2017

Consumer Confidence Report

Bear Valley Community Services District

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

"CONFIDENCE" is the key word. This Consumer Confidence Report is intended to do just that – increase your confidence in the quality of drinking water delivered to you by Bear Valley C.S.D. This report is a snapshot of last year's quality. Included are details about where your water comes from, what it contains and how it compares to State standards. Please remember we are always available to assist you should you ever have questions or concerns about your water.

Over the years, we have dedicated ourselves to delivering drinking water that meets all State and Federal standards. As new challenges to drinking water regulations emerge, we remain vigilant in meeting the goals of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

YOUR WATER SYSTEM obtains its drinking water from underground aquifers from both Bear Valley Springs and Cummings Valley. The system relies on a combination of natural disinfection of source water for its wells by flow through the ground structure and continuous chlorination for disinfection to protect against microbial contaminants. The District's water department serves 6,800 customers from a system comprised of 110 miles of water lines, 20 active ground water wells, and 43 storage tanks with a total storage capacity of 4.57 million gallons.

You can help protect your water supply by following label instructions when using lawn and garden chemicals. When disposing of household chemicals, used oil, paint and other hazardous waste, contact the Kern County Environmental Health Department at (661) 335-7315. Please do not pour hazardous materials down drains or your back yards, and be conscious of our fragile watershed areas when hiking, fishing or enjoying other outdoor activities. While enjoying our beautiful outdoors, please be aware that pets, litter and human waste may contaminate the water supply and may cause great harm to those residents who drink the water.

You are invited to attend our regular Board of Directors meetings held on the second Thursday of the month at 6:00pm at the District office. Please feel free to participate in these meetings. The Bear Valley Community Services District office is located at 28999 S. Lower Valley Rd. and is open Monday through Friday from 8:00 a.m. to 4:30 p.m. Our phone number is (661) 821-4428. For questions regarding your water quality.

Constituents that May be in Water:

The sources of drinking water (both tap 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 constituents resulting from animal or human activity. In order to insure that the tap water is safe to drink, the US Environmental Protection Agency (USEPA) and the State Department of Health Services (OHS) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The DHS regulations also establish limits for contaminants in bottled water, providing the same protections for the public health. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the 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. These can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining or farming.
- *Pesticides and Herbicides* which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- *Organic chemical contaminants* include synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, gas stations, urban storm water runoff, agricultural application and septic systems.
- *Radioactive contaminants* can be naturally occurring or be the result of oil and gas production and mining activities.

Important Health Information Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as those undergoing chemotherapy, organ transplants, individuals with HIV/ AIDS or immune disorders, infants and elderly can be particularly at risk of infections. These individuals should seek advice about drinking water from their health care providers. The USEPA/Center for Disease Control guidelines and 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) or http://water.epa.gov/drink/hotline

Irrigate landscape, Not Roadways! Be conservative while watering outside. Drip irrigation systems are a low-flow way to water landscapes. Soaker hoses or hand watering are a less expensive alternatives and a great way to water narrow strips or oddly shaped gardens to prevent overspray from sprinklers. You can also install devices that shut off automatic sprinklers when it senses rain. The key to proper outside irrigation is not to allow water to run off landscape or flow into gutters. The roadways don't need water!

Should I Use a Home Treatment Device? Your water is safe to drink straight from the tap. If you decide to install a home device, please be advised that you must properly maintain it or you may, in fact, make your water unsafe. The District does have hard water. Because of this, many residents may choose to install a water softener system. Sodium or potassium exchange systems are the only method known to work effectively. Despite the presence of hard water, rest assured that hard water does not threaten the overall quality of health for residents receiving water.

Definitions of Terms Used in this Report

- *Maximum Contaminant level (MCl):* The highest level of contaminant allowed in drinking water. Primary MCls are set as close to the PHGs (or MClGs) as is economically and technologically feasible.
- *Maximum Contaminant level Goal (MClG):* The level of contaminant in drinking water below which there is no known or expected risk to health. MClGs are set by the USEPA.
- *Maximum Residual Disinfectant level (MRDl):* The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- *Maximum Residual Disinfectant level Goal (MRDlG):* The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDlGs are set by the USEPA.
- *Primary Drinking water Standards (PDWS):* MCls for contaminants that affect health along with 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 USEPA.
- *Regulatory Action level (Al):* The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water purveyor must follow.
- *Secondary Drinking Water Standards (SOWS):* MCls for contaminants that affect taste, odor or appearance of the drinking water. SDWS contaminants do not affect health at the MCl level.

ABBREVIATIONS USED IN THIS REPORT

NA: not applicable
ND: not detected at testing level
ppm: parts per million or milligrams per liter (mg/L).
(ppm is equivalent to 1 second in 115 days)
ppb: parts per billion or micrograms per liter (ug/l).
ppt: parts per trillion or nanograms per liter (ng/l).
pCi/L: Picocuries per liter (a measure of radiation).

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) And the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain Contaminants in water provided by public water systems. The DHS regulations also establish limits for Contaminants in bottled water that must provide the same protection for the public health.

All drinking water including ***Bottled Water*** may be reasonably expected to contain at least small amounts of some contaminants. The presence of these 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791)

Tables 1, 2, 3, 4, and 5 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 allows us to monitor for certain contaminants less then once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of water quality, are more than a year old

TABLE 1 - MICROBIOLOGICAL

Microbiological Contaminants	MCL	PHG (MCLG)	Highest number of detections	Number of months in violation	Typical source of bacteria
Total Coliform Bacteria	No more than one positive monthly sample	0	In a month 0	0	Naturally present in the environment
Fecal Coliform or E. Coli	A routine sample and a repeat sample are total Coliform positive and one of these is also fecal Coliform or E. Coli positive	0	In the year 0	0	Human and animal fecal waste

TABLE 2 – LEAD AND COPPER

Lead and Copper	Action Level (AL)	PHG (MCLG)	90th Percentile Detected	Number of sites Sampled	Number of samples exceeding (AL)	Typical source of contaminant
LEAD (ppb)	0.015	2	ND	20	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
COPPER (PPM)	1.3	0.17	0.22	20	0	Internal corrosion of household water plumbing systems; leaching from wood preservatives; erosion of natural deposits

The Lead and Copper results are from the 2017 sampling, and are scheduled to be taken in 2020.

TABLE 3 – SODIUM AND HARDNESS

Chemical or constituent (and reporting units)	MCL	PHG (MCLG)	Level Detected (average)	Range of Detection	Typical source of contaminant
Sodium (ppm)	None	None	34.5	27-42	Generally found in ground and surface water
Hardness (ppm)	None	None	203.75	130-310	Generally found in ground and surface water

TABLE 4 – PRIMARY DRINKING WATER STANDARDS

Radioactive Contaminants	Units	MCL	PHG (MCLG)	Level Detected (average)	Range of Detections	Violation (Yes/No)	Typical source of contaminant
Gross Alpha Activity	pCi/L	15	0	16.9	2.77-29.2	No	Erosion of natural deposits
Uranium	pCi/L	20	0.5	13.5	1.5-22	No	Erosion of natural deposits
Combined radium (226 & 228 (total)	pCi/L	5	(0)(b)	2.14	ND -3.91	No	Erosion of natural deposits
Inorganic Contaminants	**Units**	**MCL**	**PHG (MCLG)**	**Level Detected (average)**	**Range of Detections**	**Violation (Yes/No)**	**Typical source of contaminant**
Arsenic	ppb	10	NA	8.98	ND -9.8	No	Erosion of natural deposits, runoff from orchards; glass and electronics production wastes
Nitrate As N	mg/L	10	10	3.95	ND - 8.8	No	Runoff from leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

Disinfection Byproducts	Units	MCL	PHG (MCLG)	Level Detected (average)	Range of Detections	Violation (Yes/No)	Typical source of contaminant
TTHM's (Total Trihalomethane's)	ppb	80	NA	15.9	ND-70	No	Byproduct of drinking water Disinfection
HAA5's (Haloacetic Acids)	ppb	60	NA	5.7	ND – 9.4	No	Byproduct of drinking water Disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Constituent	Units	MCL	PHG (MCLG)	Level Detected (average)	Range of Detections	Violation (Yes/No)	Typical source of contaminant
Iron	ppb	300	NA	32.	ND-160	No	Leaching from natural deposits; industrial waste
Total Dissolved Solids (TDS)	mg/L	1000	NA	336.6	240-490	No	Runoff / Leaching from natural deposits
Sulfate	mg/L	500	NA	34.6	27 - 42	No	Runoff / Leaching from natural deposits; natural waste
pH (1)	Ph Units		NA	7.8	7.5 -8.2	No	

Note: *There are no PHGs or MCLGs for constituents with secondary drinking water standards because these are not health-based levels. Secondary MCLs are established by the DHS and address taste, odor, or appearance of drinking water.*

SUMMARY INFORMATION FOR CONTAMINANTS

Nitrate Information:
Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. High nitrate levels above 45 mg/L 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. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant or are pregnant, you should ask advice from your health provider.

Arsenic:
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.

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

Radionuclide in Groundwater:
Uranium and Gross Alpha were detected at the concentrations above the Primary MCL in four (2) active wells. These wells exhibit slightly elevated concentrations and have been on an expedited sampling program since 2011. Radium 226/228 was taken and did not exceed the MCL.

Certain minerals are Radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer Naturally occurring uranium has been detected in groundwater throughout many areas of California, particularly in areas that have deep bedrock wells where the uranium leaches into groundwater from natural mineral deposits within the bedrock. Areas with an abundance of uranium mineralization, and where uranium concentrations have been detected in water-supply wells above the MCL, include Kern County, San Bernardino County, and Riverside County.

Some people who drink water containing Uranium in excess of the MCL over many years may have kidney problems or increased risk of getting cancer.Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have increased risk of getting cancer.