public Utility District
35559 Highway 190
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93265

(A) Results reported due to regulatory requirement or detection of a constituent. ND – Non-detect.
(B) **ABOUT SECONDARY DRINKING WATER STANDARDS:** Aluminum and Iron were found in the source waters at levels exceeding the Secondary MCLs. These MCLs are set to protect you against unpleasant aesthetic affects such as color, taste, odor or appearance of drinking water and/or the staining of plumbing fixtures, such as tubs and sinks, and clothing while washing. The elevated levels are typically due to leaching of natural deposits.
(C) ABOUT TOTAL TRIHALOMETHANES (TTHMs): Some people who drink water containing Total Trihalomethanes 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.
(D) ABOUT HALOACETIC ACIDS (HAA5s): Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.
(E) ABOUT CHLORINE: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or stomach discomfort.

Additional General Information On Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk. More information about constituents, contaminant levels and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1/800/426-4791 or their website https://www.epa.gov/dwreginfo/drinking-water-regulation.

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 and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1/800/426-4791.