WATER QUALITY REPORT: 2019 Rancho Pauma Mutual Water Co.

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, 2019 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Rancho Pauma Mutual Water Company a (760) 742-1909 para asistirlo en español.

Type of water sources in use: RPMWC relies on local groundwater.

Name & location of source: RPMWC receives all of its water from 6 domestic wells.

Drinking Water Source Assessment information: Drinking Water Source Assessments have been completed for your drinking water in 2002, 2007, 2014, 2016, 2017, 2018 and in 2019. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: Sewer collection systems, agricultural/irrigation wells, paved roads, pesticide/fertilizer/petroleum storage, wastewater treatment plants, an airstrip, and maintenance /fueling areas. For more information regarding the Drinking Water Source Assessments please contact the Division of Drinking Water (DDW) at (619) 525-4159.

Time and place of regularly scheduled board meetings: Board meetings are held monthly in the company's boardroom, located at 33129 Cole Grade Road, Pauma Valley, CA. Meetings are open to the shareholders.

For more information, contact: Bobby Graziano, General Manager, phone: (760) 742-1909

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 (U.S. EPA).

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

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.

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

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: Permissions 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 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.

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)

do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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 stormwater 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,** 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, the U.S. EPA 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 bottled water that provide the same protection for public health.

Tables 1,2,3,4 & 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 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, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (completed if bacteria detected)	**Highest No. of detections**	**No. of Months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria (state Total Coliform Rule)	(In a month) 0	0	1 positive monthly sample. Two or more positive monthly samples is a violation of the MCL.	0	Naturally present in the environment

Fecal Coliform or *e. coli (state Total Coliform Rule)*	(In a year) 0	0	A routine sample and a repeat sample detect total coliform, and either sample also detects fecal coliform or E. coli	0	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	(In a year) 0	0	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 repeat sample for E. coli.	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION LEAD AND COPPER

Lead and Copper (Tested every 3 years. Data is from 2013)	Sample Date	No. of samples collected	90th percentile level detected	No. of sites exceeding Action Level	Action Level	PHG	Typical Source of Contaminant
Lead (ug/L)	6/2019	10	ND	0	15	0.2	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	6/2019	10	0.8	0	1.3	0.3	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample date	Level Detected (average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (mg/L)	2017-2019	64	54 – 110	NA	NA	Salt present in the water is generally naturally occurring
Hardness (mg/L)	2017-2019	230	230 – 680	NA	NA	Sum of polyvalent cations present in the water, generally magnesium and calcium are naturally occurring

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

Chemical or Constituent (and reporting units)	Sample date	Level Detected (average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha (pCI/L)	2017-2019	1.58	1.56 – 6.8	15	(0)	Erosion of natural deposits
Barium (ug/L)	2017	120	ND – 120	1000	2000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2017	.2	.1 - .2	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Chemical or Constituent (and reporting units)	Sample date	Level Detected (average)	Range of Detections	MCL	PHG	Typical Source of Contaminant
Nitrate (as N) (mg/L)	2019	3.8	.60 – 8.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	2017	ND	ND - 10	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufactures; runoff from livestock lots (feed additive)
Uranium (pCi/L)	2017-2019	0.37	ND – 3.43	20	1	Naturally found in very amounts in the form of minerals. Rocks, soil, surface and underground water, air, plants and animals all contain varying amounts of uranium.
Chlorine (ppm)	2017	1.09	.31 – 1.09	(4.0)	(4)	Drinking water disinfectant added for treatment
TTHMs (Total Trihalomethanes) (ppb)	2019	11	N/A	80	NA	Byproduct of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	2019	2	N/A	60	NA	Byproduct of drinking water disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample date	Level Detected (average)	Range of Detections	MCL	PHG	Typical Source of Contaminant
Total Dissolved Solids (mg/L)	2017-2019	460	430 - 1200	1000	NA	Runoff/leaching from natural deposits
Chloride (mg/L)	2017-2019	87	84 - 200	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	2017-2019	110	85-460	500	NA	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2017-2019	1077	780-1800	1600	NA	Substances that form ions when in water; seawater influence

TABLE 6 – Detection of unregulated contaminants					
Chemical or Constituent (and reporting units)	Sample date	Level Detected (average)	Range of Detections	Notification Level	Health Effects Language
Hexavalent Chromium (mg/L)	2017	1.2	ND – 3.8	10	Naturally occurring element found in rocks, animals, plants, soil and volcanic dust and gases

Additional General Information on Drinking Water

Drinking water, included 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. Rancho Pauma Mutual Water Company 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 (1-800-426-4791) or at http://www.epa.gov/lead.