2020 Water Quality Report for Lake Hemet Municipal Water District

ESTE INFORME CONTIENE INFORMACIÓN MUY IMPORTANTE SOBRE SU AQUA PARA BEBER. FAVOR DE COMUNICARSE LAKE HEMET MWD PARA ASISTIRLO EN ESPAÑOL.

We test the drinking water 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, 2020 and may include earlier data.

There are ten wells located along the San Jacinto River from Valle Vista to San Jacinto that supply most of your drinking water. In 2020, 1.8% of domestic production was purchased from Eastern Municipal Water District (EMWD). Complete 2008 drinking water source assessments for all ten wells and our 2017 Sanitary Survey are available upon request at our district office located at 26385 Fairview Ave. Hemet, CA 92544 (951-658-3241) or from the State Water Resources Control Board, Drinking Water Field Office, 1350 Front Street, Room 2050, San Diego, CA 92101 (619-525-4159). The 2008 assessments determined our sources are most vulnerable to sewer collection systems, septic systems, agricultural and/or irrigation wells, and high-density housing.

LHMWD invites public participation at our monthly board meeting held at 3:00 PM on the third Thursday of every month at the LHMWD district office, 26385 Fairview Ave. Hemet, 92544. For more information contact Kristen Frankforter, 951-658-3241 ext.245 or email kfrankforter@lhmwd.org.

Lake Hemet MWD treats all its ground water sources with chlorine disinfectant, either in liquid or tablet form. This is the only treatment added to the water we provide. There are 2 tie-ins to EMWD water, which also comes from local ground water sources and is treated similarly.

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. USEPA/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).

Nitrate in drinking water at levels above 10 mg/L 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 skin. Nitrate levels above 10 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. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

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. LHMWD 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.

In order to ensure that tap water is safe to drink, the USEPA 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 bottles water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health website.
https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx

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 substances resulting from the presence of animals or from human activity.

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

*Contaminants that may be present in source water include: **Radioactive contaminants** that can be naturally-occurring or be the result of oil and gas production or mining activities; **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 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 that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, agricultural applications, and septic systems.*

Unregulated contaminant monitoring helps USEPA and the State Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

Terms and Abbreviations 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.
Primary Drinking Water Standard (PDWS): MCLs, MRDLs and treatment techniques (TTs) 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 drinking water. Contaminants with SDWSs do not affect health at MCL levels.
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. MRGLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
ND: Not detectable at testing limit **NTU**: Nephelometric Turbidity Unit: a measure of turbidity
Parts per Billion (ppb): micrograms per liter (µg/L) is approximate to about one second in 32 years.
Parts per Million (ppm): milligrams per liter (mg/L) is approximate to about one second in 11.5 days,
Parts per Trillion (ppt): nanograms per liter (ng/L) is approximate to about three seconds in 100,000 years.
Parts per Quadrillion (ppq): pictograms per liter (pg/L) is approximate to 2.5 minutes in the total age of the earth or 2.5 billion years.
Picocuries per liter (pCi/L): a measure of radiation
Microsiemens per centimeter (µS/cm): a measure of conductivity

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The following tables list all the drinking water contaminants that were detected during the most recent sampling. 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, although representative of the water quality, are more than one year old.

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 costs 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.

Results for water purchased from Eastern Municipal Water District (EMWD) are listed in braces {} in the tables below.

SAMPLING RESULTS FOR COLIFORM BACTERIA

Microbiological Contaminants	Sample Date	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	2020	(in a month) Zero	Zero	5% of monthly samples are total coliform positive	0	Naturally present in the environment
Fecal Coliform or *E.coli* (state Total Coliform rule)		(in the year) Zero	Zero	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E.coli positive		Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)		(in the year) Zero	Zero	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 sample for E.coli	0	Human and animal fecal waste

SAMPLING RESULTS FOR LEAD AND COPPER

Lead and Copper	Sample Date	No. samples collected	90th percentile level detected	N. sites exceeding AL	No. of schools requesting lead sampling	AL	PHG	Typical source of contaminant
Lead (ppb)	2019	31	ND	Zero	Zero*	15	0.2	Internal corrosion of household water plumbing systems; erosion of natural deposits
Copper (ppm)	2019	31	0.2	Zero	N/A	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

*LHMWD and Hemet Unified School District tested drinking water fountains and food-prep sinks in all K-12 public schools in 2018 and there were no detectable levels of lead found.

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent	Sample Date	Level Detected {EMWD}	Range of Detections {EMWD}	MCL	PHG	Typical Source of Contaminant
Sodium (ppm)	2019-20	43 {38}	21-92 {26-91}	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2019-20	152 {160}	49-210 {97-290}	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

DETECTION OF UNREGULATED CONTAMINANTS

Contaminant	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Hexavalent Chromium (ppb)	2019-20	ND	ND -2.1	* (PHG = 0.02)	---
Total Organic Carbon [TOC] (ppm)	2018	0.38 {0.3}	ND – 1.2 {ND-0.8}	---	---
Vanadium (ppb)	2019-20	15.6	3.4 – 74	50	Exposures resulted in developmental and reproductive effects in rats

*There is currently no MCL for Hexavalent Chromium. The previous MCL of 10 ppb was withdrawn on Sept. 11, 2017.

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Contaminant (reporting units)	Sample Date	Level Detected {EMWD}	Range of Detections {EMWD}	MCL [MRDL]	PHG [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	2019-20	ND {ND}	ND - 7.6 {ND-3.0}	10	0.004	Erosion of natural deposits; orchard run-off
Barium (ppm)	2019-20	ND {ND}	ND - 0.17 {ND-0.14}	1	2	Erosion of natural deposits
Fluoride (ppm)	2019-20	0.3 {0.2}	ND - 0.4 {0.1-0.4}	2	1	Erosion of natural deposits; discharge from fertilizer factories
Gross alpha particle activity (pCi/L)	2012-20 {2016-19}	4.0 {ND}	ND - 8.4 {ND-7.1}	15	0	Erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	2020	2.2 {1.0}	0.5-6.4 {ND-3.4}	10	10	Runoff/leaching from fertilizer use, septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2019-20	ND {ND}	ND-7.6 {ND-12}	50	30	Discharge from petroleum, glass & metal refineries; erosion of natural deposits; runoff from livestock lots (feed additive)
Uranium (pCi/L)	2016-17	3.1 {2.4}	ND - 4.6 {1.1-5.8}	20	0.43	Erosion of natural deposits
Chlorine (ppm)	2020	1.3	0.3-2.25	[4.0 as Cl2]	[4.0 as Cl2]	Drinking water disinfectant added for treatment
Haloacetic Acids (ppb)	2020	2.0	1.0-2.0	60		Byproduct of drinking water disinfection
Trihalomethanes (ppb)	2020	2.6	1.5-2.6	80		Byproduct of drinking water disinfection
1,2,3-Trichloropropane [TCP] (ppb)[+]	2020	ND {ND}	ND-0.0056 {none}	0.005	0.0007	Leaching from hazardous waste sites; ingredient in nematicide used in this area in the 1950's

DETECTION OF CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARDS

Contaminant	Date	Level detected {EMWD}	Range of Detections {EMWD}	MCL	Typical Source of Contaminant
Chloride (ppm)	2019-20	30 {31}	15-50 {9.3-97}	500	Runoff/leaching from natural deposits
Odor-Threshold – distribution (TON)	2020	1 {ND}	1-2 {ND-1}	3	Natural-occurring organic deposits
Specific Conductance (µS/cm)	2019-20	497 {470}	340-860 {310-970}	1600	Substances that form ions when in water
Sulfate (ppm)	2019-20	62 {55}	21-220 {8.8-220}	500	Runoff/leaching from natural deposits
Total Dissolved Solids [TDS} (ppm)	2019-20	307 {310}	200-560 {200-660}	1000	Runoff/leaching from natural deposits
Turbidity – distribution NTU)	2020	ND	ND-0.7	5	Soil runoff
Turbidity-source water (NTU)	2019-20	ND {0.1)	ND-0.2 {0.1-0.3}	5	Soil runoff

[+]A note regarding 1,2,3-Trichloropropane (123-TCP): We have one well containing levels of 123-TCP above the MCL of 0.005 ppb. In 2020, this well had an average concentration of 0.0121 ppb with a range between 0.0058 ppb and 0.016 ppb. In order to use water from this well, we have implemented a blending program to reduce the concentration of 123-TCP down to a safe level. We test this blend 3 times per week to make sure this goal is met. Our blending program had an average 123-TCP concentration of 0.00305 ppb with a range between ND (<0.0012 ppb) and 0.0056 ppb. We had one blend sample that was above the MCL in 2020, however the average remained well below the maximum allowed. Sources of 123-TCP include discharges from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvents, paint and varnish removers, and cleaning and degreasing agents; and byproducts during the production of other compounds and pesticides. Some people who drink water containing 123-TCP in excess of the MCL over many years may have an increased risk of getting cancer.