# Suburban Water Systems

# WATER QUALITY REPORT 2014 GLENDORA 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 the portion of Glendora bounded on the north and south by the Santa Fe Railroad and Arrow Highway, respectively, and on the east and west by Grand Avenue and Barranca Avenue, respectively. Suburban serves approximately 5,000 people. In 2014, Suburban's water supply was purchased from the City of Glendora and the Covina Irrigating Company (CIC).

### 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 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.

## **GLENDORA SYSTEM**



Continued from page 1

**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 <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.



Continued from page 2

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

In 2014, Suburban distributed treated surface water from the CIC and groundwater through an interconnection with the City of Glendora. CIC and Glendora 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. You may request summaries of the assessments by contacting Ken Reich, Quality Assurance Manager, at (626) 543-2575 or you may request complete copies from the SWB at (818) 551-2049.

City of Glendora source water assessments were completed in 2001 and concluded that Glendora's groundwater wells are considered most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: crops irrigation, fertilizer, pesticide/herbicide application and known contaminant plumes. In addition, the groundwater wells are considered most vulnerable to the following facilities not associated with contaminants detected in the water supply: utility stations maintenance areas, above ground storage tanks and high density of housing.

Every five years, CIC is required to examine and update possible sources of drinking water contamination in their surface water source waters. These reports are called watershed sanitary surveys. CIC completed an update of its San Gabriel River watershed sanitary survey in 2010. The survey concluded that CIC's surface water is vulnerable to contamination from erosion, debris removal, forest fires and recreational activities.

**Nitrate Advisory** Nitrate can result from the presence of fertilizer. Nitrate in drinking water at levels above 45 milligrams per liter (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 ask advice from your health care provider. The level of nitrate in water provided by Suburban was well below 45 milligrams per liter. The flow weighted average nitrate concentration in water delivered to customers in 2014 was 11 mg/L and was never above 29 mg/L.

Arsenic Advisory Water purchased from the CIC exceeded one half the arsenic MCL (10 micrograms per liter) during a brief period in 2014. The flow-weighted average level throughout the year was less than the 4 mg/L in Suburban's mixed supply to its Glendora customers. The transient increase in arsenic was due to drought conditions in the San Gabriel River watershed source water reservoir. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.





# SUBURBAN WATER SYSTEMS-GLENDORA 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	38	8 - 110	No	Byproducts of Disinfection	
Haloacetic Acids (ppb)	60	19	3 - 44	No	Byproducts of Disinfection	
Chlorine Residual (ppm)	(4 / 4)	0.9	0.1 - 2	No	Disinfectant for Treatment	
Aesthetic Quality						
Color (color units)	15 <sup>*</sup>	<3.0	<3.0	No	Erosion of Natural Deposits	
Turbidity (ntu)	5 <sup>*</sup>	<0.1	ND - 0.4	No	Erosion of Natural Deposits	
Odor (threshold odor number)	3*	1	1	No	Erosion of Natural Deposits	

Two locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; one location is 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; ppb = parts-per-billion; ppm = parts-per-million; MCL= Maximum Contaminant Level

Bacterial Quality	MCL (MCLG = 0)	Highest Number Positive	MCL Violation?	Typical Source Of Contaminant
Total Coliform Bacteria	No more than one monthly positive	0	No	Bacteria that occur naturally in soils and water

## LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

Metal	Action Level	Public Health Goal	90th Percentile Value	AL Violation?	Typical Source Of Contaminant
Copper (ppm)	1.3	0.3	0.37	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	<5	No	Corrosion of Household Plumbing

In the Glendora service area, the most recent lead and copper at-the-tap samples were collected from residences in 2013. None of the 20 samples for lead and exceeded the respective Action Level (AL). A regulatory Action Level is the concentration of a contaminant which if exceeded triggers treatment or other copper requirements that a water system must follow. **PHG** = California Public Health Goal

Various Natural and Man-Made Sources



Total Organic Carbon (ppm)

SUBURBAN WATER SYSTEMS-GLENDORA DRINKING WATER SOURCES TESTED IN 2014								
Company or Agency		Covina Irriga	Covina Irrigating Company		City of Glendora			
	Source		San Gab	San Gabriel River		Groundwater		
	Percent of Total	l 2014 Usage	56%		44%			
Chemical	MCL	PHG (MCLG)	Average	Range	Average	Range	MCL Violation?	Typical Source of Contaminant
Radiologicals		(IIICEU)	Avelage	Nanye	Avelage	Nully	Violation	
Uranium (pCi/L)	20	0.43	ND	ND	<1	ND - 1.9	No	Erosion of Natural Deposits
Inorganic Chemicals		0.10	110	115	<u> </u>	110 1.0	110	Liveren et l'access de provinc
Arsenic (ppb)	10	0.004	7	3 - 10	<2	ND - 3	No	Decay of Natural and Man-Made Deposits
Barium (ppm)	1	2	ND	ND	0.2	ND - 0.3	No	Runoff or Leaching from Natural Deposits
Fluoride (ppm) natural	2	1	0.4	0.3 - 0.4	0.3	0.2 - 0.5	No	Runoff or Leaching from Natural Deposits
Chromium, hexavalent (ppb)	10	0.02	ND	ND	<1	ND - 2	No	Erosion of Natural Deposits
Nitrate (ppm as Nitrate)	45	45	6	ND - 16	17	4 - 29	No	Fertilizers, Septic Tanks
Secondary Standards*								
Chloride (ppm)	500*	n/a	22	12 - 37	59	42 - 77	No	Runoff or Leaching from Natural Deposits
Odor (TON)	3*	n/a	1	1	1	1	No	Naturally-Occurring Organic Materials
Specific Conductance (µmho)	1,600*	n/a	453	420 - 500	640	450 - 850	No	Ions in Water
Sulfate (ppm)	500*	n/a	35	34 - 37	53	25 - 83	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	263	240 - 300	370	250 - 550	No	Runoff or Leaching from Natural Deposits
Turbidity (ntu)	5*	n/a	0.1	0.1 - 0.1	0.3	ND - 1	No	Runoff or Leaching from Natural Deposits
Unregulated Contaminants								
Alkalinity, total (ppm CaCO3)	Not Regulated	n/a	190	160 - 210	180	110 - 250	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm CaCO3)	Not Regulated	n/a	170	160 - 180	240	150 - 400	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	10	9 - 11	14	9 - 23	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8	8	8	7-8	n/a	Acidity, Hydrogen Ions
Sodium (ppm)	Not Regulated	n/a	26	20 - 33	36	24 - 54	n/a	Runoff or Leaching from Natural Deposits

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;

NR = not required to be tested; < = 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; TT = Treatment Technique; \*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

1-3

2

n/a

NR

NR

Turbidity - Combined Filter Effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source	Importance of Removing Turbidity in Drinking Water			
Covina Irrigating Company Temple Filtration Plant	Turbidity is a measure of the cloudiness of the water, an indication of particulate matter; some of which might include harmful							
1) Highest single turbidity measurement	1	0.07	No	Soil Run-Off	microorganisms. Low turbidity in CIC's treated water is a good indicator of effective filtration. Filtration is called a treatment technique (TT). A treatment technique is a required process			
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Run-Off	intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.			