Annual WATER QUALITY REPORT

Reporting Year 2012

Presented By
City of Rohnert Park

PWS ID#: CA4910014

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

Commitment to Community

We are pleased to provide you with this year's Annual Water Quality Report. The 2012 Report covers all testing completed from January 1 through December 31, 2012. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of our water customers.

Included in this report is a summary of results from water quality tests performed in 2012, an explanation of our City's water sources, and information on how to interpret the data. Please note that the City's drinking water met or exceeded all State water quality mandates. This "Consumer Confidence Report" is required by law – we are pleased to share the results with you.

Questions?

If you are interested in learning more about water quality or your water utility, please direct your questions, concerns or comments to the Department of Public Works at (707) 588-3300.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Substances That Could Be in Water

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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.

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 can result from urban stormwater 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, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

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. We are 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 www.epa.gov/safewater/lead.

Community Participation

Citizens may address comments directly to the Rohnert Park City Council, which meets on the second and fourth Tuesday of each month at 5:00 p.m. Meetings are held in the Council Chambers located at City Hall – 130 Avram Avenue. City Council meetings are open to the public, with corresponding agendas posted to the City's website prior to each meeting – www.rpcity.org.

Source Water Description

The City of Rohnert Park delivers treated water to its customers produced primarily by the Sonoma County Water Agency (SCWA) – approximately 84 percent in 2012. Water produced by SCWA originates from six Ranney Collectors (or Caissons) along the Russian River; seven production wells along the Russian River; and three production wells along the Cotati Aqueduct in the Santa Rosa Plain. The primary water supply received from SCWA is supplemented and blended with water from a series of 29 groundwater wells located throughout the City. Prior to blending, the water distributed from the City wells is treated with a chlorine disinfectant to protect the community against microbial contaminants. Combined, the City's water system provides roughly 1.5 billion gallons of clean drinking water to the community every year. Additionally, Rohnert Park has seven water storage tanks with a total capacity of approximately 4.5 million gallons of treated water. This source is used to balance water system pressure during peak demand periods and also provides emergency water storage for fire protection.

Drinking Water Source Assessment

The Sonoma District, Department of Public Health, completed a Drinking Water Source Assessment for the City of Rohnert Park in January 2003, which is in accordance with guidelines issued by the State Department of Public Health. The purpose of the Drinking Water Source Assessment is to determine if water sources in the community are vulnerable to contamination. It also includes an inventory of potential sources of contamination within the delineated area and provides a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to the Drinking Water Source Assessment Plan, our water sources are most vulnerable to the following activities: chemical/petroleum storage, pesticide/fertilizer used in association with parks and golf courses (note: pesticides and fertilizers are no longer used in City parks), transportation corridors (railroad/freeways/highways/road right-of-ways), storm drain discharge points, stormwater detention facilities, agricultural drainage, golf course ponds, high-density housing, and utility stations (maintenance areas). If you would like to review the plan, please feel free to contact our office during regular business hours – (707) 588-3302.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. Only those substances with detectable amounts are required to be included in this report. You may find the definitions included at the end of this report helpful to you when interpreting the water quality results listed below.

The State allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included along with the year in which the samples were taken.

The City collected and analyzed 624 coliform samples during 2012 with no positive samples.

REGULATED SUBSTANCES

				City of Rohnert Park		Sonoma County Water Agency			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,2-Dichloroethane (ppt)	2011	500	400	96.21[1]	88–110	ND	ND	No	Discharge from industrial chemical factories
Aluminum (ppb)	2012	1	0.6	0.005	ND–0.06	ND	ND	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2012	10	0.004	3.41	ND–5.9	ND	ND	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2012	1	2	0.03	ND–0.15	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	2012	50	(100)	ND	ND	0.30	ND–0.58	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride[2] (ppm)	2012	2.0	1	0.02	ND–0.13	0.11	ND–0.20	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2011	15	(0)	0.40	0.26–0.65	0.18[3]	ND–3.49[3]	No	Erosion of natural deposits
Haloacetic Acids [HAA]–Stage 2[4] (ppb)	2012	60	NA	9.9	9.8–10	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2012	45	45	13.63	ND–44	0.48	ND–1.5	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2[4] (ppb)	2012	80	NA	16.5	16–17	NA	NA	No	By-product of drinking water disinfection
Trichlorofluoromethane (ppb)	2011	150	700	0.02	ND–0.05	ND	ND	No	Discharge from industrial factories; degreasing solvent; propellant and refrigerant

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2010	1.3	0.3	0.195	0/32	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2010	15	0.2	3.1	0/32	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	City of Rohnert Park AMOUNT DETECTED	City of Rohnert Park RANGE LOW-HIGH	Sonoma County Water Agency AMOUNT DETECTED	Sonoma County Water Agency RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2012	500	NA	28	11–80	8.62	5.4–26	No	Runoff/leaching from natural deposits; industrial wastes
Color (Units)	2012	15	NS	6.82	ND–50	ND	ND	No	Naturally occurring organic materials
Corrosivity (Units)	2012	Non-corrosive	NS	12.01	11.7–12.4	ND	ND	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
Iron (ppb)	2012	300	NS	286	ND–2,100	ND	ND	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2012	50	NS	24.03	ND–101	27.17	ND–92	No	Leaching from natural deposits
Odor–Threshold (TON)	2012	3	NS	1.91	ND–20	1.43	ND–20	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2012	1,600	NS	538	340–770	244	150–300	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2012	500	NS	24.8	4.6–77	11.35	2.3–16	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2012	1,000	NS	362	230–520	162	140–220	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2012	5	NS	3.77	ND–24	0.29	ND–1.10	No	Soil runoff
Zinc (ppm)	2012	5.0	NS	0.13	ND–0.80	ND	ND	No	Runoff/leaching from natural deposits; industrial wastes

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	City of Rohnert Park AMOUNT DETECTED	City of Rohnert Park RANGE LOW-HIGH	Sonoma County Water Agency AMOUNT DETECTED	Sonoma County Water Agency RANGE LOW-HIGH	TYPICAL SOURCE
Bicarbonate (ppm)	2012	237	155–336	109	99–130	Natural geology
Calcium (ppm)	2012	44	25–61	23	14–28	Natural geology
Magnesium (ppm)	2012	23	15–32	13	2.4–23	Natural geology
pH (Units)	2012	7.4	7.2–7.6	7.4	7.1–8.4	Measure of acidity of water
Potassium (ppm)	2012	2.2	1.4–3.6	1.3	1.1–1.9	Natural geology
Sodium (ppm)	2012	27.45	18–50	15.75	8.4–44	Sodium refers to the salt present in the water and is generally naturally occurring
Total Alkalinity (as CaCO3) (ppm)	2012	194	127–275	109	99–130	Natural geology
Total Hardness (as CaCO3)[5] (ppm)	2012	209	120–290	116	45–187	Water hardness is measured by the sum of polyvalent cations present in the water (generally magnesium and calcium), which are typically naturally occurring
Total Radon 222 (pCi/L)	2012	NA	NA	198	139–432	Found in the ground throughout the U.S.

[1] Next sampling event scheduled for 2017.
[2] Fluoridation of water is not required and has not been implemented in Rohnert Park.
[3] Sampled in 2012.
[4] We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.
[5] Rohnert Park water may be considered very hard when determining settings for water-using appliances such as dishwashers, filters, and water softeners.

Definitions

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

TON (Threshold Odor Number): A measure of odor in water.