

City of Bell Gardens

# Water Quality

REPORT 2004



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City of Bell Gardens  
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Bell Gardens, CA 90201



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# Water Quality

R E P O R T

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The City of Bell Gardens is pleased to provide you with this annual report, which includes information on the quality of water delivered to city customers. The City of Bell Gardens water system provided approximately 390 million gallons of water in 2003 through 1,500 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 169 million gallons of water daily to customers throughout California. This report includes valuable information about the sources and quality of drinking water and the challenges of water delivery.

## Drinking Water Quality

The United States Environmental Protection Agency (EPA), the State Department of Health Services (DHS), and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards. The water delivered to your home meets standards required by EPA, DHS, and CPUC. In some cases, SCWC 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.

Unregulated contaminant monitoring helps EPA determine where certain contaminants occur and whether it needs to regulate those contaminants.

Since 1991, California water utilities, including the city, have mailed the annual Water Quality Report to customers. This year's report is in compliance with new regulations of the 1996 Safe Drinking Water Act (SDWA) reauthorization that charges EPA with updating and strengthening the tap water regulatory program. This report presents water quality and supply information for 2003.

To ensure the drinking water is safe to drink, EPA sets regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for health.

## 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 cre-



## Southern California Water Company

SCWC provides water to more than one million people in 10 counties throughout California and the company is dedicated to providing customers with water that meets strict state and federal drinking water standards.

## 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 United States Environment Protection Agency, the American Water Works Association

ated 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 de beber. Traduzcalo o hable con alguien que lo entienda bien.*



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. Southern California Water Company has taken all these steps and is 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 the groundwater well serving the customers of the City of Bell Gardens System in 2003.

The groundwater source is considered most vulnerable to the following activities not associated with detected contaminants:

- Dry cleaners
- Metal plating/finishing/fabricating

## Immunocompromised People

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 2003 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.

- Gas stations/Auto shops
- Known contaminant plumes

The groundwater source is 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 more details or information contact Sunil Kesavapillai, (562)907-9200, extension 404

In December 2002, Metropolitan Water District of Southern California completed its 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 the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water



runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850.

## Additional Notes

### 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 United States Environmental Protection Agency. 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 Metropolitan Water District (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

### Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. Primary 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.

### 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.

### 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 by the U. S. Environmental Protection Agency.

### 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 risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

### Primary Drinking Water Standard (PDWS)

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

### 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.

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.

## 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).

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

Parts per million (ppm or mg/L):

- 3 drops in 42 gallons
- 1 second in 12 days
- 1 inch in 16 miles

Parts per billion (ppb or  $\mu\text{g/L}$ ):

- 1 drop in 14,000 gallons
- 1 second in 32 years
- 1 inch in 16,000 miles

Parts per trillion (ppt or ng/L):

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

Parts per quadrillion (ppq or pg/L):

- 1 drop in 13.2 billion gallons
- 1 second in 31.7 million years
- 1 drop in enough water to fill 100 Rose Bowls



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

Constituent (units)	PRIMARY MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Arsenic (ug/l)	50	n/a	ND-2.4	0.8	No	2003	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Fluoride (mg/l)	2	1	ND-0.37	0.22	No	2003	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO3) (mg/l)	45	45	ND-8.5	3.2	No	2003	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**Radioactive Constituents (units)**

Gross Alpha particle activity (pCi/l)	15	n/a	ND - 4.3	ND	No	2003	Erosion of natural deposits
Gross Beta particle activity (pCi/l)	50	n/a	ND - 5.90	ND	No	2003	Decay of natural and man-made deposits

Constituent (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	278-528	387	No	2003	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	1,600	n/a	518-890	670	No	2003	Substances that form ions when in water; seawater influence
Chloride (mg/l)	500	n/a	53-105	71	No	2003	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/l)	500	n/a	41-177	106.3	No	2003	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
Hardness as CaCO3 (mg/l)	Not Regulated	n/a	109-237	182.7	n/a	2003	Leaching from natural deposits
pH (pH units)	Not Regulated	n/a	7.9-8.3	8.1	n/a	2003	Leaching from natural deposits
Calcium (mg/l)	Not Regulated	n/a	24-73	49	n/a	2003	Leaching from natural deposits
Magnesium (mg/l)	Not Regulated	n/a	11-23.5	15.3	n/a	2003	Leaching from natural deposits
Potassium (mg/l)	Not Regulated	n/a	2.6-4.0	3.3	n/a	2003	Leaching from natural deposits
Sodium (mg/l)	Not Regulated	n/a	55-87	64	n/a	2003	Leaching from natural deposits
Boron (ug/l)	Not Regulated	n/a	100-160	146.7	No	2003	Runoff/leaching from natural deposits; industrial wastes
Vanadium (ug/L)	Not Regulated	n/a	ND-17	5.7	No	2003	Naturally occurring; industrial wastes
Radon (pCi/l)	Not Regulated	n/a	ND-250	61.6	n/a	1999-2001	Natural decay of radioactive material

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

Constituent (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 - 4.0	ND	No	2003	Naturally-occurring organic materials
Turbidity (NTU)	5	n/a	ND - 1.2	0.11	No	2003	Soil runoff

Disinfection By-Products, Disinfectant Residuals, and Disinfection Byproduct Precursors (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	57.4 - 59.8	58.6	No	1999	By-product of drinking water chlorination
Halocetic Acids (ug/l)	60	n/a	5.5 - 6.2	5.9	No	1999	By-product of drinking water disinfection
Chlorine (mg/L)	MRDL = 4.0 (as Cl2)	MRDLG = 4 (as Cl2)	ND - 2.9	1.3	No	2003	Drinking water disinfectant added for treatment

Copper (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 - 0.27	0.17	No	2001	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. None of the 20 samples collected exceeded the action level.

\* The MCL is based on the highest four-quarter running average.