



2022 Public Health Goals Report

June 21, 2022

Prepared by:

CITY OF LAKEWOOD
Department of Water Resources
5812 Arbor Rd
Lakewood, CA 90713

Public Water System
ID No. **CA1910239**

Submitted by:

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Director of Water Resources

2022 Public Health Goals Report

Background

Provisions of the California Health and Safety Code §116470 specify that a public water system serving more than 10,000 service connections must prepare a special report by July 1, 2022 that gives information on the “detection” of any constituents that exceeded any Public Health Goals (PHGs). PHGs are non-enforceable goals established by the California Environmental Protection Agency (Cal-EPA)’s Office of Environmental Health Hazard Assessment (OEHHA). The law also requires that where OEHHA has not adopted a PHG for a constituent, water suppliers are to use the Maximum Contaminant Level Goals (MCLGs) adopted by the United States Environmental Protection Agency (USEPA). MCLGs are the federal equivalent to PHGs.

The purpose of this report is to provide water system customers information concerning detectable levels of a constituent below enforceable mandatory drinking water standards, Maximum Contaminant Levels (MCLs), and to provide customers with the cost to eliminate any trace of the contaminant from drinking water regardless of how minimal the health risk. The report is required by State of California.

Drinking Water Standard, MCLs, PHGs and MCLGs

The USEPA and the California State Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) establish drinking water standards at very conservative levels to protect consumers against all but very low to negligible health risks. MCLs are the regulatory definition of what is “safe”. Adopted MCLs are the criteria utilized to ensure that a public water system is in compliance with drinking water standards. Per standard health effects language specified in California Drinking Water Regulations, Title 22, Code of Regulations, drinking water which meets DDW standards is associated with little to no risk and should be considered safe.

PHGs set by the OEHHA are based solely on public health risk considerations. None of the practical risk-management factors, which are considered by the USEPA or the DDW in setting drinking water standards (aka. MCLs) are considered in setting the MCLGs or PHGs. These factors include analytical detection capability, treatment technology available, benefits and costs. The Attachment “A” is a list of all regulated constituents with their MCLs and PHGs or MCLGs.

PHGs and MCLGs are set at very low levels where the health risks are very low or, in the case of zero, the health risk is zero. Determinations of health risk at these low levels are frequently theoretically based on risk assessments with many assumptions and mathematical extrapolations. Many constituents are considered to be carcinogenic and the USEPA has set the MCLGs at zero, which cannot be measured by practical available analytical methods. PHGs and MCLGs are not regulatory in nature and represent only non-mandatory theoretical goals.

Water Quality Data Considered

All of the water quality data collected by our water system between 2019 and 2021 for purposes of determining compliance with drinking water standards was considered. This data was detailed in our 2019, 2020, and 2021 Annual Water Quality Reports, which are also referred to as Consumer Confidence Report (CCR). Each report was available and noticed to all water customers.

If a constituent was detected in the water supply at a level above an applicable PHG or MCLG, this report provides the information required by the law. Included is the numerical public health risk associated with the MCL and the PHG or the MCLG, the category or type of risk to health that could be associated with each constituent level, and an estimate of the annualized cost of the treatment system if it is appropriate and feasible.

Best Available Treatment Technology and Cost Estimates

Both the USEPA and DDW adopt what are known as BATs or Best Available Technologies, which are the best known methods of reducing contaminant levels to meet a MCL. However, since many PHGs and MCLGs are set much lower than the MCLs, it is neither always possible nor feasible to determine what treatment is needed to further reduce a constituent downward to or near the PHG or MCLG, which many are set at zero.

Estimating the costs to reduce a constituent to a low PHG level (sometimes to non-detect levels, or zero) is difficult and highly speculative because it is not possible to verify by analytical means. In some cases, installing a treatment facility to further reduce levels of one constituent that already is at a very low level may have adverse effects on other aspects of water quality.

Using the best available technology to reduce a constituent level – including annualized cost to design, install and operate – has been estimated. The cost estimates for each service connection are calculated by assumption that the cost will be equally shared by each of the 20,130 service connections in the water system.

Constituents Detected That Exceed a PHG or MCLG

The following are discussions of constituents that were detected in one or more of the City's drinking water sources at levels above the PHG or MCL. The table below is a brief summary of those constituents.

Constituent	MCL	DLR	PHG	Detection Level 2019	Detection Level 2020	Detection Level 2021
Arsenic (ppb)	10	2	.004	6	6	6
Uranium (pCi/L)	20	1	0.43	0.988	1.098	1.098
Gross Alpha (pCi/L)	15	3	none	0.359	0.527	0.527

ppb: parts-per-billion

pCi/L: pico-Curies per Liter

DLR: Detection limits for reporting purposes

More information can be found at OEHHA's website at: <https://oehha.ca.gov/water/public-health-goals-phgs>

Arsenic

Arsenic has been detected from all of our 10 ground water wells. The **MCL is 10 ppb** and the **PHG is .004 ppb (4 parts-per-trillion, ppt)**. The levels detected in the City's system were below the MCL but above the PHG level.

The PHG is established based on a theoretical 70-year lifetime excess cancer risk of 1×10^{-6} at a statistical confidence limit, which is upper bound estimate of excess cancer risk from lifetime exposure. Actual cancer risk may be lower or zero. Cancer risk is stated in terms of excess cancer per million (or fewer) population, e.g., 1×10^{-6} means 1 excess cancer cases per 1,000,000 people exposed.

Arsenic is a naturally occurring element in the earth's crust and is widely detected in the environment. All humans are exposed to microgram quantities of arsenic largely from food and to a lesser degree from drinking water and air. The PHG of .004 ppb for arsenic in drinking water is derived based on the mortality of arsenic-induced lung and urinary bladder cancers observed in epidemiological studies of populations in Taiwan, Chile, and Argentina. Similar unit risks were derived from a mouse bioassay using prenatal exposure to arsenic. The risk estimates were based on a low-dose linear extrapolation approach although the mode of carcinogenic action is not fully understood.

In 2010, the City of Lakewood completed the installation of a treatment plant for the removal of arsenic from the water supply at one of the city's production wells. This plant uses coagulation/filtration to treat arsenic to below the MCL. Additional treatment would need to be installed to further reduce the levels. However, it is not possible to remove arsenic levels at or below the PHG of 4 parts per trillion (ppt), because the detection limit for laboratory analysis stands at 2,000 ppt.

The applicable BAT for removing arsenic to the PHG level is the Reverse Osmosis (RO) treatment technology. Using recent water supply data and industrial available data for the RO facilities, the Department of Water Resources estimates the annualized capital and O&M costs at approximately \$16 million. The costs include engineering design, construction management and inspection services, and annual operation and maintenance activities. The cost estimates for treatment do not include any additional land acquisition. In most cases, well sites do not have enough space for treatment facilities.

Uranium

Uranium has been detected in 2 of our 10 ground water wells. The **MCL is 20 pico-Curies per liter (pCi/L)** and the **PHG is 0.43 pCi/L (4 parts-per-trillion, ppt)**. The levels detected in the City's system were below the MCL but above the PHG level.

Naturally occurring uranium is found in groundwater supplies as a result of leaching from uranium-bearing sandstone, shale, and other rock formations. Uranium may also be present in surface water, carried through runoff from areas with mining operations.

The Office of Environmental Health Hazard Assessment has a numerical cancer risk of 1×10^{-6} for the 0.43 pCi/L PHG, and a cancer risk of 5×10^{-5} for the California Department of Health Maximum Contaminant Level of 20 pCi/L. As previously described, 1×10^{-6} means 1 excess cancer case per 1,000,000 people; 5×10^{-5} means 5 excess cancer cases per 100,000 people. (1 and 5 excess cases mean 1 and 5 persons respectively will get cancer than if the population had not been exposed to the chemical.)

Ion exchange, reverse osmosis, lime softening, coagulation/filtration are the technologies available for achieving compliance with the MCL for uranium. The applicable BAT for removing uranium to the PHG level is the Reverse Osmosis (RO) treatment technology. Using reverse osmosis, it would cost the City of Lakewood an estimated \$63 million dollars in annualized capital, and operation and maintenance cost to achieve the PHG level.

Gross Alpha

Radionuclides such as alpha in water supplies are from erosion of natural deposits. The term radionuclide refers to naturally occurring elemental radium, radon, uranium, and thorium with unstable atomic nuclei that spontaneously decay producing ionizing radiation. Gross alpha is defined as the sum total of these radionuclides. Exposure to ionizing radiation in concentrations exceeding the maximum contaminant level may have carcinogenic (cancer causing), mutagenic (causing mutation of cells) or teratogenic (causing abnormalities in offspring) effects.

The EPA's **Maximum Contaminant Level Goal (MCLG) for gross alpha particle is 0** and the California **Maximum Contaminant Level (MCL) is 15 pCi/L**. The City of Lakewood's average levels of gross alpha detected were below MCL at all times.

Recommendations for Further Action

The drinking water quality of the City of Lakewood's water system meets all State and Federal drinking water standards set to protect public health. Additional costly treatment processes would be required to further reduce the levels of the constituents identified in this report, which are already below the MCLs established to provide safe drinking water. The effectiveness of the treatment processes to provide further reductions in constituent levels at these already low values is uncertain. The health protection benefits of these further hypothetical reductions are not at all clear and may not be quantifiable. Therefore, no action is proposed.

Attachment A Table of Regulated Constituents with MCLs, PHGs or MCLGs

Attachment B City of Lakewood Annual Water Quality Reports (2019, 2020 and 2021)

ATTACHMENT A

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019

Presented By
City of Lakewood

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

PWS ID#: 1910239

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 best-quality 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;

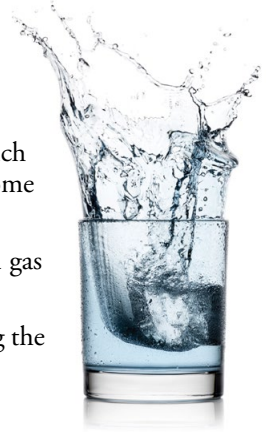
Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

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

“We remain vigilant in delivering the best-quality drinking water”

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

Our 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 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 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.

REGULATED SUBSTANCES WITH PRIMARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	10	0.004	6	3–8	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.5	0.4–0.7	No	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)	60	NA	6.5	2.2–11.7	No	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	10	10	0.4	ND–1.9	No	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	No	By-product of drinking water disinfection

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	0.2	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

REGULATED SUBSTANCES WITH SECONDARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	500	NS	22	8–46	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	1,600	NS	445	310–670	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	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

SUBSTANCE (UNIT OF MEASURE)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	49	17–82	Abundant naturally occurring element
Hardness in Grains (grains/gal)	8.9	2.8–15	Naturally occurring calcium
Hardness (ppm)	152	47–256	Naturally occurring calcium
Magnesium (ppm)	7	1–14	Abundant naturally occurring element
pH, Laboratory (Units)	8.1	7.9–8.6	Hydrogen ion concentration
Potassium (ppm)	2.6	1.3–3.7	Runoff or leaching from natural deposits
Sodium (ppm)	32	24–49	Naturally occurring

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 percent of our lead and copper detections.

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

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

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

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).

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

Table Talk

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

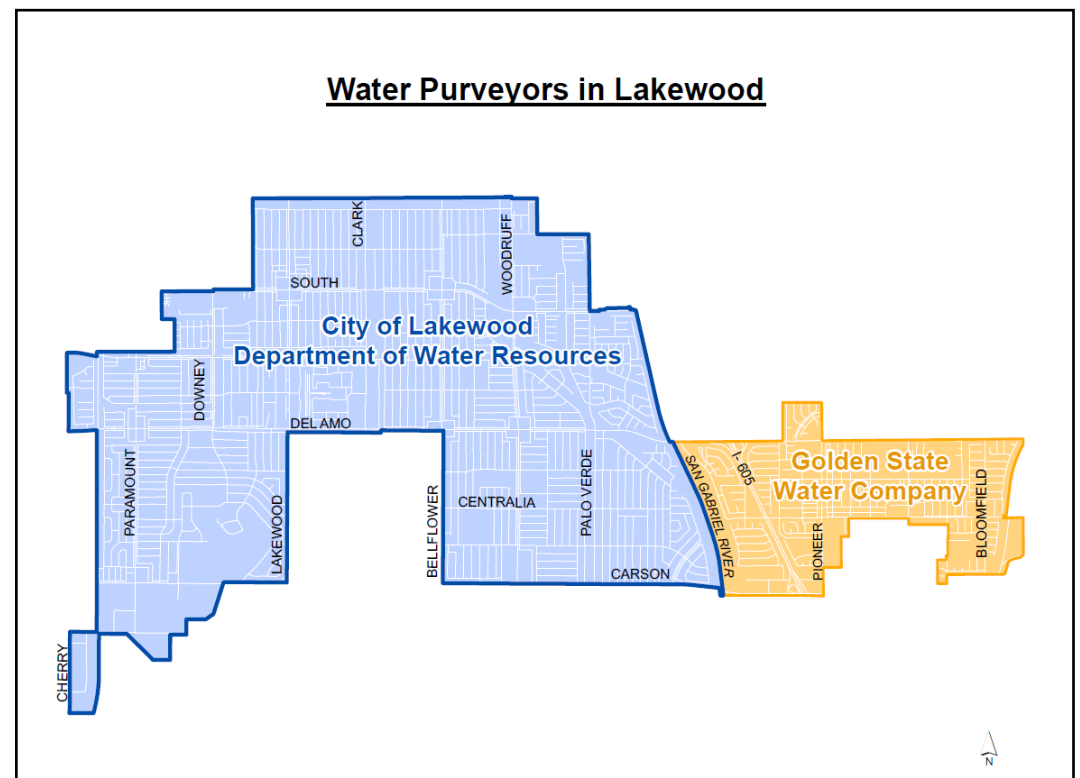
For each substance listed, compare the value in the Average Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Average Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

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

Per- 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



A close-up photograph of a clear glass pitcher pouring water into a glass. The water is captured mid-pour, creating a dynamic, crystalline stream. The background is softly blurred, showing hints of other glassware and a warm, ambient light.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By
City of Lakewood

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

PWS ID#: 1910239



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drinking water

Coronavirus (COVID-19)

According to the U.S. EPA, Americans can continue to use and drink water from their tap as usual. Coronavirus, which causes COVID-19, is a type of virus that 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/coronavirus-and-drinking-water-and-wastewater>.



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Substances That Could Be in Water

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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;

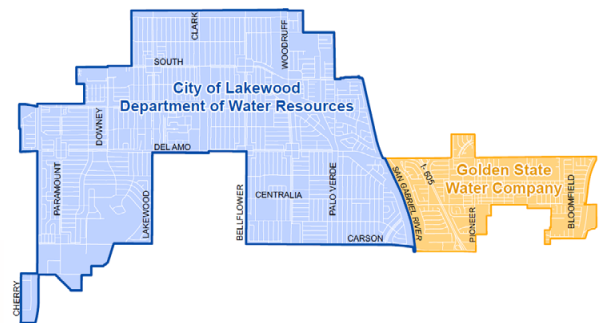
Pesticides and Herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

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 Purveyors in Lakewood



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 beginning at 7:30 p.m. in the City Council Chambers at 5000 Clark Avenue, Lakewood.

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 or <https://www.epa.gov/ground-water-and-drinking-water>.



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.



PFAS

Per- 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

PFAS have been detected in groundwater wells in our region, although not in Lakewood.

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 the State Water Board website: <https://www.waterboards.ca.gov/pfas/>.



Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a 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.

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 is linked to other health effects such as skin damage and circulatory problems.

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 Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.



Smart Meters

In 2018 the City of Lakewood completed an 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 51 percent of our customers registered on the smart meter web portal in 2020 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.



Test Results

Our 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 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 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.

REGULATED SUBSTANCES WITH PRIMARY STANDARDS						
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	10	0.004	6	3–10	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.5	0.4–0.7	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2.0	1	0.3	0.3–0.4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (ppb)	60	NA	5.9	2.4–10.9	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	80	NA	22	12–30	No	By-product of drinking water disinfection
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	0.2	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

REGULATED SUBSTANCES WITH SECONDARY STANDARDS						
SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	500	NS	21	8–46	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	1,600	NS	438	310–626	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	38	12–86	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	264	170–408	No	Runoff/leaching from natural deposits

UNREGULATED AND OTHER SUBSTANCES			
SUBSTANCE (UNIT OF MEASURE)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	51	17–78	Abundant naturally occurring element
Hardness in Grains (grains/gal)	9.4	2.8–15.0	Naturally occurring
Hardness (ppm)	160	47–259	Naturally occurring
Magnesium (ppm)	7	1–14	Abundant naturally occurring element
pH (units)	7.8	7.0–8.4	Hydrogen ion concentration
Potassium (ppm)	2.7	1.3–3.6	Runoff or leaching from natural deposits
Sodium (ppm)	30	24–47	Naturally occurring

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 which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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

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).

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

ANNUAL WATER QUALITY REPORT

Reporting Year 2021



Presented By
City of Lakewood

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

PWS ID#: CA1910239



“At Lakewood, we are proud to deliver the highest-quality drinking water to our community for the last 68 years.”

PFAS

Per- 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 or PFOS may result in adverse health effects including cancer, problems with the liver, thyroid, and immune system, and developmental problems to fetuses during pregnancy, among others.

PFAS have been detected in local groundwater wells in our region, although not in Lakewood. Under State Water Board order in 2019, 70 wells from 17 central basin purveyors were required to collect PFAS samples; in 36 wells from 13 purveyors, PFAS were detected above the state response levels. Three Lakewood wells were among those required for monitoring, and all our results continue to be below the detection limit for PFAS.

The four major sources of PFAS are fire training and fire response sites, industrial sites, landfills, and wastewater treatment plants and 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 long distances and can contaminate drinking wells. More PFAS information can be found at www.waterboards.ca.gov/pfas/.



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 Hotline at (800) 426-4791 or www.epa.gov/safewater/lead.

Our Mission Continues

The City of Lakewood is once again pleased to present our annual water quality report covering all testing performed in 2021. 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 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 of our water users. For the year 2021, all water delivered by the City of Lakewood Department of Water Resources met and exceeded 100% of all Federal and State standards.

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 possible health effects of arsenic against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency (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 issues 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 Hotline at (800) 426-4791 or www.epa.gov/ground-water-and-drinking-water.



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.

Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a 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 or 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.

Community Participation

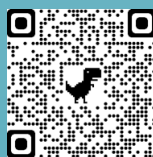
You are invited to participate in our City Council meetings to voice your concerns about your drinking water. We meet the second and fourth Tuesday of each month at 7:30 p.m. in the City Council Chambers at 5000 Clark Avenue, Lakewood.

Smart Meters

In 2018 the City of Lakewood completed an upgrade converting 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 57 percent of our customers registered with the smart meter web portal in 2020 and are now enjoying the benefits of timely monitoring, reviewing, and controlling their water usage; receiving leak detection alerts; and saving water and money. For questions and portal registration, call customer service at (855) 785-4021. To view your account online, visit www.lakewoodcity.org/UtilityBill.



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

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

Our 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 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 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, along with the year in which the sample was taken.

REGULATED SUBSTANCES WITH PRIMARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	10	0.004	6	3–10	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine (ppm)	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.5	0.4–0.7	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2.0	1	0.3	0.3–0.4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
HAA5 [sum of 5 haloacetic acids]–Stage 1 (ppb)	60	NA	4.4	1.2–15.2	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes]–Stage 1 (ppb)	80	NA	23	9–59	No	By-product of drinking water disinfection

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 PERCENTILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	0.3	0.2	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

REGULATED SUBSTANCES WITH SECONDARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	500	NS	21	8–46	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	1,600	NS	427	310–626	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	37	12–86	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	263	170–408	No	Runoff/leaching from natural deposits

Definitions

90th percentile: 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 (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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.

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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.

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).

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

UNREGULATED AND OTHER SUBSTANCES

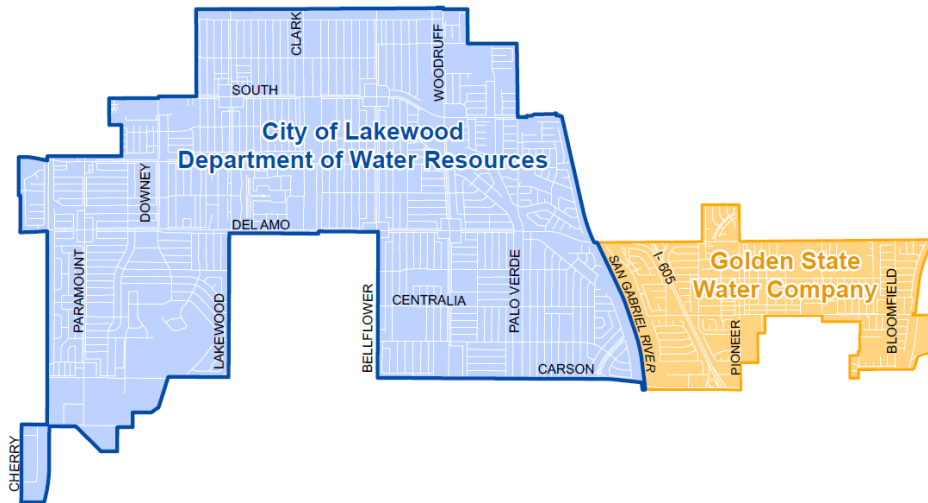
SUBSTANCE (UNIT OF MEASURE)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	50	17–78	Abundant naturally occurring element
Hardness (grains/gal)	9.3	2.8–15.1	Naturally occurring calcium
Hardness (ppm)	160	47–259	Naturally occurring calcium
Magnesium (ppm)	7	1–14	Abundant naturally occurring element
pH (units)	7.9	6.9–8.5	Hydrogen ion concentration
Potassium (ppm)	2.7	1.3–3.6	Runoff or leaching from natural deposits
Sodium (ppm)	31	24–47	Naturally occurring

Coronavirus (COVID-19)

According to the U.S. EPA, Americans can continue to use and drink water from their tap as usual. Coronavirus, which causes COVID-19, is a type of virus that 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 www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater.



Water Purveyors in Lakewood



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's imported supplies for emergency use.
- Four emergency interconnections with the City of Long Beach, GSWC, the City of Cerritos, and the City of Signal Hill.
- More than 2.3 billion gallons of water provided annually to over 60,000 residents and commercial and institutional customers via more than 20,000 meter connections.
- Approximately 6 percent of water supply is recycled water and used for irrigation at 42 sites.

ATTACHMENT B

MCLs, DLRs, PHGs, for Regulated Drinking Water Contaminants

(Units are in milligrams per liter (mg/L), unless otherwise noted.)

Last Update: September 14, 2021

The following tables includes California's maximum contaminant levels (MCLs), detection limits for purposes of reporting (DLRs), public health goals (PHGs) from the Office of Environmental Health Hazard Assessment (OEHHA). For comparison, Federal MCLs and Maximum Contaminant Level Goals (MCLGs) (USEPA) are also displayed.

Inorganic Chemicals Table, Chemicals with MCLs in 22 CCR §64431

State Regulated Inorganic Chemical Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Aluminum	1	0.05	0.6	2001	--	--
Antimony	0.006	0.006	0.001	2016	0.006	0.006
Arsenic	0.010	0.002	0.000004	2004	0.010	zero
Asbestos (MFL = million fibers per liter; for fibers >10 microns long)	7 MFL	0.2 MFL	7 MFL	2003	7 MFL	7 MFL
Barium	1	0.1	2	2003	2	2
Beryllium	0.004	0.001	0.001	2003	0.004	0.004
Cadmium	0.005	0.001	0.00004	2006	0.005	0.005
Chromium, Total - OEHHA withdrew the 0.0025-mg/L PHG	0.05	0.01	withdrawn Nov. 2001	1999	0.1	0.1

State Regulated Inorganic Chemical Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Chromium, Hexavalent - 0.01-mg/L MCL & 0.001-mg/L DLR repealed September 2017	--	--	0.00002	2011	--	--
Cyanide	0.15	0.1	0.15	1997	0.2	0.2
Fluoride	2	0.1	1	1997	4.0	4.0
Mercury (inorganic)	0.002	0.001	0.0012	1999 (rev2005)*	0.002	0.002
Nickel	0.1	0.01	0.012	2001	--	--
Nitrate (as nitrogen, N)	10 as N	0.4	45 as NO3 (=10 as N)	2018	10	10
Nitrite (as N)	1 as N	0.4	1 as N	2018	1	1
Nitrate + Nitrite (as N)	10 as N	--	10 as N	2018	--	--
Perchlorate	0.006	0.002	0.001	2015	--	--
Selenium	0.05	0.005	0.03	2010	0.05	0.05
Thallium	0.002	0.001	0.0001	1999 (rev2004)	0.002	0.0005

Copper and Lead Table, 22 CCR §64672.3

Values referred to as MCLs for lead and copper are not actually MCLs; instead, they are called “Action Levels” under the lead and copper rule.

State Regulated Copper and Lead Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Copper	1.3	0.05	0.3	2008	1.3	1.3
Lead	0.015	0.005	0.0002	2009	0.015	zero

Radiological Table, Radionuclides with MCLs in 22 CCR §64441 and §64443

[units are picocuries per liter (pCi/L), unless otherwise state; n/a = not applicable]

State Regulated Radionuclides Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Gross alpha particle activity - OEHHA concluded in 2003 that a PHG was not practical	15	3	none	n/a	15	zero
Gross beta particle activity - OEHHA concluded in 2003 that a PHG was not practical	4 mrem/yr	4	none	n/a	4 mrem/yr	zero
Radium-226	--	1	0.05	2006		
Radium-228	--	1	0.019	2006		
Radium-226 + Radium-	5	--	--	--	5	zero

State Regulated Radionuclides Contaminant	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
228						
Strontium-90	8	2	0.35	2006	--	--
Tritium	"20,000"	"1,000"	400	2006	--	--
Uranium	20	1	0.43	2001	30 µg/L	zero

Organic Chemicals Table, Chemicals with MCLs in 22 CCR §64444

Volatile Organic Chemicals (VOCs)

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Benzene	0.001	0.0005	0.00015	2001	0.005	zero
Carbon tetrachloride	0.0005	0.0005	0.0001	2000	0.005	zero
1,2-Dichlorobenzene	0.6	0.0005	0.6	1997 (rev2009)	0.6	0.6
1,4-Dichlorobenzene (p-DCB)	0.005	0.0005	0.006	1997	0.075	0.075
1,1-Dichloroethane (1,1-DCA)	0.005	0.0005	0.003	2003	--	--
1,2-Dichloroethane (1,2-DCA)	0.0005	0.0005	0.0004	1999 (rev2005)	0.005	zero

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
1,1-Dichloroethylene (1,1-DCE)	0.006	0.0005	0.01	1999	0.007	0.007
cis-1,2-Dichloroethylene	0.006	0.0005	0.013	2018	0.07	0.07
trans-1,2-Dichloroethylene	0.01	0.0005	0.05	2018	0.1	0.1
Dichloromethane (Methylene chloride)	0.005	0.0005	0.004	2000	0.005	zero
1,2-Dichloropropane	0.005	0.0005	0.0005	1999	0.005	zero
1,3-Dichloropropene	0.0005	0.0005	0.0002	1999 (rev2006)	--	--
Ethylbenzene	0.3	0.0005	0.3	1997	0.7	0.7
Methyl tertiary butyl ether (MTBE)	0.013	0.003	0.013	1999	--	--
Monochlorobenzene	0.07	0.0005	0.07	2014	0.1	0.1
Styrene	0.1	0.0005	0.0005	2010	0.1	0.1
1,1,2,2-Tetrachloroethane	0.001	0.0005	0.0001	2003	0.1	0.1
Tetrachloroethylene (PCE)	0.005	0.0005	0.00006	2001	0.005	zero

State Regulated Volatile Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Toluene	0.15	0.0005	0.15	1999	1	1
1,2,4-Trichlorobenzene	0.005	0.0005	0.005	1999	0.07	0.07
1,1,1-Trichloroethane (1,1,1-TCA)	0.200	0.0005	1	2006	0.2	0.2
1,1,2-Trichloroethane (1,1,2-TCA)	0.005	0.0005	0.0003	2006	0.005	0.003
Trichloroethylene (TCE)	0.005	0.0005	0.0017	2009	0.005	zero
Trichlorofluoromethane (Freon 11)	0.15	0.005	1.3	2014	--	--
"1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)"	1.2	0.01	4	1997 (rev2011)	--	--
Vinyl chloride	0.0005	0.0005	0.00005	2000	0.002	zero
Xylenes	1.750	0.0005	1.8	1997	10	10

Non-Volatile Synthetic Organic Chemicals (SOCs)

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Alachlor	0.002	0.001	0.004	1997	0.002	zero

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Atrazine	0.001	0.0005	0.00015	1999	0.003	0.003
Bentazon	0.018	0.002	0.2	1999 (rev2009)	--	--
Benzo(a)pyrene	0.0002	0.0001	0.000007	2010	0.0002	zero
Carbofuran	0.018	0.005	0.0007	2016	0.04	0.04
Chlordane	0.0001	0.0001	0.00003	1997 (rev2006)	0.002	zero
Dalapon	0.2	0.01	0.79	1997 (rev2009)	0.2	0.2
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.00001	0.000003	2020	0.0002	zero
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.07	0.01	0.02	2009	0.07	0.07
Di(2-ethylhexyl)adipate	0.4	0.005	0.2	2003	0.4	0.4
Di(2-ethylhexyl)phthalate (DEHP)	0.004	0.003	0.012	1997	0.006	zero
Dinoseb	0.007	0.002	0.014	1997	0.007	0.007

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
				(rev2010)		
Diquat	0.02	0.004	0.006	2016	0.02	0.02
Endothal	0.1	0.045	0.094	2014	0.1	0.1
Endrin	0.002	0.0001	0.0003	2016	0.002	0.002
Ethylene dibromide (EDB)	0.00005	0.00002	0.00001	2003	0.00005	zero
Glyphosate	0.7	0.025	0.9	2007	0.7	0.7
Heptachlor	0.00001	0.00001	0.000008	1999	0.0004	zero
Heptachlor epoxide	0.00001	0.00001	0.000006	1999	0.0002	zero
Hexachlorobenzene	0.001	0.0005	0.00003	2003	0.001	zero
Hexachlorocyclopentadiene	0.05	0.001	0.002	2014	0.05	0.05
Lindane	0.0002	0.0002	0.000032	1999 (rev2005)	0.0002	0.0002
Methoxychlor	0.03	0.01	0.00009	2010	0.04	0.04
Molinate	0.02	0.002	0.001	2008	--	--
Oxamyl	0.05	0.02	0.026	2009	0.2	0.2

State Regulated Non-Volatile Synthetic Organic Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Pentachlorophenol	0.001	0.0002	0.0003	2009	0.001	zero
Picloram	0.5	0.001	0.166	2016	0.5	0.5
Polychlorinated biphenyls (PCBs)	0.0005	0.0005	0.00009	2007	0.0005	zero
Simazine	0.004	0.001	0.004	2001	0.004	0.004
Thiobencarb	0.07	0.001	0.042	2016	--	--
Toxaphene	0.003	0.001	0.00003	2003	0.003	zero
1,2,3-Trichloropropane	0.000005	0.000005	0.0000007	2009	--	--
2,3,7,8-TCDD (dioxin)	3x10 ⁻⁸	5x10 ⁻⁹	5x10 ⁻¹¹	2010	3x10 ⁻⁸	zero
2,4,5-TP (Silvex)	0.05	0.001	0.003	2014	0.05	0.05

Disinfection Byproducts Table, Chemicals with MCLs in 22 CCR §64533

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Total Trihalomethanes	0.080	--	--	--	0.080	--

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
Bromodichloromethane	--	0.0010	0.00006	2020	--	zero
Bromoform	--	0.0010	0.0005	2020	--	zero
Chloroform	--	0.0010	0.0004	2020	--	0.07
Dibromochloromethane	--	0.0010	0.0001	2020	--	0.06
Haloacetic Acids (five) (HAA5)	0.060	--	--	--	0.060	--
Monochloroacetic Acid	--	0.0020	--	--	--	0.07
Dichloroacetic Acid	--	0.0010	--	--	--	zero
Trichloroacetic Acid	--	0.0010	--	--	--	0.02
Monobromoacetic Acid	--	0.0010	--	--	--	--
Dibromoacetic Acid	--	0.0010	--	--	--	--
Bromate	0.010	0.0050**	0.0001	2009	0.01	zero
Chlorite	1.0	0.020	0.05	2009	1	0.8

Chemicals with PHGs established in response to DDW requests. These are not currently regulated drinking water contaminants.

State Regulated Disinfection Byproducts Contaminants	State MCL	State DLR	State PHG	State Date of PHG	Federal MCL	Federal MCLG
N-Nitrosodimethylamine (NDMA)	--	--	0.000003	2006	--	--

*OEHHA's review of this chemical during the year indicated (rev20XX) resulted in no change in the PHG.

**The DLR for Bromate is 0.0010 mg/L for analysis performed using EPA Method 317.0 Revision 2.0, 321.8, or 326.0.