

WATER QUALITY REPORT: 2022 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, 2022 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, 2015, 2016, 2017, 2018, 2019, 2019, 2020, 2021 and in 2022. 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 every other month in the company's boardroom, located at 33129 Cole Grade Road, Pauma Valley, CA. Meetings are open to the shareholders.

For more information, contact: Eric Steinlicht, 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.

Variations 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.

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

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

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

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 1,2,3,4,5,6 & 7 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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
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 2022)	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)	6/2022	11	7.5	0	15	0.2	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
	9/2022	20	0.75	0			
Copper (mg/L)	6/2022	11	*2.2	3	1.3	0.3	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
	9/2022	20	*1.6	3			

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)	2022	55	ND - 60	NA	NA	Salt present in the water is generally naturally occurring
Hardness (mg/L)	2022	367	ND - 480	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)	2022	3.84	2.14 – 5.95	15	(0)	Erosion of natural deposits
Barium (ug/L)	2022	77	N/A	1000	2000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2022	0.21	N/A	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N) (mg/L)	2022	2.09	.98 – 3.8	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	2022	7.9	N/A	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)	2022	2.85	2.78 – 2.91	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)	2021	1.39	1.28 – 1.54	4	(4)	Drinking water disinfectant added for treatment
TTHMs (Total Trihalomethanes) (ppb)	2022	1	N/A	80	NA	Byproduct of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	2022	0	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)	2022	525	390 - 660	1000	NA	Runoff/leaching from natural deposits
Chloride (mg/L)	2022	100	80 - 120	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	2022	81	N/A	500	NA	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2021	970	N/A	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

Summary Information for a Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Action Level	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Copper action level exceedance.	Copper testing was performed in June and September 2022 at 20 homes within the RPMWC district resulting in 6 Copper AL exceedances.	June to September 2022.	Bi-annual testing to be performed at 20 homes within district boundaries.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.”

Additional General Information on Drinking Water

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 U.S. EPA'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. U.S. EPA/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: 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>.

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 infants blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the 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 specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.