

WATER QUALITY REPORT 2014

WHITTIER 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 the City of Whittier. Suburban serves approximately 59,000 people in Whittier. In 2014, all of Suburban's water supply came from local groundwater wells.

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 statecertified water system operators to protect the quality 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 Reed, Communications Manager, at (626) 543-2531 or email her at <u>Lareed@swwc.com</u> 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
- Main San Gabriel Basin Watermaster
 First Wednesday of the month, (626) 815-1300
- **Upper San Gabriel Valley Municipal Water District** First and third Tuesday of the month, (626) 443-2297.

Source Water And Water Quality Assessments

Suburban Water Systems provides drinking water for its Whittier Service Area from its four active wells in the Main San Gabriel Groundwater Basin. Suburban also distributes 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.



This information is important! Please have someone translate it for you.

Esta información es importante. Por favor pidale a alguien que se la traduzca. 這個資訊非常之重要。 請他人為您翻譯一下。 この情報は重要です。 翻訳を依頼してください。 Chi tiết này thật quan trọng. Xin nhở người dịch cho quý vị.

这一信息非常重要。 请别人为您翻译一下。 Mahalaga ang impormasyong ito Mangyaring ipasalin it ... ਇਹ ਸੂਚਨਾ ਮਹਤੱਵਪੂਰਣ ਹੈ । ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ । 이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시요.

यह सूचना महत्वपूर्ण है । कृपा करके किसी से :सका अनुवाद करायें । مدر مسودت مدد الرجاء أن تجعل أحد الأشخاص يساعدك في ترجمتها. Continued on page 4



At Your Service

Vanadium (ppb)

NL = 50

SUBURBAN WATER SYSTEMS-WHITTIER DRINKING WATER SOURCES TESTED IN 2014 Company or Agency California Domestic Water Co. **Suburban Water Systems** Source Groundwater Groundwater Percent of Total 2014 Usage 48% 52% PHG MCL Chemical MCL Typical Source of Contaminant Violation? (MCLG) Average Range Average Range Organic Chemicals Tetrachloroethylene (ppb) 5 ND - 3 ND ND Industrial Solvent Contamination 0.06 1 No Trichloroethylene 1-2 ND ND Industrial Solvent Contamination 5 1.7 1 No Radiologicals Alpha Radiation (pCi/L) 15 (0)<3 ND - 4 ND ND No **Erosion of Natural Deposits** Uranium (pCi/L) 20 0.43 3 2 - 4 2 1-2 Nο **Erosion of Natural Deposits Inorganic Chemicals** Arsenic (ppb) 10 0.004 <2 ND - 3 <2 ND - 2 Nο **Erosion of Natural Deposits** Barium (ppm) 1 2 0.1 0.1 < 0.1 ND - 0.1 No Erosion of Natural Deposits Fluoride (ppm) naturally-occurring 2 0.3 0.3 0.2 - 0.31 0.3 - 0.4No **Erosion of Natural Deposits** Nitrate (ppm as Nitrate) 45 45 17 11 - 19 11 3 - 16 No Fertilizers, Septic Tanks Secondary Standards* Chloride (ppm) 500* n/a 20 19 - 21 98 91 - 100 No **Erosion of Natural Deposits** ND ND - 70 MBAS - surfactants (ppb) 500* n/a ND 42 No Municipal and Industrial Waste Odor (TON) 3* n/a 1 1 1 1 No Naturally-Occurring Organics Specific Conductance (µmho/cm) 485 lons in Water; Seawater Influence 1.600* n/a 480 - 490 898 860 - 940 No **Erosion of Natural Deposits** Sulfate (ppm) 500* n/a 46 44 - 47 122 110 - 130 Nο Total Dissolved Solids (ppm) 1.000* 320 320 540 - 600 Erosion of Natural Deposits n/a 556 No ND - 0.4 Turbidity (ntu) n/a 0.1 ND ND No Erosion of Natural Deposits **Unregulated Contaminants** 1,4-Dioxane (ppb) NL = 1 n/a 0.5 0.5 0.5 0.5 Industrial Solvent Contamination n/a Alkalinity, total (ppm CaCO3) Not Regulated n/a 170 170 165 150 - 180 n/a **Erosion of Natural Deposits** Calcium (ppm) Not Regulated n/a 66 65 - 66 81 78 - 93 n/a **Erosion of Natural Deposits** Chlorate (ppb) 77 55 Disinfection Byproduct NL = 800n/a 77 55 n/a Chromium, Hexavalent (ppb) 0.02 1 1 1 10 (proposed) 1 n/a Erosion of Natural Deposits Cobalt (ppb) Not Regulated 2 2 3 3 n/a n/a **Erosion of Natural Deposits** Hardness, total (ppm CaCO3) 210 210 264 250 - 310 Not Regulated n/a n/a **Erosion of Natural Deposits** Hardness, total (grains/gal) Not Regulated n/a 12 12 15 15 - 18 n/a **Erosion of Natural Deposits** Magnesium (ppm) n/a 12 15 13 - 18 Not Regulated 12 n/a **Erosion of Natural Deposits** Molybdenum (ppb) 2 2 Not Regulated n/a 2 2 n/a Erosion of Natural Deposits pH (pH units) Not Regulated n/a 8 8 8.0 8 Acidity, Hydrogen Ions n/a Potassium (ppm) 4 3 - 4 5.0 4 - 5 Not Regulated n/a n/a **Erosion of Natural Deposits** Sodium (ppm) 15 Not Regulated n/a 14 - 16 75 58 - 79 n/a **Erosion of Natural Deposits** Strontium (ppb) 540 540 580 Not Regulated n/a 580 n/a **Erosion of Natural Deposits**

ppb = parts-per-billion; ppm = parts-per-million; ppt = parts-per-trillion; pct = parts-per-tril

Erosion of Natural Deposits



SUBURBAN WATER SYSTEMS-WHITTIER 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	17	3.5 - 25	No	Byproducts of Chlorine Disinfection	
Haloacetic Acids (ppb)	60	2.9	ND - 3.6	No	Byproducts of Chlorine Disinfection	
Chlorine Residual (ppm)	(4 / 4)	1.1	0.6 - 1.9	No	Disinfectant Added for Treatment	
Aesthetic Quality						
Color (Color Units)	15*	ND	ND	No	Erosion of Natural Deposits	
Turbidity (ntu)	5 [*]	< 0.1	ND - 0.7	No	Erosion of Natural Deposits	
Odor (threshold odor number)	3*	1	1	No	Erosion of Natural Deposits	
Unregulated Contaminants						
Chlorate (ppb)	NL = 800	68	56 - 80	NA	Erosion of Natural Deposits	
Chromium, hexavalent (ppb)	10 (proposed)	1.4	0.9 - 1.9	NA	Erosion of Natural Deposits	
Cobalt (ppb)	NA	1.3	ND - 2.5	NA	Erosion of Natural Deposits	
Molybdenum (ppb)	NA	1.8	ND - 1.8	NA	Erosion of Natural Deposits	
Strontium (ppb)	NA	540	530 - 550	NA	Erosion of Natural Deposits	
Vanadium (ppb)	NL = 50	2.8	2.3 - 3.2	NA	Erosion of Natural Deposits	

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; six 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; NL = Notification Level; NA = not applicable *Contaminant is regulated by a secondary standard tomaintain aesthetic qualities.

Bacterial Qual	ity	MCL	MCLG	Highest Monthly Percent Positives	MCL Violation?	Typical Source of Contaminant
Total Coliform Bacteria		No more than 5% monthly positives	0	1.1	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	0.33	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. **PHG** = California Public Health Goal