ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By

CITY OF TEHACHAPI
CALIFORNIA

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: 1510020

Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education, while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

> "We remain vigilant in delivering the best-quality drinking water"

Where Does My Water Come From?

The City of Tehachapi uses only groundwater pumped from the Tehachapi Basin aquifer; no surface or imported water is used for direct consumption. Six active deep wells within the city continually refill five million gallons of storage facilities and the 40 miles of transmission lines that bring water to homes, schools, and businesses served by our system.

The city operates five pressure zones, four of which are used and tested. Weekly bacteriological testing is done in all four zones as well. A free chlorine residual of 0.15 - 2.20 mg/l (parts per million) is maintained throughout the distribution system.

Misc. Water System Information

Of the six active wells operated by the city, one is equipped with standby power for use in case of an emergency. However, two other wells can run on portable generators if needed. These wells are designed so that water can be diverted in different directions in the event of a catastrophic line rupture. The city also has a portable generator for use at a second well or at the booster station located at the Curry Street Tank Site.

Testing

The city of Tehachapi performs water quality testing in accordance with all federal and state criteria. Although comprehensive testing was done in 2018, only detected contaminants will be reported in this report.

The City's water sampling (both chemical and bacteriological) is done by a state-certified water treatment plant operator and analyzed by a state-certified laboratory to ensure accuracy in testing.

QUESTIONS? For more information about this report, or for any questions related to your drinking water, please call Tyler Napier, Deputy Public Works Director, at (661) 822-2200, ext. 507, or via email at tnapier@tehachapipw.com.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (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. 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.

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 can result from urban storm-water 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 storm-water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban storm-water runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

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

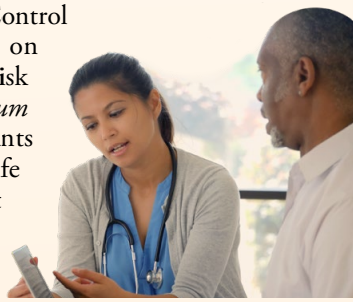
Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. To access the details of the monthly City Council meetings, please visit the city's website at www.liveuptehachapi.com.

Important Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health-care provider.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.



Source Water Assessment

The City of Tehachapi conducted a water source assessment and protection program. The assessment for the Mojave Well identified vulnerabilities from activities located near the drinking water source. The source is considered most vulnerable to sewer collection systems and to a historic gas station within the 5- and 10-year times of travel. The source has a 100-foot sanitary seal and a depth of 182 feet to the uppermost perforation. Any microbiological activity would have to travel this vertical distance to the aquifer before it could begin horizontal travel to the well. The gas station has not had any problems associated with it, and no gas products have ever been detected in the Mojave Well.

For the Dennison Well, again, no contaminants above the MCL have been detected in the water supply; however, the assessment identified vulnerabilities from activities located nearby. These vulnerabilities include high-density housing and the close proximity of other supply wells, which violates specifications requiring distances far enough so that contaminants would take a minimum of two years to reach the water supply. Both of these vulnerabilities pose a relatively low-ranking risk, as does potential leaching from gas stations--both active and historic--and confirmed leaking from a tank within the 10-year time of travel. No contaminants above the MCL have been detected in the water supplied from Curry Well. The assessment noted that the water supply is still considered vulnerable to activities located near the drinking water source.

Minton Well's supply was assessed, and no contaminants above the MCL were found, though it is still considered vulnerable to activities located near the drinking water source.

No contaminants above the MCL have been detected in the water supplied from Wahlstrom Well. The assessment considers the source to be vulnerable to activities located near the drinking water supply.

Pinon Well is considered most vulnerable to septic systems--both low density and sewer collection systems. No contaminants above the MCL have been detected in the water supply; however, the source is considered vulnerable to activities located near the drinking water source. This source has a very deep 300-foot sanitary seal. In addition, the depth to the uppermost perforation is 400 feet. Any microbiological activity would have to travel this vertical distance to the aquifer before it could begin horizontal travel to the well. A copy of the complete assessment may be viewed at the City of Tehachapi, 115 South Robinson Street, Tehachapi, CA 93561.

Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

> For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,2,3-Trichloropropane [1,2,3-TCP] (ppt)	2018	5	0.7	0	0–0	No	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agent; byproduct from production of other compounds and pesticides
Barium (ppb)	2018	1	2	79.17	43–100	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2020	[4.0 (as Cl2)]	[4 (as Cl2)]	1.34	0.29–2.2	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2018	2.0	1	0.27	0.0171–0.57	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2015	15	(0)	1.89	0.767–4.34	No	Erosion of natural deposits
Nitrate [as nitrogen] (ppm)	2020	10	10	6.41	5.80–7.40	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2018	50	30	1.35	0.0–3.0	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	2.1	0–4.2	No	By-product of drinking water disinfection

Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2019	1.3	0.3	0.096	0/20	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2019	15	0.2	<1.0	0/20	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2018	500	NS	22.50	10–43	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2018	300	NS	10	0–61	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2018	50	NS	<10	<10–<10	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2018	1,600	NS	488	416–578	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2018	500	NS	39	31–55	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2018	1,000	NS	333	290–400	No	Runoff/leaching from natural deposits

UNREGULATED AND OTHER SUBSTANCES [1]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Bicarbonate (ppm)	2018	186	160–230
Calcium (ppm)	2018	61	39–82
pH (Units)	2018	7.99	7.96–8.03
Potassium (ppm)	2018	1.2	1.0–1.6
Sodium (ppm)	2018	35.6	26–48
Total Hardness (ppm)	2018	185	120–250

[1] Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.