

# WATER QUALITY REPORT: 2012 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, 2012 and may include earlier monitoring data.

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

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

**Name & location of source:** RPMWC receives all of its water from 5 domestic wells.

**Drinking Water Source Assessment information:** Drinking Water Source Assessments have been completed for your drinking water in 2002 and in 2007. 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 California Department of Public Health (CDPH) at (619) 525-4159.

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

**For more information, contact:** Mindy Houser, Administrator, phone: (760) 742-1909

## TERMS USED IN THIS REPORT:

● **Maximum Contaminant Level (MCL):** The highest level of a contaminant 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 one's 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 one's health. PHGs are set by the California Environmental Protection Agency.

● **Maximum Residual disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

● **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. These are set by the U.S. Environmental Protection Agency.

**1 part per million (mg/L) is:**      **1 part per billion (ug/L) is:**

- 1 minute in 2 years
- 1 inch in 16 miles
- 1 drop in 10 gallons
- 1 minute in 2000 years
- 1 inch in 16,000 miles
- 1 drop in 10000 gallons

● **Notification Level (NL):** Notification levels are health-based advisory levels for contaminants without a MCL.

● **Primary Drinking Water Standards (PDWS):** MCLs or 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.

● **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:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

● **N/A:** Not applicable.

● **ppm or mg/L:** Part per million or milligrams per liter.

● **ppb or ug/L:** Part per billion or micrograms per liter.

● **RAA:** Running Annual Average: The highest RAA is the highest of all Running Annual Averages. It is calculated as an average of all the samples collected within a 12-month period.

**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**, 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 US Environmental Protection Agency and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Health Department’s regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables that follow list the drinking water contaminants that were detected during the most recent sampling.** The presence of these contaminants does not necessarily indicate that the water poses a health risk. The Department of Health 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.

<b>TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA</b>					
<b>Microbiological Contaminants ( completed if bacteria detected)</b>	<b>Highest No. of detections</b>	<b>No. of Months in violation</b>	<b>MCL</b>	<b>MCLG</b>	<b>Typical Source of Bacteria</b>
Total Coliform Bacteria	(In a month) 0	0	More than 1 sample in a given month with detection	0	Naturally present in the environment
Fecal Coliform or <i>e. coli</i>	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

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

<b>Lead and Copper</b> (Tested every 3 years. Data is from 2010)	<b>No. of samples collected</b>	<b>90<sup>th</sup> percentile level detected</b>	<b>No. of sites exceeding Action Level</b>	<b>Action Level</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Lead (ug/L)	10	ND	0	15	0.2	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L)	10	ND	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (mg/L)	2011	51	ND – 64	N/A	N/A	Salt present in the water is generally naturally occurring
Hardness (mg/L)	2011	260	ND – 330	N/A	N/A	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Gross Alpha (pCi/L)	2011	1.82	ND – 2.62	15	(0)	Erosion of natural deposits
Aluminum (mg/L)	2011	0	ND - .00	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Barium (mg/L)	2011	.00	ND - .00	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Cyanide (ug/L)	2011	.00	ND - .00	150	150	Discharge from steel/metal, plastic and fertilizer factories
Fluoride (mg/L)	2011	0.2	ND - 0.2	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as nitrate, NO <sub>3</sub> ) (mg/L)	2011	6.5	ND - 8.7	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Perchlorate (ug/L)	2011	.80	ND - 4.0	6	6	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches and a variety of industries. It usually gets into drinking water as a result of environmental; contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts
Selenium (ug/L)	2011	5.4	ND - 12	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)

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

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample date</b>	<b>Level Detected (average)</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG</b>	<b>Typical Source of Contaminant</b>
Aluminum (ug/L)	2011	.00	ND – .00	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Color (units)	2011	0	ND - 0	15	N/A	Naturally - occurring organic materials
Iron (ug/L)	2011	0	ND - 0	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	2011	0	ND - 0	50	NL=500	Leaching from natural deposits
Odor - Threshold (ton)	2011	0	ND - 0	3	N/A	Naturally - occurring organic materials
Turbidity (ntu)	2011	.54	ND - 2.0	5	N/A	Soil runoff
Zinc (mg/L)	2011	.00	ND - .00	5	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	2011	486	ND - 620	1000	N/A	Runoff/leaching from natural deposits
Chloride (mg/L)	2011	70	ND - 92	500	N/A	Runoff/leaching from natural deposits; seawater influence
Foaming Agents (mg/L)	2011	.04	ND - .05	500	N/A	Municipal and industrial waste discharges
pH (units)	2011	7.2	ND - 7.5	N/A	N/A	Naturally occurring
Potassium (mg/L)	2011	3.8	ND - 4.2	N/A	N/A	Runoff/leaching from natural deposits

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Notification Level</b>	<b>Health Effects Language</b>
Boron (mg/L)	2011	0	ND - 0	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
Chromium (ug/L)	2011	0.0	ND - 0.0	N/A	Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis
Vanadium (ug/L)	2011	9.9	ND - 16	50	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

### **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 or at <http://www.epa.gov/safewater/lead>.