

TO OUR CUSTOMERS:

Thank you for taking the time to read our annual water quality report. Each year, the City provides this report to inform you, our customers, about the quality of the water you drink. In 2018, your water met or surpassed all health-based drinking water standards. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) 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. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. To meet these regulations, the City contracts with certified laboratories to perform water quality testing. We welcome your thoughts and suggestions to improve our service and delivery of the earth's most precious resource. Please visit our websites, www.lomita.com/cityhall and www.lomitawater.com, or attend our City Council meetings.

Este informe contiene información muy importante sobre su agua beber. Favor de comunicarse City of Lomita a (310) 325-7110.

SOURCES OF WATER

The Metropolitan Water District of Southern California (MWD) is a consortium of 26 cities and water districts that provides drinking water to nearly 19 million people in Southern California, including West Basin Municipal Water District (WBMWD) from whom the City purchases treated water. MWD supplies the City with water treated at the Weymouth Treatment Plant. Most of the water treated at this plant travels down the Colorado River and flows through MWD's 242-mile Colorado River Aqueduct. Some MWD water also comes from Northern California rivers and streams that feed the State Water Project's 444-mile California Aqueduct. The plant uses conventional techniques to treat your water. This includes the coagulation process where aluminum sulfate and other chemical additives cling to particles in the water, forming large particles that settle to the bottom of large sedimentation basins. Then, the water flows through coal and sand for filtration. Chloramine (chlorine plus ammonia) disinfection is used to kill remaining microorganisms, such as bacteria, and to keep the water safe as it travels to your tap. In December 2002, MWD completed a source water assessment of its Colorado River and State Water Project supplies. Colorado River water is considered to be most vulnerable to recreation, urban and storm water runoff, increasing urbanization in the watershed, and wastewater. The State Water Project is considered to be most vulnerable to urban and storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6850..

The Water Replenishment District of Southern California (WRD) manages groundwater for nearly four millions residents in 43 cities of Southern Los Angeles County. There is one groundwater source well within the City, Well No. 5, with an approximate production capability of 1,500 gallons per minute. The City has adjudicated rights to 1,352 acre-feet of groundwater. An assessment of the City's groundwater well was completed in 2014. The well is considered vulnerable to various contaminating activities including the following: automobile-repairs, gas stations, dry cleaners, landfills/ dumps, and other chemical/industrial activities. A copy of the assessment can be obtained by contacting the State Water Resources Control Board, Division of Drinking Water, 500 North Central Avenue, Suite 500, Glendale, CA 91203 or by phone at (818) 551-2004.

WATER SYSTEM INFORMATION

The City's water distribution system is divided into four pressure zones due to varying topography in the City. Pressure Zone I is located north of PCH to the northern City limit. It is the largest pressure zone, serving approximately 75% of Lomita's population. Zone I is supplied by blending purchased water from WBMWD and groundwater from Well No. 5. The Cypress Water Production Facility (CWPF) treats Well No. 5 groundwater for iron, manganese, and color. The treatment process consists of oxidation and precipitation, filtration of the precipitates through a manganese greensand and anthracite pressure filter, chloramine disinfection to kill the remaining microorganisms, and an ortho/polyphosphate injection to inhibit calcium hardness and minimize corrosion. The treated groundwater is blended with WBMWD purchased water and is monitored to ensure primary water quality standards. Water service connections within the City's remaining Pressure Zones II, III, and IV were supplied with water purchased from WBMWD in 2018.

CITY OF LOMITA



ANNUAL WATER QUALITY REPORT

Reporting Period : Jan – Dec 2018

Public Information & Contact Information

Regular City Council Meetings are held on the 1st and 3rd Tuesdays of each month at 6:00 p.m. at Lomita City Hall (24300 Narbonne Avenue, Lomita, CA 90717).

The City of Lomita welcomes your comments and questions about water quality. For questions or comments regarding water quality or this report, please contact the City of Lomita Public Works Department at (310) 325-7110. To view this report on the internet, please visit www.lomitawater.com.

A full version of MWD's Annual Water Quality Report may be obtained from Dr. Mic Steward at msteward@mwadh20.com or (213) 217-5696.

DRINKING WATER & YOUR 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

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 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 application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. 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 Safe Drinking Water Hotline (1-800-426-4791).

LEAD IN HOME PLUMBING

If present, elevated levels of lead can cause serious health 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 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>.



TABLE DEFINITIONS

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

AL (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 of expressing the amount of electrical conductivity of a solution.

LRAA (Locational Running Annual Average): The average of a sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as LRAAs.

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 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. Environmental Protection Agency.

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.

WATER CONSERVATION TIPS

As part of the City's Water Conservation and Drought Management Plan, the following water conservation requirements shall apply to all persons within the city:

- No lawn/landscape watering between 10 a.m. and 8 p.m.
- Timely repair of breaks or leaks
- Use of hand-held bucket or similar container to clean sidewalks and parking areas
- Use of hand-held bucket or hose with a quick release shutoff nozzle when cleaning a vehicle
- No excess water runoff from lawn/landscape areas
- Restaurants to provide water to customers only on request
- Motels to provide guests the option of having towels/linens laundered daily
- For conveyor style car washes, installation of water recycling system

Please call (310) 325-7110 or visit www.lomita.com/cityhall/ to get information regarding additional restrictions.

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.

N/A: Not applicable

ND (Not detected): Substance was not found in laboratory analysis.

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 Environmental Protection Agency.

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.

SAMPLING RESULTS

During the past year, your water was tested for chemical, physical, radiological and bacteriological parameters. We also test for additional organic and inorganic chemicals that are not regulated. The tables included in this report list all the substances that were detected. The presence of these substances in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from the testing performed last year. The State allows monitoring for certain substances less 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.

The City participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality.

PRIMARY DRINKING WATER STANDARDS - MANDATORY HEALTH RELATED STANDARDS								
SUBSTANCE	MCL [MRDL] (Federal)	PHG [MCLG]	CITY OF LOMITA GROUNDWATER & DISTRIBUTION SYSTEM		DATES SAMPLED if other than 2018 [D]	MWD SURFACE WATER		TYPICAL SOURCE
			RANGE	DETECTED AVERAGE LEVEL (2018) [A], [B], [C]		RANGE	DETECTED AVERAGE LEVEL (2018)	
DISINFECTION BYPRODUCTS (DBPs) AND DISINFECTANT RESIDUALS								
Total Chlorine Residual, ppm	MRDL = 4.0 as Cl ₂		0.6 -3.7	2.52 [A]	-	1.4 -2.9	2.4	Drinking water disinfectant added for treatment
Haloacetic Acids (HAA5), ppb	60	N/A	4.7 – 15.7	15.6 [A]	-	ND - 21	17	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs), ppb	80	N/A	19.2 -68.4	65.3 [A]	-	11 - 35	38	Byproduct of drinking water disinfection
Bromate, ppb	10	0.1	N/A	N/A	--	ND - 10	3.92	Byproduct of drinking water ozonation
Total Organic Carbon (TOC), ppm	TT	N/A	N/A	N/A	--	1.6 - 3.2	2.42	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts.
INORGANIC CONTAMINANTS								
Aluminum, ppb	1,000	600	N/A	N/A	--	ND - 310	124	Residue from water treatment process; natural deposits erosion
Arsenic, ppb	10	0.004	N/A	ND [C]	2016	N/A	ND	Natural deposits erosion, glass and electronics production wastes
Barium, ppm	1	2	N/A	ND [C]	2016	ND – 0.118	0.047	Oil and metal refineries discharge; natural deposits erosion
Copper, ppm	AL = 1.3	0.3	N/A	ND [C]	2016	N/A	ND	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride, ppm	2	1	N/A	0.39 [C]	2016	0.4 – 0.9	0.7	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium, ppb (*)	N/A	0.02	N/A	ND [C]	2017	N/A	ND	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate (as N), ppm	10	10	N/A	ND [C]	-	N/A	0.22	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS								
Fecal coliform and E. coli (Total Coliform Rule) (# positive samples)	A routine sample and repeat sample are total coliform, and one of these is also fecal coliform or E. coli positive	0	N/A	ND [A]	-	N/A	ND	Human and animal fecal waste
Heterotrophic Plate Count (HPC), CFU/mL	TT	N/A	ND – 2,000	16 [A]	-	ND – 1	ND	Naturally present in the environment
Total Coliform Bacteria (Total Coliform Rule) (# positive samples)	More than 5.0% of monthly samples are positive	0	N/A	0 [A]	-	0 – 0.3	0.1	Naturally present in the environment
Giardia, cysts/200 L	TT	MCLG = 0	N/A	N/A	N/A	ND - 1	ND	Human and animal fecal waste
ORGANIC CONTAMINANTS								
Benzene, ppb	1 (5)	0.15	N/A	0.54 [C]	-	N/A	ND	Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills
RADIOACTIVE CONTAMINANTS								
Combined Radium, pCi/L	5	0	N/A	0.17 [C]	2014	ND	ND	Erosion of natural deposits
Gross Alpha Particle Activity, pCi/L	15	0	N/A	ND [C]	2014	ND – 4	ND	Erosion of natural deposits
Gross Beta Particle Activity, pCi/L	50	MCLG = 0	N/A	N/A	N/A	ND - 5	ND	Decay of Natural and manmade deposits
Uranium, pCi/L	20	0.43	N/A	0.438 [C]	2014	ND - 3	ND	Erosion of natural deposits

LEAD AND COPPER

Every three years, at least 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2017. Lead was detected in three homes, none of which exceeded the action level. Copper was detected in 24 homes, none of which exceeded the action level. A regulatory action level is the concentration of a contaminant, if exceeded, triggers treatment or other requirements that a water system must follow.

SUBSTANCE	YEAR SAMPLED	AL	PHG	90TH% LEVEL	SITES ABOVE AL/ TOTAL SITES	AL Violation	TYPICAL SOURCE
Copper, ppm	2017	1.3	0.3	0.59	0/35	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead, ppb (residential testing)	2017	15	0.2	0	0/35	No	Internal corrosion of household/building water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Lead, ppb (at Flemming MS)	2018	15	0.2	ND	0/5	No	
Lead, ppb (at Eshelman Elem.)	2018	15	0.2	1.61	0/5	No	
Lead, ppb (at Lomita Magnet)	2018	15	0.2	3.044	0/5	No	

The Division of Drinking Water (DDW), in collaboration with the California Department of Education, has taken the initiative to begin testing for lead in drinking water at all public K-12 schools. In early 2017, DDW and Local Primacy Agencies issued amendments to the domestic water supply permits of approximately 1,200 community water systems so that schools that are served by a public water system could request assistance from their public water system to conduct water sampling for lead and receive technical assistance if an elevated lead sample is found. To further safeguard water quality in California's K-12 public schools, California Assembly Bill 746 published on October 12, 2017, effective January 1, 2018, requires community water system to test lead levels, by July 1, 2019, in drinking water at all California public, K-12 school sites that were constructed before January 1, 2010. This webpage contains information on both the permit amendments and AB 746. Lomita's schools were tested on 10-10-18 and 10-17-18.

SECONDARY WATER STANDARDS - AESTHETIC STANDARDS

SUBSTANCE	MCL [MRDL]	PHG [MCLG]	CITY OF LOMITA GROUNDWATER & DISTRIBUTION		DATES SAMPLED	MWD SURFACE WATER		TYPICAL SOURCE
			RANGE	DETECTED AVERAGE LEVEL (2018) [A], [B], [C]		if other than 2018 [D]	RANGE	
Aluminum, ppb	200	N/A	N/A	N/A	-	ND - 310	67.6	Erosion of natural deposits; residue from some surface water treatment processes
Chloride, ppm	500	N/A	N/A	180 [C]	2016	54 - 97	84.6	Runoff/leaching from natural deposits; seawater influence
Color, units	15	N/A	ND - 10	0.3 [A]	-	ND - 1	0.2	Naturally-occurring organic materials
Iron, ppb	300	N/A	N/A	ND [B]	-	N/A	ND	Leaching from natural deposits; industrial wastes
Manganese, ppb	50	N/A	N/A	ND [B]	-	N/A	4.4	Leaching from natural deposits
Methyl tert-Butyl Ether (MTBE), ppb	5	13	N/A	ND [C]	-	N/A	ND	Leaking underground storage tanks
Odor---Threshold, units	3	N/A	1-2	1.4 [A]	-	1-4	2.4	Naturally-occurring organic materials
Specific Conductance, µS/cm	1,600	N/A	N/A	1,200 [C]	2016	428 - 1,010	731.6	Substances that form ions when in water; seawater influence
Sulfate, ppm	500	N/A	N/A	65 [C]	2016	34 - 236	133.6	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids, ppm	1,000	N/A	500 - 760	608 [B]	-	239 - 639	439.8	Runoff/leaching from natural deposits
Turbidity (NTU), units	5	N/A	ND - 6.9	0.2 [A]	-	N / A	ND	Soil runoff

ADDITIONAL PARAMETERS

SUBSTANCE	MCL [MRDL]	PHG [MCLG]	CITY OF LOMITA GROUNDWATER & DISTRIBUTION		DATES SAMPLED	MWD SURFACE WATER	
			RANGE	DETECTED AVERAGE LEVEL (2018) [A], [B], [C]		if other than 2018 [D]	RANGE
Alkalinity (as CaCO3), ppm	N/A	N/A	N/A	390 [C]	2016	66-117	93.2
Calcium, ppm	N/A	N/A	N/A	86 [C]	2016	16-69	43
Magnesium, ppm	N/A	N/A	N/A	27 [C]	2016	9.5-26	18.1
pH, units	N/A	N/A	7.2-8.7	8.1 [A]	-	8.1 - 8.5	8.28
Potassium, ppm	N/A	N/A	N/A	7.0 [C]	2016	2.8-5.0	3.7
Sodium, ppm	N/A	N/A	N/A	140 [C]	2016	45-103	77.2
Total Hardness (as CaCO3), ppm	N/A	N/A	230-310	268 [B]	-	84-274	180.6

THIRD UNREGULATED CONTAMINANT MONITORING RULE (UCMR3)

Monitored in 2013 - 2015

SUBSTANCE	MINIMUM REPORTING LIMIT	RANGE	AVERAGE
Chlorate, ppb	20	ND - 810	163.4
Hexavalent Chromium, ppb (*)	0.03	0.04 - 0.2	0.06
Total Chromium, ppb	0.2	ND - 1	0.4
Molybdenum, ppb	1	3.2 - 5.2	4.5
Strontium, ppb	0.3	440 - 1,200	938.8
Vanadium, ppb	0.2	ND - 6.3	2.3

Notes: [A] Measured within the Distribution System; [B] Measured at the Cypress Water Production Facility effluent, this is also the entry point to the distribution system; [C] Measured at Well No. 5; [D] The state allows the City to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. *There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.