

# 2010 ANNUAL WATER QUALITY REPORT

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LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 37, ACTON

### LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 37, ACTON WATER QUALITY REPORT FOR CALENDAR YEAR 2010

The Los Angeles County Waterworks District is pleased to provide you with our 2010 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2010, your drinking water met all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

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



# WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water guality analyses.

The source water is tested for chemical, physical, radiological, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not regulated.

Key locations within the distribution system have been selected to monitor water quality. Every week, the distribution system is tested for bacteria and disinfectant levels to ensure that you receive safe and high quality drinking water. The distribution system is also tested for color, odor, temperature, turbidity, and disinfection by-products monthly. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

## THE SOURCE OF YOUR WATER AND ITS TREATMENT

During 2010, approximately 24 percent of the water served in the Los Angeles County Waterworks District No. 37, Acton, was treated surface water and the remaining 76 percent was groundwater. The District purchases its treated surface water from the Antelope Valley-East Kern Water Agency (AVEK). AVEK gets its water from the Sacramento River/San Joaquin Delta via the State Water Project. The District extracts groundwater from its three wells in the Acton area.

The surface water from AVEK is treated at their

treatment plant using conventional treatment methods, which include coagulation, flocculation, sedimentation and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes. The groundwater the District serves is also disinfected with chlorine for the same reasons.

### SOURCE WATER ASSESSMENT

CDPH completed a 2006 update of the Source Water Assessment (SWA) for the California Aqueduct, AVEK's water source. The SWA is used evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Water supplies from the Sacramento-San Joaquin River Delta are most vulnerable to contamination from municipal, industrial and agricultural activities. Also

influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the naturally occurring salt-water intrusion which is dependent to a large extent on the inflow from the contributing rivers. A copy of the complete assessment can be obtained by contacting AVEK by phone at (661) 943-3201.

A source water assessment was conducted for Wells 37-1, 37-3, and 37-4 in the Los Angeles County Waterworks District No. 37, Acton water system in December 2001. These wells are considered most vulnerable to the following activities, although no associated contaminants have been detected in the water produced by these wells.

Vulberable Wells	Possible Contaminating Activities
37-1, 37-3, 37-4	HISTORIC GAS STATIONS
	WASTEWATER TREATMENT PLANTS
	WELLS - WATER SUPPLY
	STORM DRAIN DISCHARGE POINTS

A copy of the complete assessment may be viewed at: CDPH Los Angeles Office, 500 North Central Avenue, Suite 500, Glendale CA 91203, or by phone at (818) 551-2004.





### THE QUALITY OF YOUR WATER

Lead: 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. The District 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/safewater/lead.

**Nitrate**: Nitrate in drinking water at levels above 45 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 infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should seek advice from your health care provider.

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).



### **CONTAMINANTS THAT MAY BE PRESENT IN WATER**

The sources of drinking water (both tap 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 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 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 use.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

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

In order to ensure tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that 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).



### WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2010 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2010. Trihalomethanes, haloacetic acids, and

chlorine are also tested regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently.

PARAMETER	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER		TYPICAL SOURCE OF CONSTITUENT		
FARAMETER			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL			
PRIMARY DRINKING WATER STANDARDS									
INORGANIC CONTAMINANTS									
ARSENIC (ppb)	0.004	10	ND	ND	2.1-2.8	2.4	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
BARIUM (ppm)	2	1	ND	ND	0.11-0.17	0.13	Discharge if oil drilling wastes and from metal refineries; erosion of natural deposits		
FLUORIDE (ppm)	1	2	0.12	0.12	ND-0.3	0.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
NITRATE (as NO <sub>3</sub> ) (ppm)	45	45	ND	ND	11.3-43.4	26.4	Runoff / leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
DISINFECTION BYPRODUCTS PRECURSORS									
TOTAL ORGANIC CARBON (ppm)	N/A	TT	0.6-2.7	1.7	-	-	Various natural and manmade sources		
			RA	DIOLOGICAL C	ONTAMINANTS				
GROSS ALPHA PARTICLE ACTIVITY (ppm) 2005 & 2006	[0]	15	-	-	2.82-4.16	3.48	Erosion of natural deposits		
RADIUM 226 (pCi/L) 2005	0.05	5	-	-	ND-0.43	0.14	Erosion of natural deposits		
RADIUM 228 (pCi/L) 2005	0.019	5	-	-	ND-0.17	0.10	Erosion of natural deposits		
URANIUM (pCi/L) 2005	0.43	20	-	-	ND-0.66	0.34	Erosion of natural deposits		
			SECOND	ARY DRINKING	G WATER STAND	ARDS			
ZINC (ppm)	N/A	5	0.10	0.10	ND	ND	Runoff / leaching from natural deposits; industrial wastes		
TOTAL DISOLVED SOLIDS (ppm)	N/A	1000	260	260	324-552	410	Runoff / leaching from natural deposits		
SPECIFIC CONDUCTANCE (µS/cm)	N/A	1600	500	500	478-852	635	Substances that form ions when in water; seawater influence		
CHLORIDE (ppm)	N/A	500	91	91	35-100	61	Runoff / leaching from natural deposits; seawater influence		
SULFATE (ppm)	N/A	500	47	47	46-72	55	Runoff / leaching from natural deposits; industrial wastes		
IRON (ppb)	N/A	300	ND	ND	ND-103	34	Runoff / leaching from natural deposits; industrial wastes		
		15			AL PARAMETERS				
COLOR (units) ODOR THRESHOLD (units)	N/A N/A	15 3	<1-<5 <1	<5 <1	0	0	Naturally-occurring organic materials Naturally-occurring organic materials		
TURBIDITY (units)	N/A	5	0.01-0.20	0.05	0.29-0.44	0.34	Soil runoff		

			UN	IREGULATED C	ONTAMINANTS					
	PHG or MCLG	MCL	TREATED SURFACE WATER		CHLORINATED GROUNDWATER					
PARAMETER			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	TYPICAL SOURCE OF CONSTITUENT			
BORON (ppb)	N/A	NL=1000	-	-	74-276	162	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 VI (ppb) (2003)	N/A	N/A	_	-	ND-1.82	0.61	N/A			
VANADIUM (ppb) (2003)	N/A	NL=50	-	-	6.9-9.2	8.10	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			
GENERAL MINERAL CONSTITUENTS										
HYDROXIDE ALKALINITY (ppm)	N/A	N/A	<]	<]	ND	ND	Leaching from natural deposits			
CARBONATE ALKALINITY (ppm)	N/A	N/A	<1.8	<1.8	ND-28	9.00	Leaching from natural deposits			
BICARBONATE ALKALINITY (ppm)	N/A	N/A	75	75	137-179	161	Leaching from natural deposits			
SODIUM (ppm)	N/A	N/A	60	60	24-52	35	Leaching from natural deposits			
CALCIUM (ppm)	N/A	N/A	18	18	58-96	73	Leaching from natural deposits			
TOTAL HARDNESS (as CaCO <sub>3</sub> ) (ppm)	N/A	N/A	98	98	215-345	260	Leaching from natural deposits			
MAGNESIUM (ppm)	N/A	N/A	13	13	15-26	19	Leaching from natural deposits			
pH (pH units)	N/A	N/A	6.1-7.5	6.7	7.3-7.5	7.4	Natural acidity/alkalinity of water			
POTASSIUM (ppm)	N/A	N/A	2.9	2.9	-	-	Leaching from natural deposits			
TOTAL ALKALINITY (as CaCO <sub>3</sub> ) (ppm)	N/A	N/A	61	61	-	-	Leaching from natural deposits			
			DISTRI	BUTION SYSTE	M WATER QUAI	.ITY				
DISINFECTION & DISINFECTION BYPRODUCTS	MCLG or [MRDLG]	MCL or [MRDL]	RANGE OF DETECTION		HRAA		TYPICAL SOURCE OF CONSTITUENT			
TOTAL CHLORINE (ppm)	[4] as Cl <sub>2</sub>	[4] as Cl <sub>2</sub>	0.73-1	.16	1.19		1.19		Drinking water disinfectants added for treatment	
TOTAL TRIHALOMETHANES (ppb)	NS	80	21-5	1	48		Byproduct of drinking water chlorination			
HALOACETIC ACIDS (ppb)	NS	60	ND-2	2	2		Byproduct of drinking water chlorination			
RESIDENTIAL TAP WATER QUALITY										
LEAD and COPPER*	PHG	ACTION LEVEL	RANGE OF DETECTION	90th % LEVEL	NUMBER OF SITES SAMPLED	NUMBER OF SITES ABOVE ACTION LEVEL	TYPICAL SOURCE OF CONSTITUENT			
COPPER (ppm) 2008	0.17	1.3	ND-0.82	0.20	21	0	Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives			
LEAD (ppb) 2008	2	15	ND-5.2	ND	21	0	Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives			

### TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is 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) is 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) is the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the USEPA.

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

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

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

\* The District is required to sample for lead and copper at specific consumer taps. The results for lead and copper are reported as the 90th percentile. The 90th percentile is the result that is greater than 90% of all the results.

<b>ppm</b> = parts per million (milligrams per liter) <b>ppb</b> = parts per billion (micrograms per liter)	<pre>pCi/L = picoCuries per liter ppt = parts per trillion</pre>	<b>N/A</b> = Not Applicable <b>ND</b> = None Detected	<b>NL</b> = Notification Level <b>HRAA</b> = Highest Running Annual Average	

## BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more <sup>Sli</sup> expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems.



However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitation Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignifi cant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.



### WATER CONSERVATION TIPS

"We all need to conserve water," is the resounding message from Mark Cowin, Director of the State Department of Water Resources. Despite recent storms California continues to face a water crisis resulting from the past three years of drought as well as environmental constraints. According to Mr. Cowin California's water shortage will continue this year. Residents are highly encouraged to make an extra effort to conserve water given the current condition of the region and District's water supply.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs for the Districts' customers. You can learn how to conserve water at home and save money by calling (626) 300-3391 or email irrosales@dpw.lacounty.gov to request a conservation specialist to visit your home at no cost to you. We will provide personalized recommendations for water conserving measures to reduce your water usage without affecting your quality of life. In addition, we offer rebates of up to \$150 on water saving devices like high efficiency clothes washers. For more information visit www.lacwaterworks.org or contact Ms. Irma Rosales at (626) 300-3391.

Every California resident can take these simple steps to save water and reduce our impact on the planet.

- Consider replacing a green lawn with water-efficient landscape and plant native and drought-tolerant plants that use less water, permeable hardscape, and drip irrigation.
- For green lawn, adjust your sprinklers. Up to 70 percent of residential water use goes to maintaining our yards. Try taking a minute or two off the timer.
- Check your system. Do a weekly check for broken or clogged sprinkler heads and replace them right away.
- Fix those leaks. Just a drip can waste more than 10,000 gallons per month. A leaking flapper on a toilet also increases flows at the water treatment plant.

Up to 70% of residential water use occurs outdoors. Make sure your sprinklers water the yard, not the sidewalk or street. Landscaping your yard and garden with California native and drought-tolerant plants is also a smart alternative for residents who want to have a beautiful garden and save water and money. These plants are accustomed to local weather and soil conditions and thrive with little summer watering. Using them not only saves water, but saves maintenance time and produces a habitat for native birds, beneficial insects and wildlife. The best time to plant native plants is between October and May each year.

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# PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m. The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Timothy Chen at (626) 300-3342. To view this report on the internet, please visit our website at https://www.lacwaterworks.org/waterquality.







900 S. Fremont Ave. Alhambra, CA 91803 To the Water Customer at: