

Santa Clara Pueblo 2023 Drinking Water Quality Report (Distributed June 2024)

The Santa Clara Pueblo Office of Environmental Affairs presents to the Pueblo community in this June 2024 community newsletter the annual drinking water system Consumer Confidence Report (CCR) that is required for public drinking water systems in the United States by the Safe Drinking Water Act (SDWA). This report contains information on the community water system and details contaminants monitored through routine sampling January — December 2023. The Public Water System number for the Santa Clara Pueblo community system is 063500166. Twenty-four (24) samples for total coliforms, an indicator bacterium, were collected from the system in 2023 calendar year. None of the samples tested positive for Coliform bacteria. Other contaminants are detailed in the attached drinking water quality table.

Do I need to take special precautions?

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. 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 Water Drinking Hotline (800-426-4791).

Where does my water come from?

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.

Drinking water for the Santa Clara Pueblo water system is produced by two wells that are disinfected with chlorine to get rid of dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. The treated water flows through two storage tanks before entering the distribution system. Because the water source is groundwater, surface runoff contamination of the Pueblo drinking water system is not as high a risk.

Source water assessment and its availability

A Source Water Assessment Report is available for the Santa Clara Pueblo water system was

completed in 2001 and has not been updated since then. Based on the factors discussed in the report, the water system was determined to have a MEDIUM susceptibility to contamination. To view a copy of the Report, you may contact the environmental office at 505-753-7326.

Why are there contaminants in my 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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, which 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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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.

How can I get involved?

The community may address any questions and concerns to the Santa Clara Office of Environmental Affairs, Governor's Office, Utility and Special Projects/Planning office. Community members are also able to express concerns or comments through their Tribal Council Representative and are encouraged to participate in general community meetings.

Protection of water sources begins at home with proper disposal of pesticides, oils, chemicals and other hazards. Management of animal wastes to prevent storm water runoff from carrying the waste into water channels is another important factor in the protection of Pueblo drinking water sources.

The water in the community drinking water system during this reporting period was safe to drink.

Santa Clara Pueblo Drinking Water Quality Data Tables

The table below lists all of the drinking water contaminants detected during the 2023 calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently, therefore the latest results for some contaminants may be older.

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.076	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	ND	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Drinking Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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 allow for a margin of safety.

Maximum residual disinfectant level (MRDL): The highest level of a disinfectant allowed in drinking water. MRDLs are calculated using the Running Annual Averages (RAA). 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.

NA: Not applicable.

ppb: Micrograms per liter(ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: Milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water.

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

pCi/L: Picocuries per liter (a measure of radioactivity)

ND: Not detected

NR: Monitoring not required but recommended

90th Percentile: A value at which 90% of all samples collected tested at or below this value

Variances and Exemptions: State of EPA permission not to meet an MCL or a treatment technique under certain conditions

2023 Regulated Contaminants Detected

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2023	0.30 Avg	0.01 – 0.61	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Total Trihalomethanes (TTHM)	2023	1.13	1.13 - 1.13	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic*	2022	1.8	1.8 - 1.8	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2022	0.1	0.1 - 0.1	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2022	0.4	0.4 - 0.4	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	1	0.68 - 0.68	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2022	2.3	2.3 - 2.3	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Sodium	2023	61	61-61			mg/L	N	Erosion of Natural Deposits
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	12/02/2019	5.3	5.3 - 5.3	0	50	pCi/L	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	12/02/2019	ND	ND	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	12/02/2019	14	14 - 14	0	30	ug/l	N	Erosion of natural deposits.

^{*}Arsenic - While the drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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.

Violations Table

Ground Water Rule						
The Ground Water Rule specifies the appropriate use of disinfection while addressing other components of ground water						
systems to ensure public health protection.						
Violation Type	Violation Begin Violation End Violation Explanation					
FAILURE	09/01/2019	OPEN	Did not properly respond to significant			
ADDRESS			deficiencies in the water system identified during			
DEFICIENCY			sanitary surveys. Significant deficiencies are listed			
(GWR)			in the table below.			

Significant Deficiency	Date identified	Anticipated Correction Date	What is being done?
There are an unknown number of Air Relief Valves (ARVs) that terminate below-grade in vaults throughout the Pueblo in addition to those found during the 2019 Sanitary Survey.	8/4/2022	6/30/2025	The water system plans to purchase and install air relief valve backflow preventers on all below-grade ARVs. The water system has completed an inventory of all ARVs in the distribution systems and plans to apply for funding to order and install the required devices that are currently scarce due to supply availability issues.
Wells 1, 7, 8 and pumphouse/treatment house do not have auxiliary power.	8/4/2022	12/31/2024	The water system plans to apply to for funding to purchase and fund a contractor to install the auxiliary power source that is expected to be a high-power generator.

For more information, please contact:

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