ANNUAL WATER OUALITY REPORT

Reporting Year 2018



Presented By City of Torrance

> Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

> > PWS ID#: CA1910213

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

Source Water Assessment

An assessment of the drinking water source for the city was completed in May 2015. This study was done in compliance with the State Water Resources Control Board Division of Drinking 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 historic gas stations and underground storage tanks. For a copy of the complete assessment, contact the City of Torrance Public Works Department at (310) 781-6900, or visit the following link: https://www.torranceca.gov/ home/showdocument?id=16939.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those 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 or http:// water.epa.gov/drink/hotline.



Public Meetings

The Torrance Water Commission meets the fourth Wednesday 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.

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 Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that 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, that are by-products of industrial processes and petroleum production and 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.

Conserving Water

A lthough we experienced abundant precipitation and snowpacks in key watersheds in two of the last three years, Californians must stay committed to making water conservation a way of life. Thanks to the efforts of our customers, we continue to meet our conservation goals. While droughts in California are a cyclic event that occur on a periodic basis, there is an ongoing need to save our limited water resources to avert shortages in the future. What we save today, we preserve for tomorrow. Here are some ways you can reduce your water use and save money on your water bill.

- Fix household leaks promptly. A leaking pipe, sprinkler, faucet, valve, or toilet can waste a large amount of water and drive up your water bill.
- Water your lawn only when needed. Consider installing a "smart irrigation controller" that automatically adjusts for weather, shade, soil, and plant types. Saves up to 40 gallons per day.
- Water early in the morning to reduce evaporation and irrigation drift due to wind.
- Shrink your lawn by replacing turf with a "California Friendly" landscape that focuses on plants that use less water and are adapted to our Mediterranean climate. A new turf replacement rebate program is available for customers who meet the program qualifications
- Wash only full loads of dishes or clothes. Saves 10 to 50 gallons per load.
- Take 5-minute showers. Saves 8 gallons per shower.

For more information on conservation, turf replacement rebates, free water efficient landscape workshops, and other conservation rebates, visit these Web sites:

- BeWaterWise.com
- TorranceCA.Gov/PublicWorks

The Benefits of Fluoridation

Our water system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6-1.2 ppm with an optimum dose of 0.7 ppm. Our monitoring showed that the fluoride levels in the treated water ranged from 0.64-0.90 with an average of 0.82 ppm. Information about fluoridation, oral health, and current issues is available from http://www. swrcb.ca.gov/drinking_water/certlic/drinkingwater/ Fluoridation.shtml.

Where Does My Water Come From?

The City of Torrance Municipal Water Utility serves approximately 107,000 residents. In 2018, the Municipal Water Utility distributed approximately 17,865 acre-feet of drinking water to its customers, or approximately 5.8 billion gallons. One acre-foot of water is equivalent to 325,900 gallons or an acre of land covered with one foot of water. Torrance purchased 81% 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 19% of the municipal potable water supply came from one operating well, pumping from the West Coast Ground Water Basin and from a groundwater desalination project.

Lead in Home Plumbing

f present, elevated levels of lead can cause serious Lhealth 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. We are responsible for providing high-quality drinking water, but we 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Andy Darlak, Water Operations Manager, at (310) 781-6900.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2018. Remember that detecting a substance does not necessarily mean the water in unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The state recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES											
				Torrance ndwater	MWD Sur	face Water	Monitored in the Distribution System				
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	VIOLATION TYPICAL SOURCE	
Aluminum (ppm)	1	0.6	ND	NA	0.06	ND-0.11	NA	NA	No	Erosion of natural deposits; residue from some surface water treatment processes	
Arsenic (ppb)	10	0.004	ND	ND-3.1	ND	NA	NA	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium (ppm)	1	2	0.01	ND-0.13	0.06	ND-0.12	NA	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chlorine (ppm)	[4.0 (as Cl2)]	[4 (as Cl2)]	NA	NA	NA	NA	1.5	0.2–2.0	No	Drinking water disinfectant added for treatment	
Fluoride (ppm)	2.0	1	0.25	0.17–0.36	0.7	0.4–0.9	0.82	0.64–0.90	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Gross Alpha Particle Activity ¹ (pCi/L)	15	(0)	0.49	ND-4.4	ND	ND-3.0	NA	NA	No	Erosion of natural deposits	
Gross Beta Particle Activity (pCi/L)	50	(0)	NA	NA	ND	NA	NA	NA	No	Decay of natural and man-made deposits	
Haloacetic Acids (ppb)	60	NA	NA	NA	NA	NA	13.2	0.0-13.2	No	By-product of drinking water disinfection	
Methyl tert-Butyl Ether [MTBE] (ppb)	13	13	0.88 ²	ND-3.5 ²	ND	NA	NA	NA	No	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories	
Nitrate [as nitrate] (ppm)	45	45	ND	NA	0.25	ND-0.5	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Radium 226 (pCi/L)	5	0.05	ND	NA	ND	NA	NA	NA	No	Erosion of natural deposits	
Radium 228 (pCi/L)	5	0.019	ND	NA	ND	NA	NA	NA	No	Erosion of natural deposits	
TTHMs [Total Trihalomethanes] (ppb)	80	NA	NA	NA	NA	NA	68.1	1.7–75.4	No	By-product of drinking water disinfection	
Total Coliform Bacteria [federal Revised Total Coliform Rule] (% positive samples)	TT	NA	ND	NA	NA	NA	0.4	NA	No	Naturally present in the environment	
Turbidity (NTU)	ΤT	NA	NA	NA	NA	NA	0.8	0.4–0.8	No	Soil runoff	
Uranium (pCi/L)	20	0.43	ND	NA	ND	ND-1.0	NA	NA	No	Erosion of natural deposits	
Tap water samples were collected for I	ead and con	ner analyses from	m camnla citad	throughout the	community						

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	0.3	0.12	0/200	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	0.2	ND	0/200	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES										
			City of Torrance Groundwater		MWD Surface Water		Monitored in the Distribution System			
SUBSTANCEPHG(UNIT OF MEASURE)SMCL(MCLG)		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Aluminum (ppb)	200	NS	ND	NA	53	ND-220	NA	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	500	NS	127	74–230	76	54–97	NA	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	NS	<5	<5–5.0	ND	ND-1	<5	<5-<5	No	Naturally occurring organic materials
Corrosivity (Units)	Non- corrosive	NS	12.6	12.3–12.8	12.2	12.0–12.5	NA	NA	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Manganese (ppb)	50	NS	36	22–53	ND	NA	NA	NA	No	Leaching from natural deposits
Methyl tert-Butyl Ether [MTBE] ² (ppb)	5	NS	0.88	ND-3.5	NA	NA	NA	NA	No	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor-Threshold (Units)	3	NS	2.1	1.0-4.0	2.5	1.0-4.0	ND	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	1,600	NS	1,100	900–1,200	695	428–1,010	NA	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	197.5	65–330	128	43–236	NA	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	390	210–680	419	239–639	NA	NA	No	Runoff/leaching from natural deposits
Turbidity (Units)	5	NS	0.15	ND-0.5	ND	NA	NA	NA	No	Soil runoff

UNREGULATED SUBSTANCES (CITY OF TORRANCE GROUNDWATER)³

SUBSTANCE	YEAR	AMOUNT	RANGE	TYPICAL SOURCE
(UNIT OF MEASURE)	SAMPLED	DETECTED	LOW-HIGH	
Chromium VI [Hexavalent Chromium] (ppb)	NA	0.02	ND-0.06	NA

¹ Gross alpha particle activity standard also includes the radium 226 standard.

² MTBE was detected in one well in 2014 after treatment effluent samples were nondetectable.

³ Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Regulatory Action Level): The concentration of a contaminant that, 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 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

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

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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.