

# WATER QUALITY REPORT 2014 LA MIRADA SYSTEM

For more than 60 years, Suburban Water Systems (Suburban) has provided dependable, high-quality water that complies with federal and state health safety standards to thousands of families in the San Gabriel Valley and nearby areas. We are proud to report that 2014 was no exception.

#### **Who We Serve**

Suburban provides drinking water to portions of La Mirada, Buena Park and La Habra. Suburban serves approximately 57,000 people in our La Mirada system. In 2014, 100 percent of Suburban's water supply was from local groundwater.

### Suburban's Drinking Water Complies With All Health, Safety Regulations

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Water Board (SWB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWB regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. Last year, as in the past, Suburban's drinking water was in full compliance with all applicable county, state and federal drinking water regulations. Our system of pumps, reservoirs and distribution pipelines are all routinely inspected, monitored and maintained by professional state-certified water system operators to protect the guality of the water from source to tap.

## **Purpose Of This Report**

This annual water quality report demonstrates Suburban's compliance with SWB and USEPA regulations. It also provides important information to the public about where drinking water comes from, how drinking water is regulated, and what types of contaminants may be in the drinking water. You will find charts on the following page, which summarize the results of our ongoing water-quality testing program. Determine how the water quality in your area compares to government standards by finding the average values in the charts and comparing these values to the maximum contaminant level (MCL). Chemicals reported in the table were detected in the water by an independent accredited laboratory during 2014 or from the most recent tests. Most, but not all, of these chemicals occur naturally in the water. Some of these chemicals, however, are the result of industrial and agricultural contamination that occurred many decades ago. To help you understand what these test results mean, we have also included information about significant constituents, measurements, water quality definitions and advisories.

**Water Quality Goals** The water Suburban delivers to your home meets standards required by USEPA, SWB and California Public Utilities Commission (PUC). Often, Suburban goes beyond what is required to monitor for constituents that have known health risks. The company uses only independent, state-certified water quality laboratories for testing. **The charts in this report include two types of water quality goals:** 

- 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 USEPA.
- 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.

**Water Quality Standards** The quality of drinking water in the United States is regulated by the USEPA. Two state agencies, the SWB and the PUC, supplement and enforce federal USEPA standards. Standards established by these agencies are used to set limits for substances that may affect health or aesthetic qualities of water. The water quality charts in this report cover the following standards:

- 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 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 do not reflect the benefits of the use of disinfectants to control microbial
  contaminants.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, as well as water treatment requirements.
- Regulatory Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.



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**Contaminants That May Be In The 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.

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 byproducts of industrial
  processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and
  septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.
- Lead, if present in elevated levels, 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. Suburban 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 two 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

**Are There Risks?** 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (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 (800) 426-4791.

### **Public Participation Opportunities**

We value your input, concerns and suggestions. Please contact Lauren James, Communications Manager, at (626) 543-2531 or email her at <a href="Lareed@swwc.com">Lareed@swwc.com</a> to inquire about possible future public participation opportunities. Also, please feel free to contact Ken Reich, Quality Assurance Manager, at (626) 543-2575, if you have any questions about water quality. In addition, a number of local water boards hold monthly meetings that are open to the public, including:

- Metropolitan Water District of Southern California Second Tuesday of the month, (213) 217-6000
- Central Basin Municipal Water District
   Fourth Monday of the month, (323) 201-5500
- Water Replenishment District of Southern California Third Thursday of the month, (562) 921-5521.

#### **Source Water And Water Quality Assessments**

Suburban provides drinking water for its La Mirada Service Area (City of La Mirada and portions of La Habra and Buena Park) from its wells in the Main San Gabriel Groundwater Basin and the Central Groundwater Basin. Suburban also purchases supplemental drinking water from California Domestic Water Company (Cal Domestic). Cal Domestic water comes from wells in the Main San Gabriel Groundwater Basin.



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Suburban and Cal Domestic have completed source water assessments in accordance with the federal Safe Drinking Water Act. The purpose of the source water assessment is to promote source water protection by identifying types of activities in the proximity of sources which could pose a threat to the water quality. Suburban and Cal Domestic source water assessments were completed in 2002 and concluded that groundwater sources are most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: leaking underground storage tanks, known contaminant plumes from industrial waste discharges, and gas stations. In addition, the sources are considered most vulnerable to the following activities and facilities not associated with contaminants detected in the water supply: pesticide/fertilizer/petroleum storage and transfer areas, metal and machine shops, and agricultural drainage. You may request a summary of the assessments by contacting Ken Reich, Quality Assurance Manager, at (626) 543-2575 or you may request a complete copy from the SWB at (818) 551-2049.

**Chloramines** Some areas in La Mirada receive water year-round from Suburban that contains a treatment chemical called chloramines. Chlorine and ammonia are combined at one of Suburban's treatment facilities to produce these chloramines. Chloramines are added to the water for public health protection because they prevent regrowth of bacteria in the distribution system pipes and also reduce the formation of certain disinfection byproducts that are regulated in drinking water. All of Suburban's water has some form of chlorine disinfectant residual at all times.

**Be advised that kidney dialysis units and aquarium owners must remove chloramines from water prior to use.** Hospitals or dialysis centers should be aware of the chloramines from water and should install proper chloramine removal equipment, such as carbon adsorption units. Aquarium owners can use readily available products to remove or neutralize chlorine. Chloraminated water is safe for people and animals to drink, and for all other general uses. Should you have any questions or concerns regarding chloramine in your water, please contact Ken Reich, Quality Assurance Manager at (626) 543-2575.





Vanadium (ppb)

NL = 50

n/a

SUBURBAN WATER SYSTEMS-LA MIRADA DRINKING WATER SOURCES TESTED IN 2014								
	Compar	mpany or Agency California Domestic Water Co.		Suburban Water Systems		1		
	Source		Groundwater Groundwater			Groundwater		
	Doroont of Total							
	Percent of Total	_	14%		86%		1101	
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant
Organic Chemicals								
Tetrachloroethylene (ppb)	5	0.06	0.8	ND - 1.8	ND	ND	No	Industrial Solvent Contamination
Trichloroethylene	5	1.7	1.3	0.7 - 2.4	ND	ND	No	Industrial Solvent Contamination
Radiologicals								
Alpha Radiation (pCi/L)	15	(0)	ND	ND - 4.3	<3	ND - 4.1	No	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	2.6	2.1 - 3.6	1.6	ND - 2.5	No	Erosion of Natural Deposits
Inorganic Chemicals								
Arsenic (ppb)	10	0.004	1.1	ND - 2.8	<2	ND - 4.1	No	Erosion of Natural Deposits
Barium (ppm)	1	2	115	110 - 120	<0.1	ND - 0.1	No	Erosion of Natural Deposits
Fluoride (ppm) naturally-occurring		1	0.32	0.29 - 0.35	0.38	0.22 - 0.53	No	Erosion of Natural Deposits
Nitrate (ppm as Nitrate)	45	45	17	11 - 19	5.6	ND - 16	No	Fertilizers, Septic Tanks
Secondary Standards*								
Chloride (ppm)	500*	n/a	20	19 - 21	71	33 - 100	No	Erosion of Natural Deposits
Color (color units)	15*	n/a	ND	ND	3.8	ND - 15	No	Naturally-Occurring Substances
MBAS - surfactants (ppb)	500*	n/a	ND	ND	<50	ND - 70	No	Municipal and Industrial Waste
Odor (TON)	3*	n/a	1	1	<1	ND -1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho/cr	1,600*	n/a	485	480 - 490	812	630 - 940	No	lons in Water; Seawater Influence
Sulfate (ppm)	500*	n/a	46	44 - 47	101	79 - 130	No	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	320	320	491	370 - 600	No	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.1	ND - 0.4	<0.1	ND - 0.2	No	Erosion of Natural Deposits
Unregulated Contaminants								
1,4-Dioxane (ppb)	NL = 1	n/a	NT	NT	0.2	ND - 0.5	n/a	Industrial Solvent Contamination
Alkalinity, total (ppm CaCO3)	Not Regulated	n/a	170	170	187	150 - 240	n/a	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	66	65 - 66	59	27 - 93	n/a	Erosion of Natural Deposits
Chlorate (ppb)	NL = 800	n/a	NT	NT	80	54 - 130	n/a	Disinfection Byproduct
Chloromethane (ppb)	Not Regulated	n/a	NT	NT	0.1	ND - 0.3	n/a	Disinfection Byproduct
Chromium, Hexavalent (ppb)	10 (proposed)	0.02	NT	NT	0.6	ND - 1.7	n/a	Erosion of Natural Deposits
Hardness, total (ppm CaCO3)	Not Regulated	n/a	210	210	200	110 - 310	n/a	Erosion of Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	12	12	12	9 - 18	n/a	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	12	12	13	11 - 18	n/a	Erosion of Natural Deposits
Molybdenum (ppb)	Not Regulated	n/a	NT	NT	25	2.6 - 41	n/a	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	7.7	7.5 - 8.2	7.9	7.6 - 8.3	n/a	Acidity, Hydrogen lons
Potassium (ppm)	Not Regulated	n/a	3.5	3.3 - 3.6	3.7	2.7 - 4.8	n/a	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	15	14 - 16	86	58 - 130	n/a	Erosion of Natural Deposits
Strontium (ppb)	Not Regulated	n/a	NT	NT	523	370 - 630	n/a	Erosion of Natural Deposits
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ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal μmho/cm = micromho per centimeter; NL = Notification Level; NT = Not Tested in 2014 \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

NT

1.1

0.2 - 2.4

NT

Erosion of Natural Deposits



## SUBURBAN WATER SYSTEMS-LA MIRADA DISTRIBUTION SYSTEM WATER QUALITY TESTED IN 2014

Chemical	MCL (MRDL/MRDLG)	Average	Range	MCL Violation?	Typical Source of Contaminant	
Disinfection Byproducts						
Total Trihalomethanes (ppb)	80	58	32 - 64	No	Byproducts of Chlorine Disinfection	
Haloacetic Acids (ppb)	60	16	9.2 - 18	No	Byproducts of Chlorine Disinfection	
Chlorine Residual (ppm)	(4 / 4)	1.1	0.2 - 2.6	No	Disinfectant Added for Treatment	
Aesthetic Quality						
Color (Color Units)	15*	<3	ND - 7.5	No	Erosion of Natural Deposits	
Turbidity (ntu)	5 <sup>*</sup>	0.1	ND - 2.6	No	Erosion of Natural Deposits	
Odor (threshold odor number)	3*	1	1 - 2	No	Erosion of Natural Deposits	
Unregulated Contaminants						
Chlorate (ppb)	NL = 800	76	59 - 110	NA	Erosion of Natural Deposits	
Molybdenum (ppb)	NA	34	31 - 39	NA	Erosion of Natural Deposits	
Strontium (ppb)	NA	550	420 - 640	NA	Erosion of Natural Deposits	
Vanadium (ppb)	NL = 50	0.7	0.4 - 0.9	NA	Erosion of Natural Deposits	

Four locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; five locations are tested weekly for color, odor and turbidity. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; ND = not detected; < = average is less than the detection limit for reporting purposes; ppb = parts-per-billion; ppm = parts-per-million; MCL= Maximum Contaminant Level \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

Bacterial Quality	MCL	MCLG	Highest Monthly Percent Positives	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria	No more than 5% monthly positives	0	3.2	No	Naturally present in the enviroment

#### LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

Metal	Action Level	PHG	Ninetieth Percentile Value	Exceeding AL / No. of Samples	AL Violation?	Typical Source of Contaminant
Copper (ppm)	1.3	0.3	0.27	0/30	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	0/30	No	Corrosion of Household Plumbing

The most recent lead and copper at-the-tap samples were collected from residences in 2013. None of the 30 samples for lead and copper exceeded the respective Action Level (AL). A regulatory Action Level is the concentration of a contaminant which if exceeded triggers treatment or other requirements that a water system must follow.