

# Water Quality Report 2005



City of Bell Gardens

CBG\_A\_03

*(Look inside...)*

*“Do you know  
what’s in your  
drinking water?”*



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# 2005 Water Quality Report

The city of Bell Gardens water system provides water through 1,566 metered service connections. The city contracts with Southern California Water Company (SCWC) to operate and maintain that portion of the water system owned by the City. SCWC supplies approximately 178 million gallons of water daily to more than one million people throughout California.

## About this Report

The U.S. Environmental Protection Agency (EPA) and the California Department of Health Services (DHS) are the agencies responsible for establishing drinking water quality standards. The water we deliver to your homes and businesses meets standards established by EPA and DHS. In some cases, the City of Bell Gardens and SCWC go beyond what is required to monitor for constituents that have known health risks. Southern California Water Company uses only independent, state-certified water quality laboratories for testing. Unregulated contaminant monitoring helps the EPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

Since 1991, the City of Bell Gardens and California water districts and utilities have published an annual Water Quality Report to customers. This year's report, which contains water quality and supply information for 2004, is in compliance with the regulations of the 1996 Safe Drinking Water Act reauthorization that charges EPA with updating and strengthening the tap water regulatory program.

To ensure that the water we provide you is safe to drink, the EPA sets regulations that limit the amount of certain contaminants in water. U.S. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for health.

SCWC is a subsidiary of American States Water Company, a holding company publicly traded on the New York Stock Exchange. SCWC is one of several companies which come under American States Water Company. More than 330,000 customers throughout California and central Arizona rely on American States Water Company for water delivery and wastewater treatment. ▲

## Rain Doesn't Wash Away Need for Saving Water

Although this may be the wettest winter California has seen in more than 100 years, one season of rain doesn't wash away the need for water conservation.

The following tips will help you use water wisely:

- ◆ Water your lawn only when it needs it. Step on your grass. If it springs back when you lift your foot, it doesn't need water. Set your sprinklers for more days in between watering. Saves 750 – 1,500 gallons per month.
- ◆ Fix leaky faucets and plumbing joints. Saves 20 gallons per day for every leak stopped.
- ◆ Install water-saving shower heads or flow restrictors. Saves 500 to 800 gallons per month.
- ◆ Run only full loads in the washing machine and dish



washer. Saves 300 to 800 gallons per month.

- ◆ Use a broom instead of a hose to clean driveways and sidewalks. Saves 150 gallons or more each time. At once a week, that's more than 600 gallons a month.
- ◆ Don't water the sidewalks, driveways or gutter. Adjust your sprinklers so that water lands on our lawn or garden where it belongs – and only there. Saves 500 gallons per month. ▲

## Safekeeping of Water Supplies and Facilities

To reduce the risk of terrorism affecting local water supplies and distribution systems, the City of Bell Gardens is following recommendations from the Federal Bureau of Investigation, the EPA, the American Water Works Association and the California Office of Emergency Services. While water systems have a low relative likelihood of experiencing terrorist acts, these agencies advise that water systems should guard against unplanned physical intrusion, review emergency response plans, and increase vigilance. The City



of Bell Gardens and SCWC have taken all these steps and are continuing to look for additional safety improvements. ❄

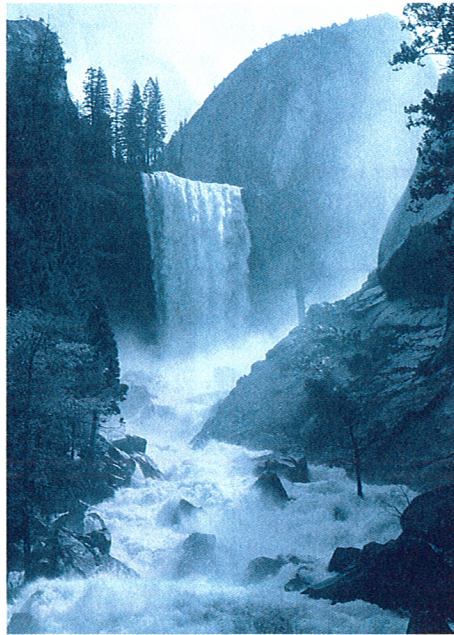
## Sources of Supply

Water delivered to customers in the City of Bell Gardens system is a blend of groundwater pumped from the Central Groundwater Basin, and imported water from the Colorado River Aqueduct, and the State Water Project. The Central Groundwater Basin stretches northeasterly from the Newport-Inglewood Fault Zone.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over the surface of the land or through the layers in the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or human activity. The presence of contaminants does not necessarily mean water may be a health risk.

Contaminants that may be present in source water include:

- ◆ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.



- ◆ Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and 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, which 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, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

## Source Water Assessment

A source water assessment was conducted for each of the groundwater wells serving the customers of the City of Bell Gardens System in 2003.

The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants:

- ◆ Dry cleaners, metal plating/finishing/fabricating, gas stations/auto shops, known contaminant plumes

The groundwater sources are considered most vulnerable to the following activities which have been associated with contaminants that have been detected in the water supply.

- ◆ Chemical/petroleum processing/storage, machine shops, automobile repair shops

A copy of the assessment may be viewed at:

DHS Los Angeles Region  
1449 West Temple Street, Rm. #202  
Los Angeles, CA 90026

or  
SCWC-Central District  
12035 Burke Street, Ste. #1  
Santa Fe Springs, CA 90670

You may request a summary of the assessment be sent to you by contacting:

DHS Los Angeles District Office  
At (213) 580-5723

## For People with Sensitive Immune Systems...

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. When ingested, the organism may cause nausea, diarrhea, and other gastrointestinal symptoms. The organism comes from animal wastes and may be in surface watersheds. Surface water is purchased from Metropolitan Water District of Southern California, which tested for cryptosporidium in 2004 and did not detect it in the water. If detected, cryptosporidium is eliminated by an effective treatment combination including sedimentation, filtration, and disinfection.

Some people may be more vulnerable to constituents in the water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk of infections. These people should seek advice about drinking water from their healthcare providers.

The EPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's safe drinking water hotline at (800) 426-4791.



## Measurements

Water is sampled and tested throughout the year. Contaminants are measured in:

- parts per million (ppm) or milligrams per liter (mg/L),
- parts per billion (ppb) or micrograms per liter ( $\mu\text{g/L}$ ),
- parts per trillion (ppt) or nanograms per liter (ng/L),
- parts per quadrillion (ppq) or picograms per liter (pg/L).

Grains per gallon (grains/gal) – A measurement of water hardness often

used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.

Nephelometric Turbidity Units (NTU) – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.

Picocuries per liter (pCi/L) – A measurement of radioactivity in water.

If this is difficult to imagine, think about these comparisons:

Parts per million:  
3 drops in 42 gallons  
1 second in 12 days

1 inch in 16 miles  
Parts per billion:  
1 drop in 14,000 gallons  
1 second in 32 years  
1 inch in 16,000 miles

Parts per trillion:  
1 second in 32,000 years  
1 inch in 16 million miles  
10 drops in enough water to fill the Rose Bowl

Parts per quadrillion:  
1 drop in 13.2 billion gallons  
1 second in 31.7 million years  
1 drop in enough water to fill 100 Rose Bowls

For more details or information contact:

Sunil Kesavapillai, (800) 999-4033

In December of 2002, Metropolitan Water District of Southern California (MWD) completed a source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in watershed and wastewater. State Water Project supplies are considered most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD by phone at (213) 217-6850. ♣

## Additional Notes

The State allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though representative, are more than a year old.

### Radon

Radon is a radioactive gas found throughout the United States that can't be seen, tasted or smelled. It can move up through the ground and into a home through cracks and holes in the foundation and can build up to high levels. Radon can get into indoor air when released from tap water from showering, washing dishes, and other household activities. Radon entering the home through tap water will, in most cases, be a small source in indoor air as compared to radon entering the home through soil. Radon is a known human carcinogen and breathing air containing radon can lead to lung cancer. Drinking water containing radon may cause increased risk of stomach cancer. If you are concerned about radon, testing the air in your home is inexpensive and easy. For information call EPA's Radon Hotline at (800) SOS-RADON.

### Total Trihalomethanes

Trihalomethanes (THMs) are a family of chemicals formed when a disinfectant such as chlorine is added to the water supply. Disinfection is an important and necessary step in the water treatment process to protect against

harmful bacteria and other possible contamination. Chlorine is the most widely used and approved disinfection in the United States.

The amount of total THMs allowed in drinking water is regulated by the EPA. The EPA has a set total THM annual average safe limit of 80 parts per billion in drinking water.

Results of a health study released in early 1998 suggests that women who drink five glasses of water daily and are in their first three months of pregnancy may have an increased risk of miscarriage from levels of THMs in drinking water. State officials have cautioned that the study is not definitive and have stated that more study on the issue is needed.

The City of Bell Gardens purchases water from the MWD and routinely tests the water delivered to your home for the presence of THMs, as well as many other substances. Our testing shows the water delivered to your home may, at times, exceed the THM levels which were cited in the study. Be assured, however, that the water meets all existing federal and state standards for safety. ♣

## Definitions

### California Notification Level (NL)

Non-regulatory, health-based advisory levels established by the CA DHS for contaminants in drinking water for which an MCL has not been established.

### Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the public health goals and maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

### Maximum Contaminant Level Goal (MCLG)

The level of contaminant in drinking water below which there is no known or expected risk to health. Maximum contaminant level goals are set EPA.

### Maximum Residual Disinfectant Level (MRDL)

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)**

The level of a disinfectant added for water treatment below which there is no known or expected health risk. MRDLGs are set by EPA.

### **Primary Drinking Water Standard (PDWS)**

MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

### **Public Health Goal (PHG)**

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

### **Regulatory Action Level (AL)**

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

### **Treatment Technique (TT)**

A required process intended to reduce the level of a contaminant in drinking water.

## **Drops of Water Knowledge**

### ***Help! My water is fizzing!***

Do you sometimes see a milky or white appearance in your drinking water? Does your water appear to fizzle or act like carbonated water?

If bubbles rise to the top and the water clears from the bottom of the glass to the top in a few minutes, then the milkiness is due to air. If very fine particles settle slowly to the bottom of the glass, the milkiness could be due to inorganic matter such as zinc.

If you see a milky appearance or if your drinking water appears to fizzle due to air there is no need to worry. If you are unsure, give us a call.

### ***“Hard Water, Scale, Spots on Glassware”***

Detergents can sometimes produce scale in cooking utensils and glassware can become coated with film or spots. Some consumers think that it's the hard water which



causes the excessive scale. Read below about white vinegar for more information.

### ***“White Vinegar... not just for salad dressing”***

The harder the water, the more white deposits (calcium carbonate) will form on glassware. When glassware is rinsed with hot water, the water evaporates, leaving a white deposit. This can occur in the dishwasher or in hand washing. These spots can be removed by warming the glassware in water containing several tablespoonfuls of white vinegar. White vinegar can be used to dissolve scale found in coffee makers and tea pots used for boiling water. Pots should be thoroughly rinsed after this cleaning process.

### ***“No matter how hard the water... it's still good to drink”***

Since hardness is usually measured in mg/L as calcium carbonate, it is identical to the mineral found in calcium vitamin supplements. Hardness is principally due to calcium and magnesium ions which occur naturally in all water. The more calcium and magnesium present, the greater the hardness.

### ***“There are snowflakes in my ice!”***

Ice made with hard water can sometimes cause “snowflakes” in a beverage container. When water is frozen, minerals, particularly calcium and magnesium sulfates, can become separated from the liquid. When the ice melts in a beverage, the precipitated minerals fall to the bottom of the glass like “snowflakes” out of the sky. Some people may not see the “snow” but will see the flakes at the bottom of the glass.

### ***Our Commitment to You***

Public health and water safety is the primary focus of the Southern California Water Company and the City of Bell Gardens. We pride ourselves in delivering water to our customers that meets strict state and federal drinking water standards. ♣

## **If You Have Questions – Contact Us**

For information about your water quality or to find out about upcoming opportunities to participate in public meetings, please contact Sunil Kesavapillai, Water Quality Engineer, at (800) 999-4033. Visit us on the Web at [www.aswater.com](http://www.aswater.com) or e-mail us at [customerservice@scwater.com](mailto:customerservice@scwater.com).

In an effort to provide public awareness about cross connection control and backflow prevention programs, a website has been created to answer common questions. To visit the web site,

please go to [www.aswater.com/xconnect](http://www.aswater.com/xconnect)

For more information about health effects of the listed constituents in the following tables, call the EPA hotline at (800) 426-4791.

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



**CITY OF BELL GARDENS SYSTEM - Source Water Quality**

Primary Standards - Health Based (units)	PRIMARY MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
<b>Turbidity</b>							
Highest single measurement of the Treated Surface Water (NTU)	TT = 1.0	n/a	0.11	n/a	No	2004	Soil runoff
Lowest Percent of all Monthly Readings less than 0.3 NTU (%)	TT = 95	n/a	100%	n/a	No	2004	Soil runoff

<b>Inorganic Constituents</b>							
Fluoride (mg/L)	2	1	0.14 - 0.37	0.24	No	2004	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ug/L)	50	0.004	ND - 2.4	ND	No	2004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Nitrate (as NO3) (mg/L)	45	45	ND - 9.1	4.5	No	2004	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (as N) (mg/L)	10	10	ND - 2	1	No	2004	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

<b>Radioactive Constituents</b>							
Gross Alpha particle activity (pCi/L)	15	n/a	ND - 4.3	ND	No	2004	Erosion of natural deposits
Uranium (pCi/L)	20	0.5	ND - 3.0	ND	No	2004	Erosion of natural deposits
Gross Beta particle activity (pCi/L)	50	n/a	ND - 5.90	ND	No	2004	Decay of natural and man-made deposits

Secondary Standards - Aesthetic (units)	SECONDARY MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Total Dissolved Solids (mg/L)	1,000	n/a	370 - 521	423	No	2004	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	1,600	n/a	641 - 877	724	No	2004	Substances that form ions when in water; seawater influence
Chloride (mg/L)	500	n/a	53-110	75	No	2004	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	500	n/a	92 - 194	127	No	2004	Runoff/leaching from natural deposits; industrial wastes

Unregulated Constituent Requiring Monitoring (units)	MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Boron (ug/L)	Not Regulated	NL=1000	130-160	145	No	2004	Runoff/leaching from natural deposits; industrial wastes
Vanadium (ug/L)	Not Regulated	NL=50	ND-17	4.1	No	2003	Naturally occurring; industrial wastes

Other Parameters (units)	MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Alkalinity (mg/L)	Not Regulated	n/a	75 - 150	108	n/a	2004	Leaching from natural deposits
Calcium (mg/L)	Not Regulated	n/a	31 - 73	41	n/a	2004	Leaching from natural deposits
Hardness as CaCO3 (mg/L)	Not Regulated	n/a	139-220	193.3	n/a	2004	Leaching from natural deposits
Magnesium (mg/L)	Not Regulated	n/a	11 - 22	16.5	n/a	2004	Leaching from natural deposits
NDMA (N-Nitrosodimethylamine) (ng/L)	Not Regulated	NL = 10	ND - 5.5	ND	n/a	2004	By-product of drinking water chlorination; industrial processes
pH (pH units)	Not Regulated	n/a	7.3 - 8.2	8.0	n/a	2004	Leaching from natural deposits
Potassium (mg/L)	Not Regulated	n/a	3 - 4.1	3.6	n/a	2004	Leaching from natural deposits
Radon (pCi/L)	Not Regulated	n/a	ND-250	61.6	n/a	2004	Natural decay of radioactive material
Sodium (mg/L)	Not Regulated	n/a	55-94	72.3	n/a	2004	Leaching from natural deposits
Total Organic Carbon (mg/L)	Not Regulated	n/a	1.7 - 3.1	2.2	n/a	2004	Various natural and man made sources

**CITY OF BELL GARDENS SYSTEM - Distribution System Water Quality**

Disinfection By-Products & Disinfectant Residuals (units)	PRIMARY MCL	PHG (MCLG)	Range of Detection	Highest 4-Quarterly Average	MCL Violation?	Most Recent Sampling date	Typical Source of Constituent
TTHMs [Total Trihalomethanes] (ug/L)	80	n/a	6 - 81	54	No	2004	By-product of drinking water chlorination
Haloacetic Acids (ug/L)	60	n/a	1 - 52	24	No	2004	By-product of drinking water disinfection
Chlorine (mg/L)	MRDL = 4.0 (as CL2)	MRDLG = 4 (as Cl2)	ND - 2.9	1.3	No	2004	Drinking water disinfectant added for treatment

Inorganic Constituents (units)	ACTION LEVEL	PHG (MCLG)	Range of Detection	90th % Level	MCL Violation?	Most Recent Sampling date	Typical Source of Constituent
Copper (mg/L)	1.3	0.17	ND - 0.52	0.39	No	2004	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. None of the 20 samples collected exceeded the action level.
Lead (ug/L)	15	2	ND - 1.80	1.00	No	2004	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits. None of the 20 samples collected exceeded the action level.

Other Parameters (units)	SECONDARY MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Odor Threshold (Units)	3	n/a	ND - 1.0	ND	No	2004	Naturally-occurring organic materials
Color (units)	15	n/a	ND -2.5	ND	No	2004	Naturally-occurring organic materials
Turbidity (NTU)	5	n/a	ND - 0.3	ND	No	2004	Soil runoff