



CITY OF WHITTIER

2011 ANNUAL

WATER QUALITY REPORT

Important Information About The Quality of Your Drinking Water

May 21, 2012

Dear Customer,

The City of Whittier is committed to keeping you informed on the quality of your drinking water. This report is provided to you annually. It includes information describing where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards. During 2011, the drinking water provided by the City of Whittier to its service area (see map) complied with all Federal and State drinking water quality standards. We remain dedicated to providing you with a safe and reliable supply of high quality drinking water.

The information that follows represents only a fraction of the activity in which the City of Whittier engages to provide you, the consumer, a high level of confidence in the water that you drink. We, along with our State-certified laboratories, routinely scrutinize our water supplies for the entire range of elements that have the potential to degrade the quality of your water.

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 United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline (1-800- 426-4791).

Some people, however, may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people who have undergone organ transplants and people with

infections are among those that may be more vulnerable. 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 USEPA Safe Drinking Water Hotline (1-800 426-4791).

Our City Council meets on the second and fourth Tuesday of each month at 6:30 p.m. in the City Council Chambers located in City Hall at 13230 Penn Street. Please feel free to participate in these meetings.

DEFINITIONS

- **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 California Environmental Protection Agency.
- **MAXIMUM CONTAMINANT LEVEL (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.
- **ACTION LEVEL (AL):** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirements which a water system must follow.

- **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:** MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **NOTIFICATION LEVEL (NL):** An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, county board of supervisors).

WHAT KIND OF CONTAMINANTS MIGHT BE FOUND IN DRINKING 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 surfaces 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gasoline

stations, urban stormwater runoff, agricultural application and septic systems.

- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas productions and mining activities.

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

If present, elevated levels of lead can cause serious 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. The City of Whittier 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 2 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 or at:

<http://www.epa.gov/safewater/lead>

WHERE DOES YOUR WATER COME FROM ?

During 2011, the City of Whittier pumped 100 percent of our source water from nine (9) active deep wells located in the Whittier Narrows area. These wells draw water from the Main San Gabriel groundwater basin and the Central groundwater basin. This water is then treated, pressurized and delivered to the City of Whittier's eleven reservoirs for your use.

In December 2005, the City of Whittier started receiving water from a groundwater treatment facility located in the Main San Gabriel Basin. The groundwater treatment facility was constructed by USEPA as a part of the Whittier Narrows Operable Unit cleanup projects. In addition, the City of Whittier assists in the operation of a groundwater treatment facility located in the Central Basin and receives treated water from the Central Basin Plant as a drinking water supply. Both facilities

removed Volatile Organic Chemicals (VOCs) to non-detectable levels. Most of the City of Whittier's water supply came from the groundwater treatment facility located in the Main San Gabriel Basin.

Water conservation is the wise use of our resource to ensure an adequate supply. The City of Whittier has had a voluntary 10 percent water conservation goal since the early 1990's. Although we have enough water pumping rights in reserve to meet the City of Whittier's needs, conservation at this time would help to meet the City of Whittier's supply need in the future if the lack of precipitation continues.

WHAT IS IN YOUR DRINKING WATER?

The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2011 or from the most recent tests. The State allows the City of Whittier to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater do not change frequently. Some of our data, although representative, are more than one year old. The chart lists all the contaminants detected in your drinking water that have Federal and State drinking water standards. Detected unregulated contaminants of interest are also included.

DRINKING WATER SOURCE ASSESSMENT

In accordance with the Federal Safe Drinking Water Act, an assessment of the drinking water sources for the City of Whittier was completed in December 2002. The assessment concluded that the City of Whittier's sources are considered vulnerable to the following activities or facilities associated with contaminants detected in the water supply: research laboratory, known VOC contamination plumes, and parking lots/mall. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: research laboratories and parks. A copy of the complete assessment is available at the City of Whittier Water Division at 13230 East Penn Street, Whittier, California 90602. You may request a summary of the assessment to be sent to you by contacting Customer Service at (562) 567-9530.

This report is intended to provide information for all water users. If received by an absentee landlord, a business or school, please share the information with tenants, employees or students. We will be happy to make additional copies of this report available for review by the public upon request.

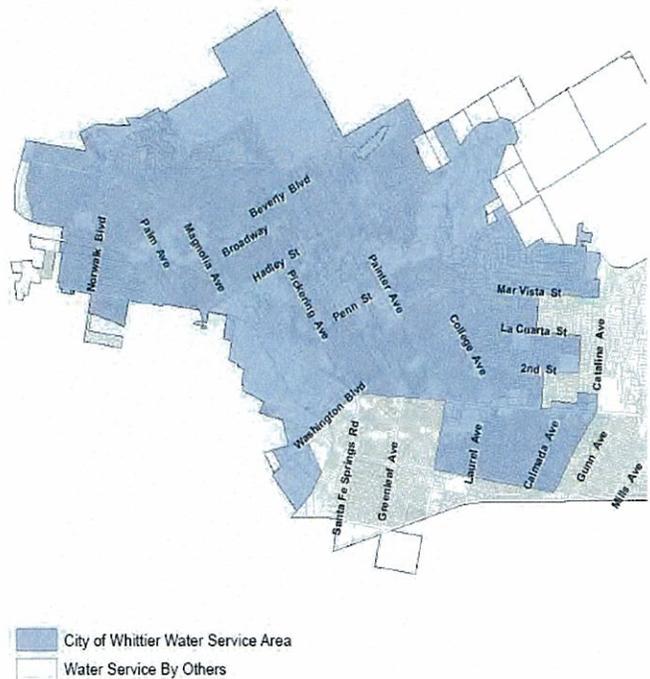
If you would like additional information regarding water quality, please call Mr. Kenneth Kittridge, Water Manager at (562) 567-9549.

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción , favor de contactar a Mr. Kenneth Kittridge. Telefono: (562) 567-9549.

這份報告包含有關閣下飲用水水質的重要資訊，請找他人為你翻譯及解釋清楚。如果您有任何問題，或是須要更多資訊，請聯絡

Sincerely,

David A. Pelsler, PE, BCEE
Director of Public Works



CITY OF WHITTIER 2011 ANNUAL WATER QUALITY TABLE

CONSTITUENT AND (UNITS)	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	DLR	GROUNDWATER SOURCES		MCL Violations?	Most Recent Sampling Date	TYPICAL ORIGINS
				Results (a)	Range (Min-Max)			
PRIMARY DRINKING WATER STANDARDS--Health-Related Standards								
ORGANIC CHEMICALS								
Tetrachloroethylene (PCE) (µg/l)	5	0.06	0.5	<0.5	ND - 0.90	No	Monthly	Discharge from industrial activities
DISINFECTANT AND DISINFECTION BYPRODUCTS (b)								
Total Trihalomethanes (TTHM) (µg/l)	80	NA	0.5	22	12 - 34	No	Quarterly	Byproduct of drinking water chlorination
Haloacetic acids (five) (HAA5) (µg/l)	60	NA	1 - 2	4.7	2.9 - 6.5	No	Quarterly	Byproduct of drinking water chlorination
Chlorine Residual (mg/l)	[4]	[4]	NA	0.35	0.04 - 0.91	No	Weekly	Drinking water disinfectant
INORGANIC CHEMICALS								
Aluminum (mg/l)	1	0.6	0.05	<0.05	ND - 0.068	No	2011	Erosion of natural deposits
Barium (mg/l)	1	2	0.1	<0.1	ND - 0.1	No	2011	Erosion of natural deposits
Copper (mg/l) (c)	AL = 1.3	0.3	0.05	0.39	0 / 30 Samples Exceeded the AL	No	2010	Corrosion of household plumbing system
Fluoride (mg/l)	2	1	0.1	0.20	ND - 0.32	No	2011	Erosion of natural deposits
Lead (µg/l) (c)	AL = 15	0.2	5	ND	0 / 30 Samples Exceeded the AL	No	2010	Corrosion of household plumbing system
Nitrate as NO3 (mg/l)	45	45	2	11	6.2 - 17	No	2011	Runoff and leaching from fertilizer use
BACTERIOLOGICAL								
Coliform Bacteria (d)	5%	(0)	NA	0.0%	--	No	Weekly	Naturally present in the environment
RADIOACTIVE CHEMICALS								
Gross Alpha (pCi/l)	15	(0)	3	<3	ND - 11	No	2011	Decay of natural and man-made deposits
Uranium (pCi/l)	20	0.43	1	1.8	ND - 5.4	No	2011	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS--Aesthetic Standards, Not Health-Related								
Aluminum (µg/l)	1,000	600	50	<50	ND - 68	No	2011	Erosion of natural deposits
Chloride (mg/l)	500	NA	NA	100	72 - 130	No	2011	Erosion of natural deposits
Iron (µg/l)	300	NA	100	<100	ND - 130	No	2011	Erosion of natural deposits
Manganese (µg/l)	50	NA	20	<20	ND - 36	No	2011	Erosion of natural deposits
Odor (TON)	3	NA	1	<1	ND - 1.0	No	2011	Naturally occurring organic materials
Specific Conductance (µmho/cm)	1,600	NA	NA	900	730 - 1,000	No	2011	Substances that form ions in water
Sulfate (mg/l)	500	NA	0.5	140	110 - 160	No	2011	Erosion of natural deposits
Total Dissolved Solids (mg/l)	1,000	NA	NA	570	510 - 620	No	2011	Erosion of natural deposits
Turbidity (NTU)	5	NA	NA	0.36	ND - 3.0	No	2011	Erosion of natural deposits
ADDITIONAL CHEMICALS OF INTEREST/UNREGULATED								
Alkalinity, total as CaCO3 (mg/l)	NA	NA	NA	180	160 - 220	No	2011	Erosion of natural deposits
Boron (µg/l)	NL = 1,000	NA	100	190	120 - 460	No	2008	Erosion of natural deposits
Calcium (mg/l)	NA	NA	NA	89	74 - 120	No	2011	Erosion of natural deposits
Hardness, total as CaCO3 (mg/l)	NA	NA	NA	290	260 - 380	No	2011	Erosion of natural deposits
Magnesium (mg/l)	NA	NA	NA	17	15 - 20	No	2011	Erosion of natural deposits
pH (pH units)	NA	NA	NA	7.7	7.4 - 8.0	No	2011	Hydrogen ion concentration
Sodium (mg/l)	NA	NA	NA	73	44 - 100	No	2011	Erosion of natural deposits
Vanadium (µg/l)	NL = 50	NA	3	4.0	2.8 - 8.7	No	2008	Erosion of natural deposits

NOTES

AL = Action Level	MRDL = Maximum Residual Disinfectant Level	pCi/l = picoCuries per liter
DLR = Detection Limit for the Purposes of Reporting	MRDLG = Maximum Residual Disinfectant Level Goal	PHG = Public Health Goal
MCL = Maximum Contaminant Level	NA = No Applicable Limit	TON = Threshold Odor Number
MCLG = Maximum Contaminant Level Goal	ND = Not Detected at DLR	µg/l = parts per billion or micrograms per liter
mg/l = parts per million or milligrams per liter	NL = Notification Level	µmho/cm = micromhos per centimeter
< = Average is less than the DLR	NTU = Nephelometric Turbidity Units	

(a) The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2011 or from the most recent tests, except for Coliform Bacteria, Chlorine Residual, TTHM, HAA5, Lead, and Copper which are described below.

(b) Samples were collected in the distribution system. For Chlorine Residual, TTHM, and HAA5, the running annual average is reported as "Results" while the maximum and minimum of the individual results are reported as "Range."

(c) Concentrations were measured at the tap. The 90th percentile concentration is reported in the table. None of the thirty sampling locations for Lead and Copper exceeded the Action Levels. The samples were collected in 2010.

(d) Seven hundred (700) Coliform Bacteria samples were collected in the distribution system in 2011.

The result in the chart is the percentage of Coliform-positive samples out of all samples collected in the month the detection was made. Coliform Bacteria are used as an indicator that if present, indicates other potentially harmful microorganisms may be present. No more than 5.0% of the monthly samples may be Coliform-positive; therefore, the MCL was not violated in 2011.