

Moraga Heights Mutual Water Corporation

P.O. Box 64, Canyon, California, 94516

April 25, 2019

Dear Water User:

The attached Consumer Confidence Report (**CCR**), is a regulatory requirement of the water supplier to notify consumers of their potable water quality standards.

Most language included in this report is required by the State Water Resources Control Board and follows a format laid out for us by the Contra Costa County Health Department.

Although we regularly test for a wide range of constituents in our water, we are required to report only those *detected at any level*, and then highlight and explain those that exceed regulatory levels.

Yours truly,

Michael Rochette, President.

Miles Price, Vice President.

Sonya Swanson, Secretary/Treasurer.

Moraga Heights Mutual Water Corporation

2018 - Consumer Confidence Report

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, 2018 and may include earlier monitoring data.

Report date: April 25, 2019

Water System Name: Moraga Heights Mutual Water Corporation

Type of Water Source(s) in use: Well

Name and location of sources: Moraga Heights Mutual Water Corporation - Well #0707585
PO Box 64
Canyon, California, 94516

Drinking water source assessment information: N/A

Regularly scheduled public board meetings: Annual Membership meeting. / 1st Sat. Oct./ Canyon School

For more information contact: Michael Rochette / Board President Phone: (925) 377-0301

About our water...

In order to ensure that our tap water is safe to drink, the USEPA 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. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. Our water is tested in accordance with a water-quality monitoring plan approved by the State Water Resources Control Board, and administered through the Contra Costa County Department of Environmental Health.

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.

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 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 application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or the result of oil and gas production and mining activities.

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.

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

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

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: Permission from the State Water Resources Control Board (State Board) 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 have been found in our water.

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.

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 picogram per liter (pg/L)

NTU: nephelometric turbidity units

pCi/L: picocuries per liter (a measure of radiation)

NA: not applicable

NT: not tested

MHMWC: Moraga Heights Mutual Water Corporation

Tables 1, 2, 3, 4, 5, 6, list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in our 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 are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old. Only those regulated contaminants that were detected in our water are listed in the following tables.

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the last page of this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 1	0	1 sample in a month with a detection	0	Naturally present in the environment.
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste.
<i>E. coli</i> (federal revised total coliform rule)	(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 sample for *E. coli*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppm) (08/04/16)	5	.0025	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) (08/04/16)	5	.072	1	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	08/14/17	91	--	none	none	Salt present in the water and is generally naturally occurring.
Hardness (ppm)	08/14/17	100	--	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nickel (ppb)	08/14/17	83	--	100	12	Erosion of natural deposits. Discharge from metal factories
Gross Alpha (pCi/L)	03/07/11	0.97	--	15	(0)	Erosion of natural deposits.
Radium 228 (pCi/L)	12/04/07	0.12	--	5	(0)	Erosion of natural deposits.

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	08/14/17	15	--	500	(a)	Runoff/leaching from natural deposits.
Corrosivity (Ph)	08/14/17	7.74	--	Non-corrosive	(a)	Measured at well. Corrected to 7.1 – 7.9ph before filtration treatment and distribution.
Odor (TON)	08/14/17	1	--	3	(a)	Naturally-occurring organic materials.
Turbidity (NTU)	08/14/17	.24	--	5	(a)	Soil runoff.
Specific conductance (umhos/cm)	08/14/17	570	--	1600	(a)	Substances that form ions when in water.
Sulfate (as SO4) (ppm)	06/03/14	75	--	500	(a)	Runoff/leaching from natural deposits.
Total dissolved solids (ppm)	08/14/17	400	--	1000	(a)	Runoff /leaching from natural deposits.

* Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the last page of this report.

- (a) There are no PHG's, MCLG's, for constituents with secondary drinking water standards, because secondary MCL's are set on the basis of aesthetics, not health based levels.

TABLE 6 – DISINFECTION BYPRODUCTS, DISINFECTION RESIDUALS. DISINFECTION BYPRODUCT PRECURSORS						
Contaminant (reporting units)	Sample Date	Level Detected	MCL (AL)	PHG (MCLG)	Health Effects Language	Health Effects Language
Bromate (ppb)	07/16/18 08/14/17	ND ND	10	0.1	Byproduct of drinking water disinfection.	Some people who drink water containing bromate in excess of MCL over many years may have an increased risk of getting cancer.

Additional General Information on Drinking Water

All 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 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).

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).

Lead-Specific Language for Community Water Systems: 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. Moraga Heights Mutual Water Corporation 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/safewater/lead>.