

APPLE VALLEY RANCHOS **WATER COMPANY**

Consumer Confidence Report & Annual Water Quality Report

2010/2011



Apple Valley Ranchos Water Company is pleased to provide you with a copy of this year's Annual Water Quality Report. We have put together a series of articles that we hope will keep you better informed on water quality issues both in general and specific to the water that comes from your tap. Please feel free to contact us should you have any questions about service or quality.

No Perchlorate Found in AVRWC Source Water

Apple Valley Ranchos Water Company has a regular schedule to test water quality. As part of that regular program all source wells were tested for perchlorate in July and August of 2010. The Maximum Contaminant Level (MCL) for perchlorate in California is 0.006 mg/L, or 0.006 parts per million. The results of these tests were Non-Detect, meaning there was no trace of perchlorate present in the source water for Ranchos customers.

As a precaution, following the recent incident in Barstow, Apple Valley Ranchos Water Company

retested all source wells for perchlorate on December 7, 2010. The results of these samples were Non-Detect, also.

Apple Valley Rancho Water Company demonstrates our dedication to providing safe and reliable service to our customers by monitoring and protecting our precious water resources. For more information on our water quality see our Annual Water Quality Report on our website: www.avrwater.com

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



Apple Valley Ranchos Water Company Sources

AVRWC pumps 100% of our source water from 23 deep wells located throughout the community. These wells draw water from the deep Alto subunit of the Mojave ground water basin. This high quality aquifer is recharged from snowmelt from the San Bernardino Mountains to the south and the Mojave River to the west. Also, the Mojave Water Agency (MWA) imports water from the California State Water project to spread in the Mojave River to help recharge the ground water. Some of the water we pump has been age-dated close to 10,000 years old by the United States Geologic Survey. That means it has been protected and naturally filtered for a very long time.

Conservation Rates for 2011

Apple Valley Ranchos Water Company (AVRWC) implemented tiered conservation rates in 2009 to reward customers for their conservation efforts, called Conservation Based Rates (CBR). With CBR water rates increase with usage, providing a financial incentive to reduce your water consumption. The tiered rate structure is designed to have minimal impact on the average bill of the typical residential customer whose consumption stays the same. For those using less water than the average, your bill will be lower. For those using more, your bill will increase.

The Tier one allowance of 14 Ccf's (hundred cubic feet) per month is based on the average residential usage during the winter months. A bi-monthly bill includes 2 months of allowance equal to 28 Ccf's.

For non residential customers, the rate structure will be based on a single commodity rate.

In addition to the tiered pricing, customers' water bills reflect three temporary surcharges. The

surcharges listed on your bi-monthly water bill can be broken down into two groups. These are Balancing Account Surcharges and WRAM/MCBA Balancing Account Surcharges. A balancing account monitors the supply costs of purchased power, Watermaster pumping fees and leased water rights. It records the difference between actual supply costs and estimated supply costs forecasted in our rates. The Public Utilities Commission (PUC) recognized that water utilities have no control over these supply costs, just as you have no control over your electric or gas bills. To protect the utility and its customers from unforeseen changes and to ensure that rates accurately reflect the cost of providing service, the PUC has allowed water utilities to recover the difference between actual supply costs and those that were estimated if that cost exceeds two percent of the utility's revenues. According to PUC policy, all customers are subject to the approved rates, including surcharges contained in the tariff schedules of Apple Valley Ranchos Water Company.

What EPA Says About the Kinds of Contaminants That Might Be Found In Drinking Water

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, USEPA and the California Department of Public Health (DPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The federal Food and Drug Administration (FDA) and DPH regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health.

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

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. The tables in this report indicate which minerals and substances have been detected in the water provided by AVRWC. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791. You can also go to the following websites for more information:

USEPA - www.epa.gov/safewater
California Department of Public Health
www.cdph.ca.gov/certlic/drinkingwater/Pages/default.aspx

Sensitive Populations May Be More Vulnerable

Some people may be more vulnerable to contaminants in drinking water than the general population. Persons with compromised immune systems such as those 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 provider. The USEPA and the national Centers for Disease Control (CDC) have guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants. These are available by calling the Safe Drinking Water Hotline at 1-800-426-4791.

What are drinking water standards?

Drinking water standards are regulations that the United States Environmental Protection Agency (EPA) sets to control the level of contaminants in the nation's drinking water. EPA, the State Department of Public Health (DPH) and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards in California. These standards are part of the Safe Drinking Water Act's "multiple barrier" approach to drinking water protection, which includes assessing and protecting drinking water sources; protecting wells and surface water; making sure water is treated by qualified operators; ensuring the integrity of distribution systems; and making information available to the public on the quality of their drinking water. With the involvement of EPA, DPH, the CPUC, drinking water utilities, communities and citizens, these multiple barriers ensure that tap water is safe to drink. The water delivered to your home meets standards required by EPA, DPH and the CPUC. To recover the growing cost of meeting and maintaining EPA, DPH and CPUC standards, AVRWC submits a General Rate Case to the CPUC every three years. The CPUC is responsible for establishing water rates for AVRWC.

If you would like more information about water quality, or to find out about upcoming opportunities to participate in public meetings, please call:

Jeff Kinnard at 760-240-8323

This report describes those contaminants that have been detected in the analysis of almost 200 different potential contaminants, nearly 100 of which are regulated by EPA and DPH. AVRWC is proud to tell you that there have been no contaminants detected that exceed any federal or state drinking water standards. Hundreds of samples are taken monthly and thousands every year by AVRWC. State approved laboratories assure that all primary (health related) and secondary (aesthetic) drinking water standards are being met. See the tables on the following page to see how your water quality rates.

This report is intended to provide information for all water users. If received by an absentee landlord, a business, or a school, please share the information with tenants, employees or students. We will be happy to make additional copies of this report available. Complete records of water quality analyses are open for inspection by the public upon request. You may also access this report on the AVRWC web page at www.avrwater.com.

Capital Improvements / Maintenance of Infrastructure

One of the most important aspects of operating a public water system is reinvesting in infrastructure. AVRWC is proud of its history of reinvesting back into our

company. The chart below summarizes the twenty-five million dollars we have reinvested over the last five years.

Capital Improvements from 2006-2010						
	NEW	TOTAL INCL REPL	NEW INCL FIRE SVCS			
	Length of Water Main Installed (feet)	Number of Fire Hydrants Installed (each)	Number of Services Installed (each)	Amt of Water Main, Fire Hydrants & Services Installed (\$)	Amount of Source of Supply Improvements (\$)	Total Dollar Reinvested
2006	81,210	113	850	\$7,732,468.95	\$4,301,821.96	\$12,034,290.91
2007	33,889	51	517	\$6,442,313.62	\$1,962,427.16	\$ 8,404,740.78
2008	13,298	53	61	\$1,503,933.00	\$1,031,908.00	\$2,535,841.00
2009	4,755	27	58	\$ 694,823.00	\$ 264,221.00	\$ 959,044.00
2010	3,842	23	109	\$1,217,671.00	\$ 390,425.00	\$1,608,096.00
Totals	136,994	267	1,595	\$17,591,209.57	\$7,950,803.12	\$25,542,012.69
5 Year Avg	27,399	53	319	\$ 3,518,241.91	\$1,590,160.62	\$ 5,108,402.54
Apple Valley Ranchos Water Company's 2011 Company Funded Capital Budget totals \$4,252,277. This amount includes \$332,010 in General Plant Improvements.						



Pictured at right: Mockingbird Pipeline Installation

Lead and Copper

Although AVRWC has not found lead or copper to be an issue in our water system, the following information is **required** by California DPH. 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. AVRWC 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 ...

www.epa.gov/safewater/lead

Supplier Diversity

Apple Valley Ranchos Water Company encourages the utilization of women; minority and service disabled veteran owned business enterprises (WMDVBE) in our procurement process and contract fulfillment. We believe that strengthening WMDVBE contributes to the overall economic growth and expansion of the community we serve.

The mission of our Supplier Diversity initiatives is to build on our partnerships with the community by maximizing procurement and contracting opportunities for WMDVBE. As a result, WMDVBE will be given the maximum practical opportunity to participate in our procurement process and in the performance of contracts. For more information about Supplier Diversity at AVRWC call Norma Armenta at 760-240-8329.

State Water Supply Report

Following significant increases in statewide rainfall and mountain snowpack this season, Governor Jerry Brown has proclaimed an end to the state's drought. While this season's storms have lifted us out of the drought, it's critical that Californians continue to watch our water use. We should not forget that this state can slip back toward drought conditions any given year and conservation needs to become a lifelong habit.

Conservation

Looking for ways to conserve water? Want to know the best schedule for watering your lawn? An in-home residential water audit can help. Contact our Conservation Coordinator at:

(760) 240-8329
for details

AVRWC has recently completed our Water Use Efficiency Business Plan. This plan will help us comply with the CPUC Water Action Plan, and the Statewide Water Conservation Plan SBx 7-7, which requires us to reduce our production by 20% by the year 2020. This plan along with the Urban Water Management Plan will help assure that we have a dependable water supply for the next twenty five years.

For more information
on AVRWC's conservation programs,
please visit our website at:
www.avrwater.com

Automated Telephone Service

AVRWC has streamlined our automated telephone line. Just by calling 760-247-6484 or 800-481-9190 you can do the following:

- Get account balance and last payment information
- Make payments using electronic checks, credit and debit cards.
- Speak to a customer service professional

Access Your Account Information Online

AVRWC is now offering online account information and bill payment. You may register for Infinitylink by visiting our website at: www.avrwater.com

- Get your account balance
- View your payment history
- View your bill detail
- Request services
- Pay your bill using electronic transfer, debit and credit card

It's fast and easy! Go to ... www.avrwater.com. Look for the sign up button in the right side "quick links" bar to register. Have your account information ready and register today.

California Climate Action Registry

AVRWC has successfully verified our 2009 greenhouse gas (GHG) emissions inventory thus earning us the status of *Climate Action Leader* for a fifth year!



By joining the California Climate Action Registry, member organizations demonstrate their concern for global climate change. By becoming a *Climate Action Leader*, AVRWC is taking action by measuring, verifying, and reporting our GHG emissions to the California Registry and to the public.

Our 2009 entity-level emissions report is now available at:

[http://www.climateactionregistry.org/
CARROT/public/reports.aspx](http://www.climateactionregistry.org/CARROT/public/reports.aspx)

Source Water Assessment Completed and Available

The 1996 Safe Drinking Water Act amendments required states to perform an assessment of potentially contaminating activities near drinking water sources of all water utilities. In California, the DPH required the utilities to perform the assessments themselves. AVRWC completed the Source Water Assessment in December of 2002. The assessment has been updated since for three new wells. AVRWC's wells are considered most vulnerable to the following activities associated with potential contamination of ground water in Apple Valley: high density housing, high and low density septic systems, parks, irrigated crops, golf courses and sewer collection systems. Additional activities that are potentially vulnerable for our wells are: gas stations, roads, streets, railroads, storm water injection wells, storm drain discharge points, storm water detention facilities, agricultural and irrigation water wells, historic grazing, historic waste dumps and landfills, machine shops and leaking underground storage tanks.

A copy of the complete assessment is available at Apple Valley Ranchos Water Company and at the DPH San Bernardino office. You may request a summary of the assessment be sent to you by contacting Scott Weldy of AVRWC at 760-247-6484 or by calling the DPH office at 909-383-4328.

Water Results

Apple Valley Ranchos Water Company

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Apple Valley Ranchos Water Company - 2010 / 2011 Annual Water Quality Report Water Quality Parameters Detected in Apple Valley Ranchos Water Company Wells

PRIMARY STANDARDS Mandatory (health-related) INORGANIC CHEMICALS	State MCL	PHG or (MCLG)	Units of Measurement	AVR Range (including highest value)	Average for AVR Wells (a)	(b) AVR Date of last Measurement	Potential Sources of Contamination
Arsenic	10.0	0.004	ppb	<2 - 4.2	ND	2008/09/10	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride	2.0	1.0	ppm	0.24 - 1.1	0.53	2008/09/10	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth (not added by AVR)
Nitrate (as NO3)	45	45	ppm	2 - 18	5.5	2010	Erosion of natural deposits; runoff and leaching from fertilizer use; leaching from septic tanks and sewers
Nitrite/Nitrate (as N)	10	10	ppm	0.48 - 4	1.2	2010	Erosion of natural deposits; runoff and leaching from fertilizer use; leaching from septic tanks and sewers
RADIONUCLIDES							
Gross Alpha	15	(0)	pCi/L	<3 - 5.8	ND	2002 - 2010	Erosion of natural deposits
Combined Radium (Radium 226 + 228)	5	(0)	pCi/L	<1 - 1.6	ND	2003 - 2009	Erosion of natural deposits
Uranium	20	0.43	pCi/L	NA* or <2 - 4.7	ND	2002 - 2010	Erosion of natural deposits
2010 LEAD AND COPPER MONITORING	Action Level (AL)	PHG or (MCLG)	Units of Measurement	Number of Samples Collected	No. of Sites Exceeding Action Level	90th Percentile Level Detected	Potential Sources of Contamination
Copper**	1.3	0.17	ppm	30	0	0.057	Internal corrosion of household water plumbing systems
Lead**	15	2	ppb	30	0	ND	Internal corrosion of household water plumbing systems
Water Quality Parameters Measured in the Distribution System							
DISTRIBUTION SYSTEM	State MCL	PHG or (MCLG)	Units of Measurements	AVR Range (including highest value)	Average for AVR Wells (a)	(b) AVR Date of last Measurement	Potential Sources of Contamination
Chlorine residual	MRDL = 4	MRDLG = 4	ppm	0.04 - 1.85	0.39	weekly	Added for disinfection purposes
Heterotrophic Plate Count Bacteria	NS	none	CFU / ml	<1 - 642	3.5	weekly	Naturally present in the environment
Color	15 #	none	units	<3 - 5	ND	monthly	Naturally occurring organic materials
Odor	3	none	units	1	1	monthly	Naturally occurring organic materials
Total Trihalomethanes (TTHM's)	80	none	ppb	6 - 12.3	8.6	quarterly	By-product of drinking water disinfection
Haloacetic Acids (HAA's)	60	none	ppb	<1.0 - 1.6	1.0	quarterly	By-product of drinking water disinfection
SECONDARY STANDARDS --Aesthetic standards (non-health related) CHEMICAL PARAMETERS	State MCL	PHG or (MCLG)	Units of Measurements	AVR Range (including highest value)	Average for AVR Wells (a)	(b) AVR Date of last Measurement	Potential Sources of Contamination
Chloride	500	none	ppm	6 - 340	27	2008/09/10	Runoff / leaching from natural deposits; seawater influence
Foaming Agents	0.5	none	ppm	<0.1 - 0.15	ND	2008/09/10	Municipal and industrial waste discharges
Odor Threshold	3	none	units	1 - 2	1.2	2008/09/10	Naturally occurring organic materials
Specific Conductance	1,600	none	micromhos per centimeter	190 - 1670	375	2008/09/10	Substances that form ions when in water, seawater influence
Sulfate	500	none	ppm	8 - 250	59	2008/09/10	Runoff / leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	1,000	none	ppm	120 - 992	238	2008/09/10	runoff / leaching from natural deposits
Turbidity / clarity	5.0	none	NTU	<0.1 - 0.55	0.1	2008/09/10	Soil runoff

Detected Unregulated Chemicals That May be of Interest to Consumers

ADDITIONAL PARAMETERS --unregulated	State MCL	PHG or (MCLG)	Units of Measurements	AVR Range (including highest value)	Average for AVR Wells (a)	(b) AVR Date of last Measurement
Agressiveness Index (c)	NS	none	units	11 - 13	11.8	2008/09/10
Alkalinity (as Ca CO ₃)	NS	none	ppm	51 - 107	83	2008/09/10
Calcium	NS	none	ppm	13 - 120	30	2008/09/10
Corrosivity (Langlier Index) (d)	Non- corrosive	none	positive / negative	(-0.4) - (+0.7)	+ 0.22	2008/09/10
Hardness (Ca CO ₃)	NS	none	ppm	34 - 431	97	2008/09/10
Hardness (grains)	NS	none	grains	2 - 25.2	5.7	2008/09/10
Magnesium	NS	non	ppm	1 - 32	5.7	2008/09/10
pH	6.5-8.5	none	units	7.1 - 8.5	8	2008/09/10
Potassium	NS	none	ppm	<1 - 4.7	1.8	2008/09/10
Sodium	NS	none	ppm	13 - 160	40	2008/09/10

KEY TO ABBREVIATIONS AND FOOTNOTES

- MCL** = Maximum Contaminant Level, a drinking water standard
- MCLG** = Maximum Contaminant Level Goal
- AL** = Action Level
- ND** = Not detected
- NL** = Notification Level
- NS** = No Standard
- NA** = Not Applicable at this time or not required to analyze for
- NTU** = Nephelometric Turbidity Units. This is a measure of the suspended material in water
- CFU / ml** = colong forming units per millimeter
- ppm** = parts per million or milligrams per liter
- ppb** = parts per billion or micrograms per liter
- pCi/L** = picoCuries per liter
- <** = less than (essentially equivalent to ND)
- *** = Ca DPH has waived AVR from further Uranium monitoring. Not all wells required monitoring.
- **** = Lead and Copper are regulated as a Treatment Technique (TT) under the Lead and Copper Rule. It requires water systems to take samples at "most vulnerable" consumer taps every three years and treatment steps must be taken if more than 10% of tap samples exceed the AL. AVR has not exceeded this level.
- (a)** = The average is weighted according to the individual contribution in pumping by each well to the total (active wells only)
- (b)** = The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater sources do not change frequently. Some of our data, though representative, are more than one year old.
- (c)** = An aggressiveness index of 11 or greater indicates that the water is not aggressive (noncorrosive)
- (d)** = A positive number Langlier index indicates that the water is noncorrosive

DEFINITIONS

Public Health Goal (PHG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) as is economically and technologically feasible. Secondary MCL's 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. MCLG's are set by the U.S. 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Regulatory Action Level (AL):

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Primary Drinking Water Standard:

MCL's and MRDL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standard:

Requirements that ensure that appearance, taste and smell of drinking water are acceptable.

Notification Level (NL):

The concentration of a contaminant that, if exceeded, triggers notification to local political jurisdictions and customers.

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Apple Valley Ranchos Water Company Background

AVRWC is an investor owned utility created in 1947 by Apple Valley Ranchos Development Company. In 1987 the company was purchased by Park Water Company (PWC). Park Water Company is currently the parent company of AVRWC. The current AVRWC service area covers approximately 50 square miles encompassing the majority of the Town of Apple Valley and portions of the surrounding area. Approximately 81 percent of the town's population is served by AVRWC. We provide domestic water from 23 wells within 14 active

pressure zones in our service area. The total capacity of these wells is nearly 37 million gallons per day (mgd). All wells are located within the Mojave Groundwater Basin. This groundwater is the only source of supply for the AVRWC system. AVRWC is determined to safeguard this precious water supply, and diligently works to assure that we will have an adequate supply for the future.