

ANNUAL
**WATER
QUALITY
REPORT**

Water testing performed in 2009



Proudly Presented By:
**LONG BEACH
WATER DEPARTMENT**

*Leader in Water Conservation
& Environmental Stewardship*

PWS ID#: 1910065

The Long Beach Water Department

The Long Beach Water Department (LBWD) has been delivering a safe and dependable water supply to the residents and businesses within the City of Long Beach (City) for almost 100 years and continues to be proactive in protecting and providing a reliable supply of quality water. Currently, LBWD serves a total population of 490,882 through 902 miles of pipelines. This water is tested on a routine basis for microbiological as well as chemical quality.

During 2009, the staff of skilled water scientists, engineers, and technicians performed over 120,000 tests to analyze for more than 120 drinking water contaminants to ensure that the water quality meets or better all Federal and state standards. We are pleased to inform you that no constituent was detected over the enforceable limit that the California Department of Public Health (CDPH) has set.

This report contains important and useful information about the sources, quality, and supply of LBWD drinking water and the conservation efforts within the City, including the role residents and businesses play to ensure a reliable supply of this natural resource. We are committed to providing you with information because informed customers are our best allies. Please share with us your thoughts about the information in this report.

Source Water Assessment

As required under the 1996 Safe Drinking Water Act amendments, a source water assessment must be completed for all active drinking water sources. The goal of the source water assessment is to inventory all potential activities that may degrade the source water quality. MWD completed its source water assessment of its Colorado River and State Water Project supplies in December 2002. It was found that Colorado River supplies are most vulnerable to recreation, urban/storm water runoff, and increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD by phone at (213) 217-6850.



The LBWD completed the required source water assessments for its active wells in April 2003. New wells that are constructed after this date must also undergo a similar assessment. To summarize, the assessment concluded that all active wells are considered most vulnerable to the community sewer collection system. Depending on location, some wells are considered vulnerable to gas stations, dry cleaners, confirmed leaking underground fuel tanks, airport activities, and historic landfills. However, although the wells are considered vulnerable to the aforementioned activities, the LBWD performs water quality monitoring for each active well annually and has not detected any constituents that suggests contamination. Please contact the LBWD by phone at (562) 570-2300 for more details if you would like to review this document.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as people 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/safewater/hotline/.

Public Meetings

The Long Beach Water Department Board of Water Commissioners meets the first Thursday of each month at 9:00 am and on the third Thursday of each month at 7:00 pm at our Administration Building. Please feel free to participate in these meetings. For further information, please call (562) 570-2300.

Board of Water Commissioners:

John D.S. Allen
Paul C. Blanco
Frank Clarke
Suzanne Dallman
William B. Townsend

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is pumped from our source wells to the LBWD Treatment Plant. Special water treatment chemicals, known as coagulants, are added to the water in order to cause the particles in the water to adhere to one another (called "floc"), making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine and ammonia are added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chloramine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, fluoride (used to prevent tooth decay) is added and the pH is adjusted (to protect distribution system pipes) before the water is pumped to drinking water reservoirs and into your neighborhood, homes, and businesses.

Questions?

If you have any questions about your water quality or this report, please call the LBWD at (562) 570-2491 (TDD 570-2499), Monday through Friday between 8 a.m. and 4:30 p.m. This information is available in an alternative format by request to Ms. Melissa Keyes at (562) 570-2309, or write to: Long Beach Water Department, 1800 E. Wardlow Road, Long Beach, CA 90807

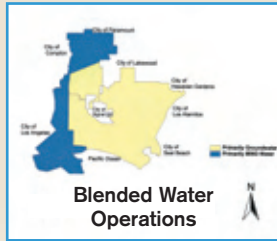


Sources of Drinking Water

Approximately 58 percent of the potable water serving the City is supplied by groundwater, and the remaining 42 percent is supplied through purchased imported surface water. In general, the sources of drinking water (for both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As the water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, sometimes including radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

LBWD purchases treated surface water from the Metropolitan Water District of Southern California (MWD) and treats groundwater pumped from 30 wells around the Long Beach area at our Groundwater Treatment Plant. Both the purchased surface water and the treated groundwater better Federal and State water quality standards. The Federal regulations are set by the U.S. Environmental Protection Agency (U.S. EPA), and the State standards are set by the California Department of Public Health (CDPH).

Two major aqueducts supply the surface waters feeding MWD's five regional treatment plants. Colorado River water, which has the higher mineral content of the two supplies, is brought into Southern California through the 242-mile long Colorado River Aqueduct. This aqueduct, constructed and operated by MWD, originates at Lake Havasu and terminates in Southern California at Lake Mathews. State Project water, which contains a lower mineral content but higher organic



matter content, is conveyed through the California Aqueduct. This aqueduct, constructed and operated by the California Department of Water Resources, transfers water originating from Lake Oroville in Northern California through 441 miles before terminating in Southern California.

The groundwater treated at the LBWD Groundwater Treatment Plant originates from the San Gabriel watershed. The watershed is fed by rain and snow melt and flows through washes and creeks into the San Gabriel River and Whittier Narrows before percolating into the underground aquifer of the central basin area of Los Angeles. The City of Long Beach is a part of the Central Basin service area.

For hydraulic reasons, the Long Beach service area may be divided into two main regions: the MWD zone, which primarily receives purchased treated surface water, and the blended zone, which may receive a combination of treated groundwater and purchased treated surface water. LBWD sometimes makes changes in blends of water in our system, and the residents may notice the associated changes to the water quality. Regardless of the area in Long Beach that you work or live in, LBWD's goal is to provide water meeting or bettering all water quality regulations to our consumers at the most reasonable cost. The following graphs show the areas that may be affected by a change in the water blend.



Natural Contaminants Present in Source Water Prior to Treatment May 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.

In order to ensure that tap water is safe to drink, CDPH prescribes regulations that limit the amount of specific contaminants in water provided by public water systems. The Long Beach Water Department takes these regulations very seriously, and in all instances we treat our water to comply or be better than CDPH's regulations.

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.

Cryptosporidium



Cryptosporidium is a microscopic organism that, when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. The risk of the microorganisms being in LBWD's water supply is extremely low. Groundwater, which makes up 58 percent of LBWD's potable water supply, is free of these organisms because of natural filtration through the soil. With respect to imported surface water supplies, MWD did not detect *Cryptosporidium* in any of the treated water samples collected in 2009. Additionally, MWD has monitored for

Cryptosporidium since 1994 and has initiated an extensive effort to prevent *Cryptosporidium* and other microorganisms from reaching its treated water.

Other pathways for exposure to *Cryptosporidium* include poor hygiene and eating contaminated foods. The U.S. EPA Centers for Disease Control guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Lead and Drinking Water



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. Long Beach Water Department 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 2 minutes before using water for drinking or cooking. This water can be captured for non-potable use. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Interesting Facts

TRIHALOMETHANES AND HALOACETIC ACIDS (TTHMs AND HAA5s)

The Stage 1 Disinfectants/Disinfection Byproducts (D/DBP) Rule became effective in January 2002. DBPs, including total trihalomethanes (TTHMs) and haloacetic acids (HAA5), are by-products of the disinfection process and suspected human carcinogens. Some people consuming water containing TTHM in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer. To lower the risk from ingesting water containing DBPs, the U.S. EPA lowered the acceptable TTHM level from 100 ppb to 80 ppb and also regulated another class of DBPs, known as HAA5, at 60 ppb. To better protect health, the U.S. EPA recently regulated utilities to meet the Stage 2 D/DBP Rule. This new Rule builds on the existing Stage 1 D/DBP regulations by requiring water systems to meet disinfection by-product maximum contaminant levels (MCLs) at each disinfection monitoring site in the distribution system.

During 2007–2008, LBWD was required by the U.S. EPA to conduct an evaluation of our distribution system. Known as the Initial Distribution System Evaluation (IDSE), this program was intended to identify other locations in our distribution system that may have elevated concentrations of TTHMs and HAAs outside of the Stage 1 sites. Of the 24 IDSE sites under evaluation, 12 sites were approved by EPA to be Stage 2 monitoring sites, and LBWD began monitoring these sites under the Stage 2 D/DBP Rule in August 2009.

The MCLs for TTHM and HAA5 have not changed from the Stage 1 D/DBP Rule. However, the method of calculating compliance has changed. Stage 2 D/DBP Rule compliance determination is based on locational running annual averages (LRAAs) of TTHM and HAA5 concentrations. Compliance must be met at each monitoring location, instead of using the system-wide running annual average (RAA) required under the Stage 1 D/DBP Rule. The LRAA is obtained by averaging the individual sampling sites over the period of a year. LBWD's 2009 TTHM values were in compliance for both the Stage 1 and Stage 2 monitoring. The TTHMs in the distribution system ranged from 32–49 ppb, and the highest LRAA was 45 ppb, or well below the MCL of 80 ppb. LBWD's 2009 distribution system HAA5 concentrations ranged from 9.7–20 ppb, and the highest LRAA was 17 ppb, also well below the MCL of 60 ppb.

BROMATE

Systems using ozone to treat drinking water are required to monitor for bromate, a disinfection by-product, at the treatment plant's effluent. Bromate is formed when ozone reacts with naturally occurring bromide found in the source water. LBWD does not ozonate our waters; however, the purchased treated MWD surface water may have detectable levels of bromate.

Exposure to high concentrations of bromate over a long period of time caused cancer in rats and kidney effects in laboratory animals, and it is suspected of potential reproductive effects in humans. The U.S. EPA developed an MCL of 10 ppb that it considers protective of non-cancer health effects from long-term exposure in humans. The 2009 MWD's drinking water bromate levels reported as, the running annual average were as high as 6.9 ppb. During the summer of 2009, MWD supplied purchased water to LBWD that had detectable levels of bromate. This resulted in a maximum detected bromate value of 5.6 ppb in the MWD Zone, during August 2009. LBWD blends the purchased MWD surface water with treated groundwater before distribution into the Blend Zone, and bromate was not detected in the 2009 monitoring of the Blend Zone distribution water.

BORON AND VANADIUM

Boron and vanadium are naturally present in the environment. Exposure to high concentrations of boron or vanadium in excess of the notification levels by women who are pregnant may increase their risk of having babies with developmental effects, based on studies in laboratory animals. The levels found in LBWD's water, 180 ppb for boron and 5 ppb for vanadium, are well below the State's notification level of 1000 ppb and 50 ppb for boron and vanadium, respectively.

PERCHLORATE

Perchlorate is an inorganic chemical used in the manufacturing of rocket fuels and explosives. At high concentrations in drinking water, it can interfere with the thyroid gland's ability to produce hormones necessary for normal growth and development. Perchlorate was first detected in drinking water wells in northern California in 1997 and was later detected in many water wells throughout the state as well as in the Colorado River. The source of contamination of the Colorado River has been determined to be an industrial site in Nevada. Colorado River water is an important source of drinking water for southern California, and much of the water that Long Beach purchases from MWD comes from this source.

MWD initiated voluntary monitoring for perchlorate in 1997. Levels found in the Colorado River supply have ranged between 4 and 9 ppb. No perchlorate has been detected in MWD's State Project water, or in LBWD's wells. Since 1997, the Nevada EPA has taken significant steps to mitigate the leaching of perchlorate into the river, and as a result there were no detectable perchlorate levels in MWD's water in 2009. Currently, the best laboratories can detect perchlorate reliably at 4 ppb, and on October 18, 2007, CDPH adopted an MCL for perchlorate at 6 ppb.

FLUORIDATION

Fluoride is one of the most plentiful elements on earth. It occurs naturally in water supplies throughout California and elsewhere. When fluoride is present in drinking water at optimal levels, it has been shown to promote oral health by preventing tooth decay. Water systems are considered naturally fluoridated when the natural level of fluoride is greater than 0.7 ppm. Water fluoridation refers to the practice of adjusting the level of fluoride to 0.7 to 1.2 ppm. Blending fluoridated water from different sources does not increase total fluoride levels in drinking water. Currently, about 67 percent of the U.S. population on public water supplies has access to fluoridated water.

The CDPH and the U.S. Centers for Disease Control and Prevention strongly agree that fluoridated water helps promote dental hygiene and reduce the risk of caries (cavities) in children and adults. For these reasons and because it is a cost-effective public health measure, the Long Beach City Council in 1971 mandated that LBWD add fluoride at a dose to achieve a level of 1.0 mg/L in the drinking water, the level recommended by the American Dental Association. Please refer to www.cdph.ca.gov/celtic/drinkingwater/Pages/Fluoridation.aspx, if you have questions regarding fluoride and fluoridation.

Water Conservation in Long Beach

The City of Long Beach imports over 40 percent of its water supply from the Colorado River and the Sacramento-San Joaquin Bay Delta. For years, these sources of water have been negatively impacted by ongoing droughts and restrictive environmental regulations and court rulings. As a result, imported water supplies to our region have been permanently reduced and are becoming increasingly less reliable than they have been in the past.

In 2007, the Long Beach Board of Water Commissioners declared an imminent water supply shortage for the City of Long Beach. Today, the City's Emergency Water Supply Shortage Plan remains activated, meaning that multiple prohibitions on certain uses of potable water continue to be in effect.

The following outdoor water uses are currently prohibited in the City of Long Beach:

1. Irrigating landscape with potable water on any day other than Monday, Thursday, and Saturday
2. Irrigating landscape with potable water between the hours of 9:00 a.m. and 4:00 p.m., and for more than 10 minutes per station
3. Spraying down driveways, sidewalks, parking areas, patios, or any other paved areas with anything but a high-pressure, water cleaning device
4. Over-watering landscape to the point of causing significant runoff

Customers can sign up to receive periodic notices throughout the year that recommend when to adjust sprinkler systems according to changes in weather patterns and hydrologic conditions. Visit www.lbwater.org/pdf/conservation/ewu_homepage.pdf.

For more information on conservation, rebates, landscape classes, and our other great programs, please visit www.lbwater.org.



Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables included in this report list all the drinking water contaminants that we detected during the 2009 calendar year. The presence of these contaminants 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 from January 1 to December 31, 2009. The State requires us to monitor 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									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Blended Zone		MWD Zone		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2009	1000 (SMCL=200)	600	132	99–230	147	108–193	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic ¹ (ppb)	2009	10	0.004	ND	NA	3	NA	No	Erosion of natural deposits; runoff from orchards and industrial processes
Bromate (ppb)	2009	10	(0)	MWD Jensen plant effluent range: 4.2–12; HRAA: 6.9 MWD Zone HRAA: <2; range: ND – 5.6			No	By-product of drinking water disinfection	
Chloramines (ppm)	2009	[4.0 (as Cl ₂)]	[4.0 (as Cl ₂)]	City-wide range: 0.36–3.1 HRAA: 2.2			No	Drinking water disinfectant added for treatment	
Fluoride (ppm)	2009	2.0	1	0.85	0.77–0.96	0.83	0.76–0.93	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	2009	10	10	ND	NA	0.42	0.27–0.56	No	Erosion of natural deposits; runoff from fertilizer use and septic system
Haloacetic Acids (ppb)	2009	60	NA	City-wide range: 9.7–20 highest LRAA: 17			No	By-product of drinking water disinfection	
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	City-wide range: 32–49 highest LRAA: 45			No	By-product of drinking water disinfection	
Total Coliform Bacteria [Total Coliform Rule] ² (% positive samples)	2009	More than 5.0% of monthly samples are positive	(0)	City-wide range: ND – 0.70% highest monthly: 0.70%			No	Naturally present in the environment	
Turbidity ³ (NTU)	2009	TT	NA	0.14	0.06–0.14	0.12	0.04–0.12	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2009	TT	NA	100%			No	Soil runoff	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community									
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE		
Copper (ppb)	2007	1300 (SMCL=1000)	300	140	0/156	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead (ppb)	2007	15	2	ND	0/156	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits		

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Blended Zone		MWD Zone		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Chloride (ppm)	2009	500	NS	52	41–103	97	84–104	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2009	15	NS	1	ND–3	ND	ND–2	No	Naturally occurring organic materials
Odor–Threshold ¹ (TON)	2009	3	NS	1	NA	1	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2009	1600	NS	566	400–1025	929	692–1072	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2009	500	NS	76	40–216	227	143–258	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2009	1000	NS	342	260–604	597	408–680	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	NL	Blended Zone		MWD Zone		TYPICAL SOURCE
			AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Boron ¹ (ppb)	2009	1000	160	NA	180	NA	Naturally present in the environment
Chlorate ¹ (ppb)	2009	800	ND	NA	76	NA	By-product of drinking water chlorination; industrial processes
N-Nitrosodimethylamine (NDMA) (ppt)	2009	10 (PHG=3)	4	ND–12	5	2–12	Formed through natural, industrial, and disinfection processes
Vanadium ¹ (ppb)	2009	50	ND	NA	5	NA	Naturally present in the environment

RADIOLOGICALS

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Blended Zone		MWD Zone		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Gross Alpha ¹ (pCi/L)	2009	15	NA	MWD's Weymouth and Diemer Plant effluents Gross Alpha detected in the range of ND – 7.6 and 3.8 – 9.3, respectively. Gross alpha was detected in the MWD Zone at 5.1				No	Erosion of natural deposits
Uranium ¹ (pCi/L)	2009	20	0.43	1.4	NA	3.3	NA	No	Erosion of natural deposits

OTHER SUBSTANCES OF INTEREST

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Blended Zone		MWD Zone	
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2009	126	97–150	117	97–142
Calcium (ppm)	2009	33	23–63	67	44–78
Hardness (grains/gal)	2009	6.7	4.3–15	15.3	9.8–17.7
Hardness (ppm)	2009	114	74–257	262	167–303
Magnesium (ppm)	2009	8.6	5.4–24	23	14–27
pH (Units)	2009	7.9	7.8–8.2	7.8	7.5–8.0
Potassium (ppm)	2009	2.5	2.2–2.9	5.0	3.8–5.6
Silica (ppm)	2009	16	11–20	7.8	3.4–11
Sodium (ppm)	2009	77	70–102	95	77–105

¹ Amount detected is a single value, unless otherwise indicated.

² The results reported to the CDPH are based on distribution system monthly sampling.

³ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The MCL for treated surface water shall be less than 0.5 NTU in 95% of the measurements taken each month, and shall not exceed 5.0 NTU at any time.

Definitions

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 expressing the amount of electrical conductivity of a solution.

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

HRAA: Highest running annual average.

LRAA: Locational running annual average.

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.

NL (Notification Level): NLs are health-based advisory levels established by CDPH for chemicals in drinking water that lack MCLs. When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

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).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

TON (Threshold Odor Number): A measure of odor in water.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.