ANNUAL WATER UALITY REPORT

REPORTING YEAR 2019



Our Mission Continues

The City of Lakewood is once again pleased to present our annual water quality report covering all testing performed in 2019. 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 bestquality drinking water to
you. As new challenges
to drinking water
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.

Important Health Information

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

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 Information Helpline at (800) 426-4791 or http:// water.epa.gov/drink/ hotline.



Coronavirus (COVID-19)

According to the U.S. EPA, Americans can continue to use and drink water from their tap as usual. The coronavirus that causes COVID-19 is particularly susceptible to disinfection, and standard treatment and disinfectant processes are expected to be effective. Boiling your water is not required as a precaution against COVID-19. At this time, there are no indications that COVID-19 is in the drinking water supply or will affect the reliable supply of water. More coronavirus-related information can be found at https://www.epa.gov/coronavirus.

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 of Lakewood is 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 two 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.) Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Information Helpline at (800) 426-4791 or at www.epa.gov/safewater/lead.

Community Participation

You are invited to participate in our City Council meetings to voice your concerns about your drinking water. We meet the second and fourth Tuesday of each month at 7:30 p.m. in the City Council Chambers at 5000 Clark Avenue, Lakewood.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact the Water Administration Manager at (562) 866-9771, extension 2700.

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 Water 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, which 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, which 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 Information Helpline at (800) 426-4791.



Information on the Internet

The U.S. EPA (https://www.epa.gov) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many

issues relating to water resources, water conservation, and public health. Also, the Division of Drinking Water has a website (https://waterboards.

We remain vigilant in delivering the best-quality drinking water

ca.gov) that provides complete and current information on water issues in California, including valuable information about our watershed.

Source Water Assessment

Assessments of the city's drinking water sources were completed in 2003 and 2006. These studies examined the potential vulnerability of each well to contaminants that could enter the water supply. Our groundwater

supply is considered most vulnerable to the following activities: gas stations and repair shops, historic gas station locations, storage tanks, dry cleaners, and permitted National Pollutant Discharge Elimination System/ Waste Discharge Requirement discharges. A copy of the complete assessment is available

at the Lakewood city clerk's office at 5050 Clark Avenue. You may request a summary of the assessment by contacting the Lakewood Department of Water Resources at (562) 866-9771, extension 2700, during regular office hours.

Test Results

those substances that were detected in our water. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective ur water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here we only show maximum allowed levels.

The state recommends 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.

REGLI ATED SUBSTANCES WITH PRIMARY STANDARDS	S WITH P	RIMARY STA	NDARDS			
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	10	0.004	9	3–8	°N	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	[4.0 (as Cl2)]	[4 (as Cl2)]	0.5	0.4-0.7	Š	Drinking water disinfectant added for treatment
Fluoride (ppm)	2.0	1	0.3	0.2–0.4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (ppb)	09	NA	6.5	2.2–11.7	%	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	10	10	0.4	ND-1.9	%	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	80	NA	24	14–46	S _o	By-product of drinking water disinfection
Tap water samples were collected for lead and copper analyses from sample sites throughout the community	for lead and	copper analyses	from sample sites throu	ghout the com	munity	
SUBSTANCE (UNIT OF MEASURE) AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES VIOL	VIOLATION TYPI	TYPICAL SOURCE	
Copper (ppm) 1.3	6.0	0.2	0/30	No Inte	rnal corrosio	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) 15	0.2	ND	0/30	No Inte	rnal corrosio	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
REGULATED SUBSTANCES WITH SECONDARY	S WITH S	ECONDARY	STANDARDS			
SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	200	SN	22	8–46	°N	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	η 1,600	SN	445	310–670	%	Substances that form ions when in water; seawater influence
Sulfate (ppm)	200	NS	38	12–90	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	268	170–440	No	Runoff/leaching from natural deposits
UNREGULATED AND OTHER SUBSTANCES	HER SUBS	TANCES				
SUBSTANCE (UNIT OF MEASURE)		AVEI AMC DETE	AVERAGE AMOUNT RA DETECTED LOV	RANGE LOW-HIGH	TYPICAL SOURCE	OURCE
Calcium (ppm)		7	49 17	17–82	Abundar	Abundant naturally occurring element
Hardness in Grains (grains/gal)	al)		8.9	2.8–15	Naturally	Naturally occurring calcium
Hardness (ppm)			152 47	47–256	Naturally	Naturally occurring calcium
Magnesium (ppm)			7	1–14	Abundar	Abundant naturally occurring element
pH, Laboratory (Units)		∞	8.1	9.8–6.2	Hydroge	Hydrogen ion concentration
Potassium (ppm)		2	2.6	1.3–3.7	Runoffc	Runoff or leaching from natural deposits
Sodium (ppm)		(()	32 24	24–49	Naturally	Naturally occurring

Definitions

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

AL (Regulatory Action

requirements that a water system contaminant which, if exceeded, Level): The concentration of a triggers treatment or other

Grains of compound per gallon of grains/gal (grains per gallon):

technologically feasible. Secondary the odor, taste, and appearance of MCLs (SMCLs) are set to protect MCL (Maximum Contaminant MCLGs) as is economically and drinking water. Primary MCLs are set as close to the PHGs (or contaminant that is allowed in **Level):** The highest level of a

MCLG (Maximum Contaminant **Level Goal):** The level of a

below which there is no known or expected risk to health. MCLGs contaminant in drinking water are set by the U.S. EPA.

Disinfectant Level): The highest of a disinfectant is necessary for MRDL (Maximum Residual level of a disinfectant allowed in drinking water. There is

control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal):

disinfectants to control microbial reflect the benefits of the use of disinfectant below which there The level of a drinking water is no known or expected risk to health. MRDLGs do not

NA: Not applicable

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

NS: No standard

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for reporting requirements and water along with their monitoring and reatment requirements.

PHG (Public Health Goal): The evel of a contaminant in drinking snown or expected risk to health. HGs are set by the California water below which there is no

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

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

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

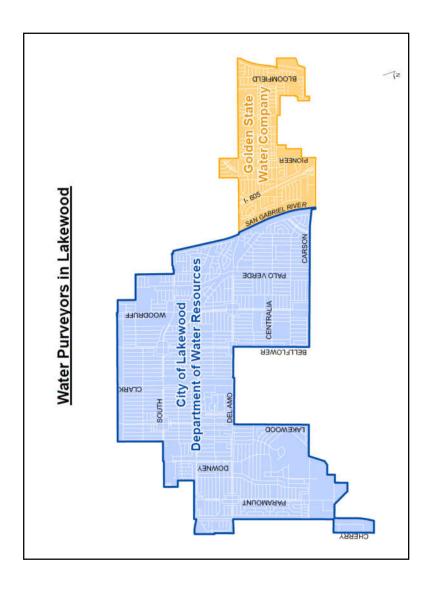
Table Talk

et the most out of the Testing Results data table with this simple suggestion. In less than a I minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Average Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Average Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report. If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings.



Smart Meters

In 2018 the City of Lakewood completed the upgrade of all our customer water meters to smart meters. The smart meters provide benefits to all customers and help everyone use water more wisely. Features include:

- Leak Detection. You are now able to receive a text or email alert if we detect usage that may indicate you have a leak.
- Control Your Water Usage. Using the customer portal, you can set a custom water consumption threshold and receive an alert via text or email when the system projects your current usage will exceed your configured threshold setting.
- Efficiency Benchmarking. Find out how your water usage compares to similar accounts using highly customizable benchmarks for both residential and commercial accounts.

More than 42 percent of our customers registered on the smart meter web portal in 2019 and enjoyed the benefits of timely monitoring, review, and control of their water usage; leak detection alerts; and saving water and money. For questions and portal registration, call customer service at (855) 785-4021 or visit www.lakewoodcity.org/UtilityBill to view your account online.

PFAS

Der- and polyfluoroalkyl substances (PFAS) are a large group of human-made substances that have been used extensively in surface coating and protectant formulations due to their unique ability to reduce the surface tension of liquids. Perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) are two types of PFAS. PFAS are persistent in the environment, can accumulate within the human body over time, and are toxic at relatively low concentrations. Exposure to unsafe levels of PFOA/PFOS may result in adverse health effects including developmental effects to fetuses during pregnancy, cancer, liver effects, immune effects, thyroid effects, and other effects.

PFAS have been detected in local groundwater wells. Under State Water Board order in 2019, the 70 wells from 17 central basin purveyors were required to collect PFA samples, 36 wells from 13 purveyors were detected above the state response levels. Three Lakewood wells were among the ones required for monitoring and all our results are non-detect for the PFAS. The four major sources of PFAS are: fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids. PFAS can get into drinking water when products containing them are used or spilled onto the ground or into lakes and rivers. Once in groundwater, PFAS are easily transported large distances and can contaminate drinking wells. More PFAS information can be found at State Water Board website: https://www.waterboards.ca.gov/pfas/.

Where Does My Water Come From?

Your tap water comes from local, deep groundwater wells that supply our service area. The City of Lakewood is responsible for providing water services for residents and businesses west of the San Gabriel River. Golden State Water Company (GSWC) - an investor-owned water utility - serves the area east of the river. For information on GSWC's water quality report, call (800) 999-4033.

Highlights of Lakewood's water system include:

- 100 percent groundwater produced from 10 deep wells
- Approximately 180 miles of water mains ranging from 4 to 27 inches in diameter
- Three water storage facilities holding approximately 13 million gallons
- A 2,500-gallon-per-minute water treatment facility
- A standby connection to Metropolitan Water District of Southern California imported supplies
- Four emergency interconnections with the City of Long Beach, GSWC, the City of Cerritos, and the City of Signal Hill
- More than 2.4 billion gallons of water provided annually to over 60,000 residents and commercial and institutional customers via more than 20,000 meter connections
- More than 6 percent of water supply is recycled water and used for irrigation at 42 sites