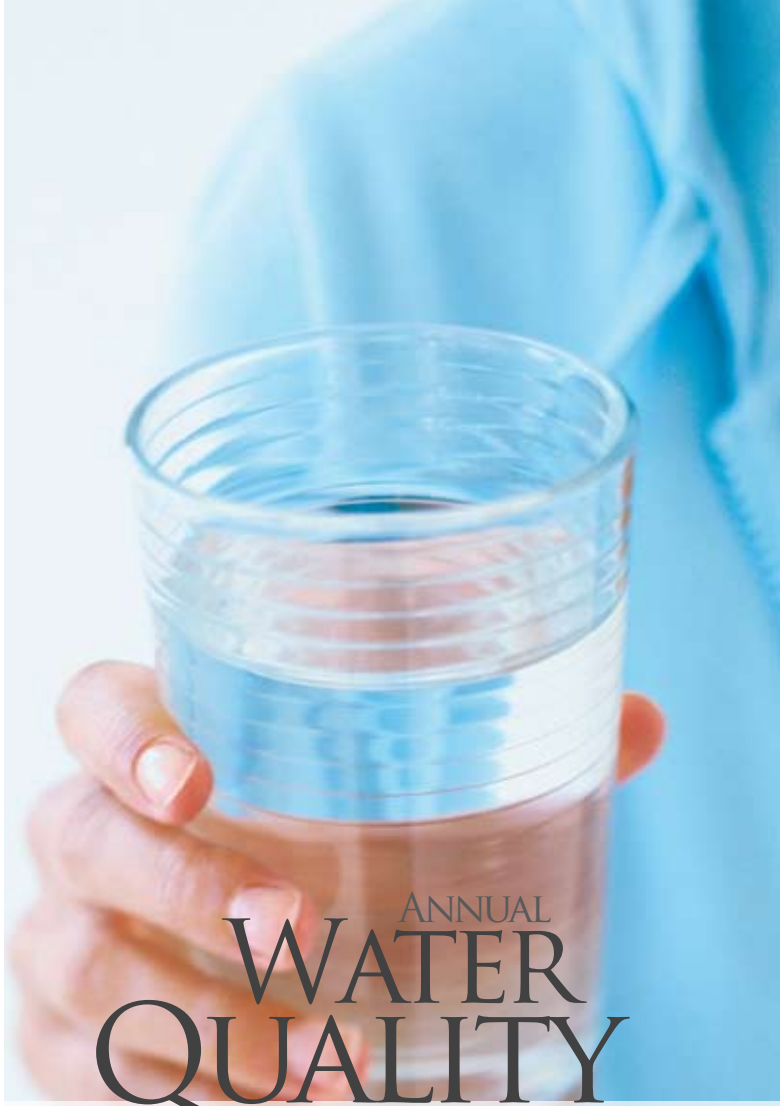

Annual Water Quality Report

Water testing performed in 2007

City of Torrance

PWS ID#: CA1910213

Continuing Our Commitment

The City of Torrance is pleased to present our annual water quality report. This edition covers all testing completed from January through December 2007. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all water users. Included is information about where the water comes from, what is in it, and how it compares with the regulatory standards set by the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (CDPH). This report will better inform you about your drinking water and the challenges in delivering a high-quality supply of drinking water to your home.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

The Torrance Water Commission meets the third Thursday of each month beginning at 7:00 p.m. at the West Annex of City Hall, 3031 Torrance Boulevard, Torrance. You are invited to participate in our public forum and voice your concerns about your drinking water.

Where Does My Water Come From?

The City of Torrance Municipal Water Utility serves approximately 110,000 residents. In 2007, the Municipal Water Utility distributed approximately 24,202 acre-feet of drinking water to its customers, or approximately 7.8 billion gallons. One acre-foot of water is equivalent to 326,000 gallons or an acre of land covered with one foot of water. Torrance purchased 87% of the total potable water supply from the Metropolitan Water District of Southern California (MWD), a regional wholesaler of imported surface water. This water originates from two sources: (1) the Colorado River, via the 242-mile Colorado River Aqueduct, and (2) Northern California, via the 441-mile California Water Aqueduct. The Metropolitan Water District performs advanced multi-stage treatment of imported water in five regional treatment plants. The remaining 13% of the municipal potable supply came from one operating well pumping from the West Coast Ground Water Basin and a state-of-the-art groundwater desalter project.

Source Water Assessment

An assessment of the drinking water source for the city was completed in May 2003. This study was done in compliance with the California Department of Public Health Source Water Assessment Program, the goal of which is to determine the water system's vulnerability to possible sources of contamination. The assessment determined that our groundwater is most vulnerable to landfills and dumps. For a copy of the complete assessment, contact the City of Torrance Public Works Department at (310) 781-6900 or visit our Web site at www.torrnet.com/publicworks.

Fluoridation Update

In fall 2007, Metropolitan joined a majority of the nation's public water suppliers in systematically adding fluoride to drinking water at each of five water treatment plants in order to help prevent tooth decay. In line with recommendations from the California Department of Public Health, as well as the U.S. Centers for Disease Control and Prevention, Metropolitan adjusted the natural fluoride level in the water, which ranges from 0.1 to 0.4 parts per million, to the optimal range for dental health of 0.7 to 0.8 parts per million. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million. Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S. 43 fluoridate their drinking water.

Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (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. 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.

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 can result from urban stormwater 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems; Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation

California's main water sources have been severely impacted by record dry conditions. And we're already using our reserves to supply our everyday water. Our water situation is serious. But here's how you can help.

What you can do:	How much you can save:
Turn off the water when you brush your teeth	3 gallons per day
Shorten your showers by one or two minutes	5 gallons per day
Fix leaky faucets	20 gallons per day
Wash only full loads of laundry	15-50 gallons per load
Water your yard only before 8 a.m. to reduce evaporation and interference from wind	25 gallons per day
Install a smart sprinkler controller	40 gallons per day
Use a broom instead of a hose to clean driveways and sidewalks	150 gallons each time
Check your sprinkler system for leaks, overspray and broken sprinkler heads	500 gallons a month
Mulch!	Save hundreds of gallons a year by using organic mulch around plants to reduce evaporation

For more conservation tips and rebate programs visit www.bewaterwise.com.

What Affects the Taste of My Water?

The taste of drinking water is affected by its mineral content as well as the presence of chlorine, which is used to protect against potential bacterial contamination. Sometimes plumbing can cause a metallic flavor, especially if the water has been sitting in the pipes for many hours. Taste, however, does not necessarily indicate a higher or lower degree of water quality.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Alan Berndt, Senior Water Service Supervisor, at (310) 781-6900.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

A constituent is any naturally occurring or man-made substance found in drinking water. The U.S. EPA and the California EPA establish the list of constituents that require testing and the frequency of each test. Some data, though representative of current water quality conditions, are three years old. The state allows water utilities to monitor some constituents less than once per year, because the concentrations of these constituents do not change frequently. All data included in this report was collected between January 1, 2004, and December 31, 2007.

REGULATED SUBSTANCES			City of Torrance Ground Water		MWD Surface Water			
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	1000	600	ND	NA	80	ND–140	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic[1] (ppb)	10	0.004	ND	NA	ND	ND–2.8	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	1	2	ND	NA	ND	ND–0.10	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chloramines[2] (ppm)	[4.0 (as Cl2)]	[4 (as Cl2)]	1.73	0.20–2.20	NA	NA	No	Drinking water disinfectant added for treatment
Dichloromethane (ppb)	5	4	0.69	0.69–0.69	ND	NA	No	Discharge from pharmaceutical and chemical factories; insecticide
Fluoride (ppm)	2.0	1	0.16	ND–0.31	0.8	0.6–1.0	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity[3] (pCi/L)	15	(0)	0.88	0.7–1.3	ND	ND–7.2	No	Erosion of natural deposits
Gross Beta Particle Activity[4] (pCi/L)	50	(0)	10	10–10	ND	ND–6.4	No	Decay of natural and man-made deposits
Haloacetic Acids[5] (ppb)	60	NA	11.5	ND–76	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	45	45	ND	NA	2.2	ND–3.5	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes][5] (ppb)	80	NA	44	ND–100	NA	NA	No	By-product of drinking water chlorination
Uranium (pCi/L)	20	0.43	ND	NA	ND	ND–1.9	No	Erosion of natural deposits

SECONDARY SUBSTANCES			City of Torrance Ground Water		MWD Surface Water			
SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	200	NS	ND	NA	80	ND–140	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	500	NS	130	110–170	78	40–101	No	Runoff/leaching from natural deposits; seawater influence
Color[6] (Units)	15	NS	ND	ND–5	2	1–2	No	Naturally occurring organic materials
Corrosivity[7,8] (Units)	Non-corrosive	NS	-0.29	-0.29–-0.29	12.1	11.9–12.2	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Iron (ppb)	300	NS	47.5	ND–120	ND	NA	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	50	NS	49.5	48–51	ND	NA	No	Leaching from natural deposits
Odor–Threshold[2,9] (Units)	3	NS	ND	ND–1	1.7	1–2	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	1,600	NS	676	619–980	676	414–893	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	42	37–71	117	46–179	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	450	280–870	391	248–519	No	Runoff/leaching from natural deposits
Turbidity[6,10] (Units)	5	NS	0.19	0.05–1.01	0.05	0.03–0.07	No	Soil runoff

UNREGULATED SUBSTANCES	City of Torrance Ground Water		MWD Surface Water	
SUBSTANCE (UNIT OF MEASURE)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Boron (ppb)	ND	NA	157	130–200
Chromium VI [Hexavalent Chromium] (ppb)	NA	NA	0.12	0.06–0.22
Sodium (ppm)	54	28–79	71	40–93
Vanadium (ppb)	NA	NA	3.2	ND–4.1

Tap water samples were collected from 50 sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005	1.3	0.17	0.19	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2005	15	2	4	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

OTHER SUBSTANCES	City of Torrance Ground Water		MWD Surface Water	
SUBSTANCE (UNIT OF MEASURE)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	126	32–220	NA	NA
Calcium (ppm)	49	37–61	37	23–55
Magnesium (ppm)	16	11–20	17	11–23
Potassium (ppm)	5.2	2.3–8.0	ND	ND–4.1
Total Hardness (ppm)	184	138–230	165	108–228
Total Organic Carbon (ppm)	97	97–97	2.2	1.5–2.9
pH (Stanard Units)	7.6	6.6–8.2	8.2	8.1–8.4

[1] Effective 01/23/2006, the federal arsenic MCL is 10 ppb. A new state MCL has not yet been adopted and remains as 50 ppb.
[2] City of Torrance Ground Water: Monitored in the distribution system.
[3] City of Torrance Ground Water: Gross Alpha standard also includes Radium 226. Analyzed every 4 years for groundwater only.
[4] Effective 6/11/2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.
[5] Running annual average used to calculate average and MCL compliance. Monitored in the distribution system.
[6] MWD Surface Water: Monitored at the source.
[7] City of Torrance Ground Water: Langlier used for analysis.
[8] MWD Surface Water: Saturation index used for analysis.
[9] MWD Surface Water: Flavor profile used for analysis. Monitored at the source.
[10] City of Torrance Ground Water: Monitored in the distribution system. Turbidity is a measure of the cloudiness of water. Turbidity serves as an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Definitions

Action Level (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. EPA.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.