



**Presented By  
Walnut Valley  
Water District**

# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017

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

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

**この情報は重要です。  
翻訳を依頼してください。**

“هذا التقرير يحتوي على معلومات مهمة تتعلق بمياه الشفة (أو الشرب) ترجم التقرير, أو تكلم مع شخص يستطيع أن يفهم التقرير.”

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را بزبان انگلیسی بخوانید لطفاً کسی که میتواند دیاری بگیرد یا مطالب را برای شما به فارسی ترجمه کند.

此份有關你的食水報告，  
內有重要資料和訊息，請找  
他人為你翻譯及解釋清楚。

此份有关你的食水报告，  
内有重要资料 and 讯息，请找  
他人为你翻译及解释清楚。

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

Mahalaga ang impormasyong  
ito. Mangyaring ipasalin ito.

## Meeting the Challenge

We are, once again, proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2017. Over the years, we have dedicated ourselves to producing drinking water that meets or exceeds 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 safety 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.

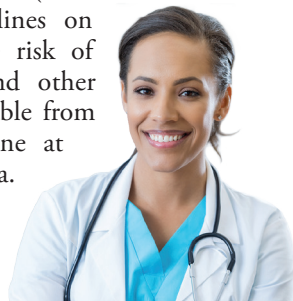
Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

## Where Does My Water Come From?

As you may be aware, our District is dependent on surface water that is imported into Southern California by Metropolitan Water District (MWD). MWD imports and treats surface water transported through two major conveyance systems: the 242-mile-long Colorado River Aqueduct and the 444-mile-long State Water Project (SWP). Water transported via the Colorado River Aqueduct originates in the Colorado River basin states, and water transported by the State Water Project conveyance system originates in the Sacramento-San Joaquin Delta. MWD treats this water at their Weymouth filtration plant in the City of La Verne. The water is then purchased by the District through our designated wholesale water agency, Three Valleys Municipal Water District (TVMWD). The district also receives (SWP) water treated by TVMWD at their Miramar Water Treatment Plant in Claremont.

## 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, those 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 <http://water.epa.gov/drink/hotline>.



## Community Participation

The District's board meetings are typically scheduled, unless otherwise noticed, for 5:00 p.m. on the third Monday of each month, in the board room of the District's headquarters located at 271 South Brea Canyon Road, Walnut. The Board meetings are open to the public. Anyone who is interested in the operations and business of the District is encouraged to attend.

Office Hours: The Customer Service Department is open Monday through Thursday, 7:00 a.m. to 5:00 p.m. and Friday, 7:00 a.m. to 4:00 p.m.

(909) 595-7554  
[www.wvwd.com](http://www.wvwd.com)

## Water Treatment Process

The treatment process consists of a series of steps. The water goes to a mixing tank where polyaluminum chloride and soda ash are added. The addition of these substances causes small particles 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 is added again as precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste). Finally, soda ash (used to adjust the final pH and alkalinity), fluoride (used to prevent tooth decay), and a corrosion inhibitor (used to protect distribution pipes) are added before the water is pumped to reservoirs and into your home or business.

## Fluoridation

It is widely accepted that fluoride helps teeth resist decay by strengthening the protective layer of tooth enamel. Although there has always been a certain amount of fluoride naturally present in MWD's water sources, these levels are not sufficient to protect against tooth decay.

As result and in line with the recommendations from the California Department of Public Health, as well as the U.S. Centers for Disease Control and Prevention, MWD began to adjust the natural fluoride level in its water supplies to the recommended optimum range of 0.7-0.8 mg/L (parts per million, ppm). At this range, fluoridation has proven to be safe to drink and effective to help prevent tooth decay.

For more information on fluoride in the drinking water, please visit MWD's website at [http://www.mwdh2o.com/PDF\\_About\\_Your\\_Water/2.3.1\\_Annual\\_Water\\_Quality\\_Report.pdf](http://www.mwdh2o.com/PDF_About_Your_Water/2.3.1_Annual_Water_Quality_Report.pdf).

## Source Water Assessment

In December 2002, the MWD completed a source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban and stormwater runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered to be most vulnerable to urban and stormwater runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6000.

## Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016, the U.S. EPA passed a new regulation called the Revised Total Coliform Rule, which requires additional steps that water systems must take to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under the new regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Although we have been fortunate to have the highest quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this new rule helps us to accomplish that goal.

Water treatment is a complex, time-consuming process.

## Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. Washing full loads of dishes saves 5-15 gallons per load.
- Turn off the tap when brushing your teeth and save 10 gallons per person per day.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



## Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call our customer service department at (909) 595-7554 or email us at [cservice@wvwd.com](mailto:cservice@wvwd.com).

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

## What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.

## Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. 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 [www.epa.gov/lead](http://www.epa.gov/lead).

## 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.

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 Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health. 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 potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



## Benefits of Chlorination

**D**isinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the United States. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

**Potent Germicide Reduction** in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

**Taste and Odor Reduction** of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.

**Biological Growth Elimination** of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

**Chemical Removal** of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

## To The Last Drop

**T**he National Oceanic and Atmospheric Administration (NOAA) defines drought as a deficiency in precipitation over an extended period of time, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people. Drought strikes in virtually all climate zones, from very wet to very dry.

There are primarily three types of drought: Meteorological Drought refers to the lack of precipitation, or the degree of dryness and the duration of the dry period; Agricultural Drought refers to the agricultural impact of drought, focusing on precipitation shortages, soil water deficits, and reduced ground water or reservoir levels needed for irrigation; and Hydrological Drought, pertains to drought that usually occurs following periods of extended precipitation shortfalls that can impact water supply (i.e., stream flow, reservoir and lake levels, ground water).

Drought is a temporary aberration from normal climatic conditions; therefore, it can vary significantly from one region to another. Although normally occurring, human factors, such as water demand, can exacerbate the duration and impact that drought has on a region. By following simple water conservation measures, you can help significantly reduce the lasting effects of extended drought.



## Sampling Results

During the past year, we have taken thousands of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table shows only those contaminants that were detected in the water. The State recommends us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sampling data are included, along with the year in which the sample was taken.

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

### REGULATED SUBSTANCES

				Walnut Valley Water District		The Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2017	1000	600	NA	NA	170	ND–210	ND	NA	ND	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Chloramines (ppm)	2017	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	1.90	1.53–2.43	2.4	1.1–3.1	2.47	2.46–2.48	NA	NA	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2017	2.0	1	NA	NA	0.7	0.5–0.9	ND	NA	0.61	0.58–0.64	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids–Stage 1 (ppb)	2017	60	NA	NA	NA	13	6.4–22	NA	NA	NA	NA	No	By-product of drinking water disinfection
Haloacetic Acids–Stage 2 (ppb)	2017	60	NA	22.37	5.43–44.4	17	6.4–26	21.64	11.4–51.2	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	2017	10	10	NA	NA	ND	NA	0.5	ND–0.8	3.1	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Strontium-90 (pCi/L)	2017	8	0.35	NA	NA	ND	NA	0.137	NA	NA	NA	No	Decay of natural and man-made deposits
TTHMs [Total Trihalomethanes]–Stage 1 (ppb)	2017	80	NA	NA	NA	35	14–79	NA	NA	NA	NA	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2017	80	NA	47.63	16.20–88.7	44	21–43	58.5	28.7–65.9	NA	NA	No	By-product of drinking water disinfection
Tritium (pCi/L)	2017	20,000	400	NA	NA	ND	NA	89.5	NA	NA	NA	No	Decay of natural and man-made deposits
Turbidity (NTU)	2017	TT	NA	NA	NA	0.04	NA	0.14	NA	0.54	NA	No	Soil runoff
Uranium (pCi/L)	2017	20	0.43	NA	NA	ND	NA	NA	NA	2.4	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2017	1.3	0.3	0.099	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2017	15	0.2	3	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES													
				Walnut Valley Water District	The Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2017	200	600	NA	NA	170	ND–210	ND	NA	ND	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2017	500	NS	NA	NA	48	29–66	28	NA	7.75	7.7–7.8	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2017	15	NS	0.08	NA	2	NA	ND	NA	ND	NA	No	Naturally-occurring organic materials
Odor–Threshold (TON)	2017	3	NS	NA	NA	3	NA	1	NA	1	NA	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2017	1,600	NS	NA	NA	460	299–621	265	240–290	405	390–420	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	500	NS	NA	NA	84	46–123	24	NA	29	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	1,000	NS	NA	NA	272	179–364	180	NA	225	220–230	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2017	5	NS	0.02	NA	ND	NA	ND	NA	ND	NA	No	Soil runoff
Zinc (ppm)	2017	5.0	NS	NA	NA	ND	NA	ND	NA	0.1	ND–0.2	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED AND OTHER SUBSTANCES <sup>1</sup>													
				Walnut Valley Water District	The Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE	
Alkalinity [as CaCO <sub>3</sub> ] (ppm)	2017	NA	NA	57	43–71	57	49–64	160	NA	Measure of water quality			
Boron (ppb)	2017	NA	NA	110	NA	135	120–150	160	140–180	Runoff/leaching from natural deposits; industrial wastes			
Calcium (ppm)	2017	NA	NA	24	14–35	15	13–17	52	NA	Runoff/leaching from natural deposits			
Chlorate (ppb)	2017	NA	NA	34	NA	ND	NA	NA	NA	By-product of drinking water chlorination; industrial processes			
Corrosivity [as Aggressiveness Index]	2017	NA	NA	12.0	11.9–12.1	11.31	NA	NA	NA	Elemental balance in water; affected by temperature, other factors			
Corrosivity [as Saturation Index]	2017	NA	NA	0.26	0.18–0.35	-0.47	NA	NA	NA	Elemental balance in water; affected by temperature, other factors			
Hardness [as CaCO <sub>3</sub> ] (ppm)	2017	NA	NA	105	58–152	74	NA	175	170–180	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in water			
pH (Units)	2017	NA	NA	8.5	8.4–8.7	8.13	7.7–8.59	7.8	NA	Measure of water quality			
Potassium (ppm)	2017	NA	NA	2.7	2.2–3.2	2.2	1.5–2.9	1.5	NA	Salt present in the water; naturally occurring			
Magnesium (ppm)	2017	NA	NA	11	6.2–16	7.6	NA	8.65	8.6–8.7	Runoff/leaching from natural deposits			
Sodium (ppm)	2017	NA	NA	50	35–64	28	NA	21.5	21–22	Salt present in water; naturally occurring			
Total Organic Carbon [TOC] (ppm)	2017	NA	NA	2.5	2.0–2.9	2.3	1.8–3.3	1.7	NA	Various natural and man-made sources; TOC is a precursor for the formation of disinfection by-products			
Vanadium (ppb)	2017	NA	NA	ND	NA	ND	NA	7.2	7.0–7.3	Naturally occurring; industrial wastes discharge			

## UNREGULATED CONTAMINANT MONITORING RULE – PART 3 (UCMR3)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Chlorate (ppb)	2014	74	NA
Total Chromium (ppb)	2014	0.38	NA
Molybdenum (ppb)	2014	5.1	NA
Strontium (ppb)	2014	350	NA
Vanadium (ppb)	2014	4.4	NA
Hexavalent Chromium (ppb)	2014	0.42	NA

<sup>1</sup> Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

## 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.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for Stage 2 TTHMs and HAAs are reported as the highest LRAAs.

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

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

**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.