

### 2019 Lomita Water Consumer Confidence Report

Annual Water Quality Report for Jan. - Dec. 2019





#### **Public Information & Contact Information**

The City of Lomita welcomes your comments and questions about water quality. For questions or comments regarding water quality or this report, including questions about requesting a paper copy of this report, please contact the City of Lomita Public Works Department at (310) 325-7110.

Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

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

A full version of MWD's Annual Water Quality Report may be obtained from Dr. Mic Steward at mstewart@mwdh20.com or (213) 217-5696.

### 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. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. In 2019, we conducted more than 3,056 drinking water tests across the Lomita Water System.

As we have previously shared with Lomita residents, one of our water sources temporarily exceeded drinking water standards. The City of Lomita is responding to a detection of benzene at the City's single groundwater well, Well No. 5, and is working with the State to investigate the source and hold accountable any parties responsible. The City's water sampling and testing program confirmed results of an annual water quality test conducted in May 2019 that showed levels of benzene exceeding State standards. The City immediately took the well offline and transitioned to importing water through its approved backup sources to eliminate benzene exposure. The City is moving forward with planned upgrades to the Cypress Water Production Facility (CWPF) that will not only enhance the water's aesthetics, per residents' requests, but are also the industry standard for removing benzene. The City has expedited the upgrades and looks forward to returning CWPF back to full normal operations. To see the latest news on efforts to investigate and address the benzene detection, visit <a href="https://www.lomitawater.com/education/benzene">www.lomitawater.com/education/benzene</a>.

In 2018, the City's regular annual sampling showed benzene at a level below the State's threshold for health and safety but above the detection limit. During 2018, we did not monitor quarterly for benzene from Well No. 5 as required and therefore, cannot be sure of the quality of your drinking water during that time. It is important to note that the City's normal operations include the provision of raw water blended with pre-treated imported water (generally approximately a 40/60 blend). As such, levels in the water that reached City residents were likely much lower than detected in the ground water alone.

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, <a href="https://www.lomita.com/cityhall">www.lomita.com/cityhall</a> and <a href="https://www.lomita.com/cityhall">www.lomita.com/city

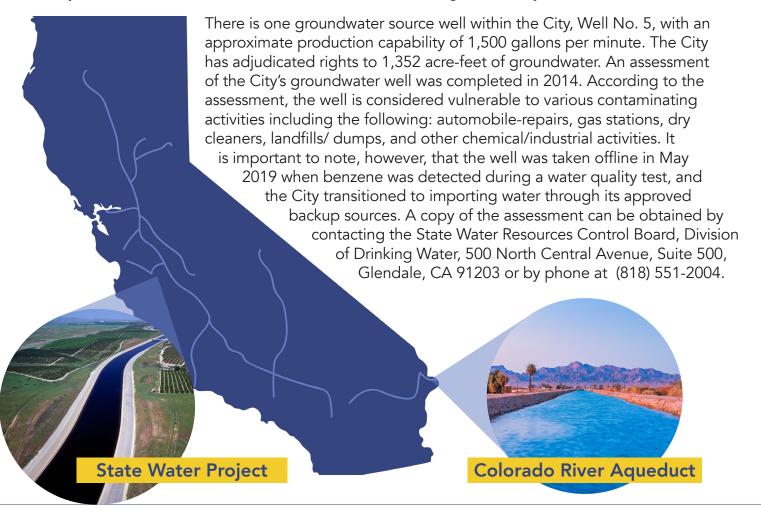
Sincerely,



#### **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.



## 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 typically supplied by a blend of water purchased from WBMWD and Well No. 5 groundwater is typically treated at the Cypress Water Production Facility (CWPF). Water service connections within the City's remaining Pressure Zones II, III,



and IV were supplied with water purchased from WBMWD in 2019.

The CWPF typically 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 typically blended with WBMWD purchased water and is monitored to ensure primary water quality standards.

While the above paragraphs describe how the system typically works, the City took Well No. 5 offline in May 2019 following the detection of benzene during a water quality test, and the entire City of Lomita (including Zone 1) has since been supplied with water purchased from WBMWD. Although Well No. 5 remains offline, we are regularly monitoring for contaminants as required. As such, no action is necessary on your part and there is currently no need to switch to an alternative source of water. On May 9, 2019 the City received a result for a single annual water quality test sample collected on April 30 that showed benzene detection over the Maximum Contaminant Level (MCL) at 3.2 parts per billion (ppb) in the water supply at Well No. 5 at the CWPF. The City is working together with the LA Regional Water Quality Control Board to investigate and address the benzene detection.

While the benzene investigation is ongoing, the City of Lomita is moving forward with plans for the Granular Activated Carbon project. Originally planned to improve the aesthetic qualities of Lomita's water, the project will also remove benzene and other constituents and allow the City to return to normal operations. The City has secured approval from the State Department of Drinking Water to build the upgrades, and the Water Replenishment District (WRD) has authorized the use of up to \$2,000,000 Safe Drinking Water Program grant funds for the project.

To provide an opportunity for Lomita residents to learn about the Lomita Water System and planned upgrades, in 2019 the City launched the Lomita Water Infrastructure Tour program. Since the program launched in October 2019, the City has conducted 15 tours of the CWPF providing more than 100 residents a first-hand look at how their water system works. Although the tour program was put on hold during the spring of 2020 due to COVID-19 precautions, the City created a video that residents can view to learn about the normal operations of the system. Visit <a href="www.LomitaWater.com">www.LomitaWater.com</a> and click on the Infrastructure tab to find and view the animated video explaining the Lomita Water Infrastructure.



# **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:

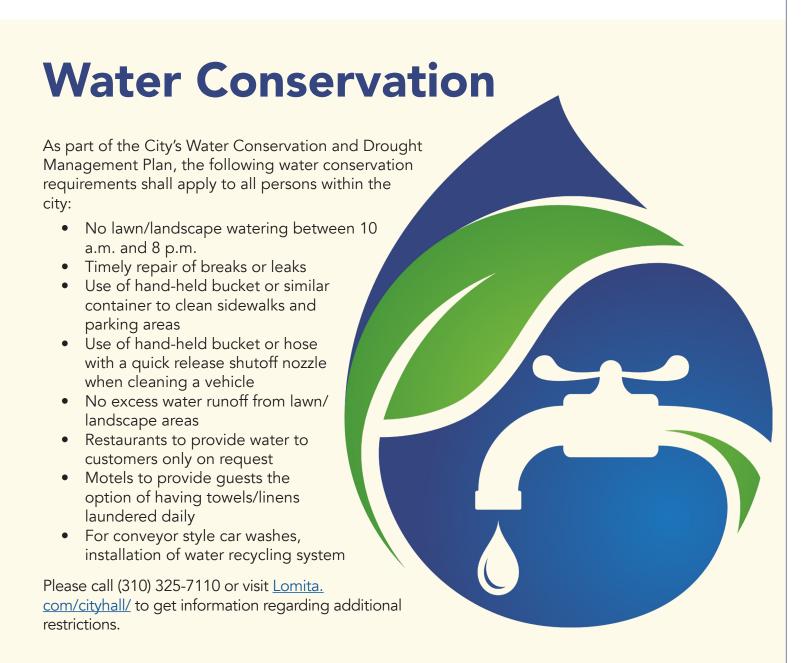
- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or 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. 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 can be particularly at risk from infections. Some people who use water containing benzene in excess of the MCL over many years may experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

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 <a href="https://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a>.



# **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 4th stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 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.

For a list of table definitions, please see the table on the final page of this report.

PRIMARY D	RINKING	WATER STA	NDARDS - N	//ANDATOR	/ HEALTH R	ELATED ST	ANDARDS	
	UNITS	MCL [MRDL]	PHG [MCLG]		DATES SAMPLED	MWD SUR	FACE WATER	TYPICAL SOURCE
			(Federal)	DETECTED AVERAGE LEVEL (2019) [A], [B], [C]	if other than 2019 [D]	RANGE	DETECTED AVERAGE LEVEL (2019)	
				INORGA	NIC CONTAI	/INANTS		
Aluminum	ppb	1000	600	101.3 [C]		ND-290	101	Residue from water treatment process; natural deposits erosion
Arsenic	ppb	10	0.004	ND	-	N/A	ND	Natural deposits erosion, glass and electronics production wastes
Asbestos	MFL	7	7	ND	-	N/A	ND	Asbestos cement pipes internal corrosion; runoff and leaching from natural deposits
Barium	ppb	1,000	2,000	ND	-	N/A	ND	Oil and metal refineries discharge; natural deposits erosion
Copper	ppm	AL=1.3	0.3	ND	-	N/A	ND	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Flouride	ppm	2	1	0.27	-	0.1-0.9	0.7	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium	ppb	NA	0.02	ND	-	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	ND	-	N/A	0.5	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

PRIMARY DI	RINKING	WATER STA	NDARDS - M				ANDARDS	
				ORGAN	IIC CONTAM	INANTS	1	
Benzene	ppb	1 (5)	0.15	3.5 [C]		N/A	ND	Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills
				MICROBIOLO	OGICAL CON	ITAMINANTS		
Fecal coli- form and E. coli (Total Coliform Rule) (# posi- tive samples)		A routine sample and repeat sample are total coliform, and one of these is also fecal coliform or E. coli positive	0	ND	•	N/A	ND	Human and animal fecal waste
Hetero- trophic Plate Count (HPC)	CFU/mL	TT	N/A	16	-	ND-64	ND (median)	Naturally present in the environment
Total Coliform Bacteria (Total Coliform Rule) (# positive samples)		More than 5.0% of monthly samples are posi- tive	0	0	-	0-0.2	0	Naturally present in the environment
			DISINFECTION	BYPRODUCT	S (DBPs) AND	DISINFECT	ANT RESIDUALS	3
Total Chlo- rine Residual	ppm	(4.0) as Cl2	MRDLG = 4 as Cl2	2.26	-	0.5-2.9	2.40	Drinking water disinfectant added for treatment
Haloacet- ic Acids (HAA5)	ppb	60	N/A	6.5	-	ND-13	9 (LRAA)	Byproduct of drinking water disin- fection
Total Triha- lomethanes (TTHMs)	ppb	80	N/A	27.6	-	12-56	28 (LRAA)	Byproduct of drinking water disin- fection
Bromate	ppb	10	0.1			ND-8.4	3.16	By-product of drinking water ozo- nation
Total Organ- ic Carbon (TOC)	ppm	ТТ	N/A			1.7-2.6	2.36	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts.
				RADIOAC	TIVE CONTA	MINANTS		
Combined Radium	pCi/L	5	0	N/A	2013	ND	ND	Erosion of natural deposits
Gross Alpha Particle Activity	pCi/L	15	[0]	ND		ND-3	ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	N/A	2013	ND-1	ND	Erosion of natural deposits

# Sampling Results (Continued)

	UNITS	MCL	PHG	CITY OF	LOMITA	DATES	MWD SURFACE WATER		TYPICAL SOURCE
	[MRDL]		[MCLG]	GROUNDWATER & DISTRIBUTION SYSTEM		SAMPLED	WWW SOR	ACE WATER	THICAL SOURCE
				RANGE	DETECTED AVERAGE LEVEL (2019)	if other than 2019 [D]	RANGE	DETECTED AVERAGE LEVEL (2019)	
Chloride	ppm	500	N/A	N/A	200	-	46-62	50-62	Runoff/leaching from nat- ural deposits; seawater influence
Color	Units	15	N/A	ND-5	0.14	-	ND-2	ND-2	Naturally-occurring organic materials
Iron	ppb	300	N/A	ND-470	23.5	-	ND-243		Leaching from natural deposits; industrial wastes
Manga- nese	ppb	50	N/A	ND-80	4	-	ND	ND	Leaching from natural deposits
Methyl tert-Butyl Ether (MTBE)	ppb	ppb	5	N/A	ND	-	ND	ND	Leaking underground storage tanks
Odor Threshold	Units	3	N/A	1-2	1.2	-	ND-1	ND-1	Naturally-occurring organic materials
Specific Conduct- ance	μS/cm	1,600	N/A	N/A	1,200	-	435-521	469-514	Substances that form ion when in water; seawater influence
Sulfate	ppm	500	N/A	N/A	73	-	56-93	59-91	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	ppm	1,000	N/A	470-710	585.5	-	244-312	266-304	Runoff/leaching from natural deposits
Turbidity (NTU)	Units	5	N/A	ND-0.2	0	-	ND	ND	Soil runoff

ADDITIONAL PARAMETERS								
	UNITS	MCL [MRDL]	PHG [MCLG]	GROUN	F LOMITA NDWATER RIBUTION	DATES SAMPLED	MWD SURFACE WATER	
				RANGE	DETECTED AVERAGE LEVEL (2019)	if other than 2019 [d]	RANGE	DETECTED AVERAGE LEVEL (2019)
Alkalinity (as CaCO3)	ppm			N/A	330	-	67-84	68-82
Calcium	ppm			N/A	100	-	23-30	25-30
Magnesium	ppm			N/A	30	-	11.0-14.0	12-14
рН	Units			8.22-8.75	8.6	-	8.4-8.5	8.4-8.5

ADDITIONAL PARAMETERS									
	UNITS	MCL [MRDL]	PHG [MCLG]	CITY OF LOMITA GROUNDWATER & DISTRIBUTION		DATES SAMPLED	MWD SURFACE WATER		
				RANGE	DETECTED AVERAGE LEVEL (2019)	if other than 2019 [d]	RANGE	DETECTED AVERAGE LEVEL (2019)	
Potassium	ppm			N/A	7.9	-	2.2-2.9	2.4-2.8	
Sodium	ppm			N/A	150	-	46-57	50-56	
Total Hardness (as CaCO3)	ppm			210-360	272	-	101-130	108-127	

FOURTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR4): Monitored in 2019-2020							
	UNITS	MINIMUM REPORTING LIMIT	RANGE	AVERAGE			
Manganese	ug/l	0.4	1.4-1.5	1.5			
Bromochloroacedic acid	ug/l	0.3	2.3-2.9	2.57			
chlorodibromoacetic acid	ug/l	0.3	0.57-0.85	0.6			
dibromoacetic acid	ug/l	0.3	2.6-3.3	2.7			
dichloroacetic acid	ug/l	0.2	1.9-3.4	2.9			
Bromodichloroacetic acid	ug/l	0.5	0.51-0.6	0.6			
Monobromoacetic acid	ug/l	0.3	0.36-0.39	0.37			
Trichloroacetic acid	ug/l	0.5	0.68-0.85	0.73			

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 which, if exceeded, triggers treatment or other requirements that a water system must follow. In 2017, no school submitted a request to be sampled for lead.

LEAD AND COPPER								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG	90% 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	ND	0/35	No	Internal corrosion of household water plumbing systems; discharges from industrial manufactur- ers; erosion of natural deposits	
Lead (ppb) - Flemming MS	2018	15	0.2	ND	0/5	No		
Lead (ppb) - Eshelman Elem.	2018	15	0.2	1.61	0/5	No		
Lead (ppb) - Lomita Magnet	2018	15	0.2	3.044	0/5	No		

Notes: [A] Measured within the Distribution System; [B] Measured at the Cypress Water Production Facility effluent this is also the entry point to Zone I of the Distribution System; [C] Measured at Well #5; [D] The City is not required to test for every parameter each year. If indicated, data is from a previous year.

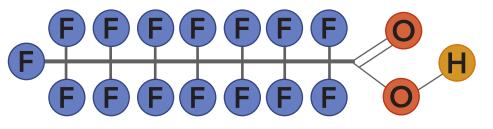
#### **Table Definitions**

TERM	DEFINITION					
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.					
MFL (million fibers per liter)	One million fibers per liter of water.					
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.					
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.					

## **Other Monitoring Data**

#### PFAS (per- and poly- fluoroalkyl substances)

The City of Lomita proactively conducted a voluntary test of its water for the presence of PFAS (per- and poly- fluoroalkyl substances), compounds previously used extensively in consumer products such as



carpets, clothing, furniture fabric, food packaging, nonstick cookware, and firefighting foams.

The testing showed that 16 of the PFAS chemicals are not present in Lomita's water in any form, and it showed the presence of a small amount of PFOS (perfluorooctanesulfonate), lower than the state's notification level. The test detected 3.1 parts per trillion of PFOS, less than half of the notification level of 6.5 parts per trillion. The test also detected 3 parts per trillion of PFHxS, which is not currently regulated in California or at the federal level. You can find the PFAS sampling report online by going to <a href="https://www.LomitaWater.com">www.LomitaWater.com</a> and clicking on "Oversight," then "Water Quality Reports."

MWD has been monitoring its water supplies for the presence of PFAS since 2013. The two types of PFAS of greatest concern in the U.S. – perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) – have not been detected in MWD's imported or treated water supplies. MWD has recently detected in its supplies low levels of perfluorohexanoic acid (PFHxA), which is not acutely toxic or carcinogenic and is not currently regulated in California or at the federal level. No other PFAS have been detected in Metropolitan supplies.

Learn more about PFAS by visiting the <a href="https://www.mwdh2o.com/homepage">www.mwdh2o.com/homepage</a> and clicking on "PFAS" in the listing of "Top Issues."



The City is committed to sharing information and helping residents understand where your water comes from, and we encourage you to continue to visit <a href="www.LomitaWater.com">www.LomitaWater.com</a> for additional information including answers to Frequently Asked Questions, water quality data and reports, and project updates. Thank you again for taking the time to read this report.