



Public Works Department  
14000 City Center Drive  
Chino Hills, CA 91709

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- 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.

- 此份有关你的食水报告, 内有重要资料和讯息, 请找他人为你翻译及解释清楚。
- 이 안내는 매우 중요함니다. 본인을 위해 번역인을 사용하십시오.

**Important Information About the Quality of Your Drinking Water**



City of Chino Hills



**2012 WATER QUALITY REPORT**

# INTRODUCTION

Did you know that our bodies are made up of 60% water? We can only live one week without water, but we could go an entire month without food. Water is precious, and we need to learn how to live with the water supply we have. While the earth is covered by more than 70% water (USGS.Gov), only 3% is fresh water, and only 1.7% of this fresh water is drinkable. New water does not exist, and the water we drink today is over one billion years old; it simply moves through the water cycle.

The City of Chino Hills uses two sources for its drinking water: surface and groundwater. Each source undergoes an extensive treatment and testing process according to the California Department of Public Health (CDPH) and the U.S. Environmental Protection Agency (U.S. EPA) standards before reaching your faucet. The City of Chino Hills takes steps to make sure its drinking water is safe for both its customers and the environment.

The City of Chino Hills is pleased to present its 2012 Water Quality Report, created to provide our customers with important information about the quality of our drinking water. At the City of Chino Hills, we work hard to ensure our drinking water meets or exceeds all State and Federal drinking water health standards each year.

The City of Chino Hills has been a leader in water conservation in the Chino Basin Region. Since 2004, through water conservation efforts, our customers have reduced water consumption from an average of 221 gallons per person per day to 199 gallons per person per day. In some countries, where water is scarce, people live on three gallons per day. Most of our water (80%) is used outdoors to irrigate our landscapes and lawns. Only 20% is actually used indoors for personal use, such as drinking, laundry, and bathing. In 1904, the City of Chino was actually covered by standing water. Today, we pump groundwater from various wells located in the City of Chino from over 100 feet below ground surface. Each year, we must go deeper and deeper to reach our water supply. It is imperative that we do our part to conserve this most valuable resource for future generations. Let's make water conservation a way of life. For more information on how you can conserve water, contact Kelly Sandel at (909) 364-2804 or via email at [ksandel@chinohills.org](mailto:ksandel@chinohills.org).

## Watering Your Lawn

Water your lawn two to three days a week instead of five days a week to conserve water.

[www.chinohills.org/WateringSchedule](http://www.chinohills.org/WateringSchedule)

## Check For Leaks

Check your sprinkler system for leaks, over-spray, and broken sprinkler heads, and repair promptly.

## Mulch!

Save hundreds of gallons a year by using organic mulch around plants to reduce evaporation.

[www.chinohills.org/FreeMulch](http://www.chinohills.org/FreeMulch)



## Where Does Chino Hills' Water Come From?

The City's water sources are comprised of surface water, supplied by the Metropolitan Water District (MWD) via the Water Facilities Authority (WFA); and groundwater that is pumped through City-owned wells, Monte Vista Water District (MVWD) wells, and Chino Basin Desalter Authority (CDA) wells.

Water enters the City of Chino Hills' distribution system from the Chino Basin Desalter Authority, Water Facilities Authority, Monte Vista Water District, and from City wells via transmission lines. The water then enters a distribution network where it is pressurized and delivered to local homes and businesses for use.



**Local Groundwater:** This source of water comes from underground water-bearing soil called an aquifer. This water originates from rain, snow, and irrigation systems. Over several years, water from those sources will percolate through the soil and reach the groundwater table. The ground acts as a large filter, so that only chlorination is normally required to produce safe drinking water at the well site. The City's groundwater supply is comprised of City-owned wells, Chino Desalter Authority wells in Chino, and Monte Vista Water District wells in Montclair.



**Surface Water:** The City purchases and imports treated surface water via the Water Facilities Authority in Upland and the Monte Vista Water District in Montclair. The source of the surface water is the State Water Project, which provides water from Northern California through the California Aqueduct system.



## How Safe Drinking Water Levels are Set

The Federal Safe Drinking Water Act of 1974, and its 1986 amendment, are intended to ensure the quality of our nation's water supplies. In order to ensure that tap water is safe to drink, the U.S. EPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH's Food and Drug Branch regulations establish limits for contaminants in bottled water that provide the same protection for public health.

## Special Note to Persons with Compromised Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

# DRINKING WATER AND YOUR HEALTH

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

**LEAD** - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The U.S. EPA promulgated National Primary Drinking Water Regulations for Lead and Copper on June 7, 1991. Three monitoring protocols are included in the final rule: (1) Water Monitoring for Lead and Copper; (2) Water Quality Parameter Monitoring; (3) Source Water Monitor-

ing for Lead and Copper. Monitoring tap water for lead and copper determines the lead and copper concentrations in drinking water. In 2012, the City took its latest round of sampling as required by the U.S. EPA. The established action level for lead is 0.15 mg/L. Sample results for the 90th percentile was .0 mg/L. The established action level for copper is 1.3 mg/L the 90th percentile for copper was .40 mg/L. Of 30 sites sampled, none exceeded the established action level.

**NITRATE** - in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

**PERCHLORATE** - has been shown to interfere with uptake of iodide by the thyroid gland, and thereby can reduce the production of thyroid hormones, leading to adverse affects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal

metabolism and mental function.

Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.

**ARSENIC** - 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. 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.

Arsenic found in City wells is caused by erosion of natural deposits in the deep aquifers. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

## CITY OF CHINO HILLS ASSESSMENT OF SOURCE WATER

The CDPH conducted a source water assessment of all operable City water wells in May 2002. The assessment is designed to make the public and the City aware of contaminants detected in the City's groundwater supply. In addition, the assessment highlights possible sources of these and future contaminants. The focus of the program is information gathering with attention to activities that may affect drinking water quality. The program enables public water systems to better protect and manage surface and groundwater resources. A copy of the complete assessment is available at CDPH's San Bernardino District Office at 464 West 4th Street, Suite 437, San Bernardino, California, 92401. You may request a summary of the assessment by contacting CDPH at (909) 383-4320.

The active sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: known contaminant plumes, agricultural drainage, furniture repair/manufacturing, electrical/electronic manufacturing, sewer collection systems, appliance/electronic repair, chemical/petroleum processing/storage, metal plating/finishing/fabricating. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: fleet/truck/bus terminals, furniture repair/manufacturing, railroad yards/maintenance/fueling areas, chemical/petroleum processing/storage, airport maintenance/fueling areas. As all potable water in existence continues to recycle for our use, pure quality does not exist; all water contains chemicals, organic and inorganic. While this lists chemicals detected in City-owned well water, no chemicals at or above allowable limits enter the water distribution system or reach our customers. Water from the wells is treated by trained and certified City staff using approved treatment processes and approved blending plans.

The City of Chino Hills publishes this Water Quality Consumer Confidence Report annually. A copy of this report can also be found on the City's website at [www.chinohills.org/ccr](http://www.chinohills.org/ccr). For additional information, or to get answers to questions you may have about your water, call:

Paul Fonseca, Water Quality Technician at (909) 364-2808.

### Public Meeting Schedule

The City of Chino Hills City Council meets on the second and fourth Tuesday of each month at 7:00 p.m. in the Council Chambers, 14000 City Center Drive, Chino Hills, unless otherwise noted. All meetings are open to the public and agendas are posted prior to the meeting at City Hall or online at [www.chinohills.org/agendas](http://www.chinohills.org/agendas).

# 2012 WATER QUALITY RESULTS

Parameters [Units]	State MCL	PHG [MCLG]	Range and Average	Chino Hills Water System				Typical Source of Contaminant
				Chino Hills Wells	Chino 1 Desalter	Monte Vista Water	Water Facilities Authority	
<b>PRIMARY STANDARDS - Mandatory Health Related Standards, Sampled 2010 - 2012, No MCL Violations</b>								
<b>CLARITY</b>								
Combined Filter Effluent Turbidity (NTU)	TT=1 NTU	N/A	range	ND	N/A	ND	.13 Highest	Soil runoff.
	TT(a)		average	ND	ND	ND	% < 0.3 100%	
<b>INORGANIC CONTAMINANTS</b>								
Aluminum [ppm]	1	0.6	range	ND	N/A	ND - .11	0.83 - .15	Residue from water treatment process; erosion of natural deposits.
			average	ND	ND	0.08	0.11	
Arsenic [ppb]	10	0.004	range	ND - 16	N/A	ND - 4.7	ND	Erosion of natural deposits; glass and electronics production wastes.
			average	2.7	ND	0.1	ND	
Barium [ppm]	1	2	range	ND - .14	N/A	ND - 0.4	ND	Oil and metal refineries discharge; erosion of natural deposits.
			average	0.023	ND	0.004	ND	
Chromium [ppb]	50	[100]	range	3.2 - 8.7	N/A	ND-1.9	ND	Discharge from steel, pulp mills, and chrome plating; erosion of natural deposits.
			average	6.1	ND	.2	ND	
Copper [ppm]	AL=1.3	0.3	range	ND	N/A	ND - .007	ND	Erosion of natural deposits; leaching from wood preservatives.
			average	ND	ND	.0002	ND	
Fluoride [ppm]	2	1	range	.1 - .3	N/A	ND - .30	ND	Erosion of natural deposits, water additive; discharge from fertilizer /aluminum factories.
			average	.02	0.1	0.05	ND	
Lead [ppb]	AL=15	0.2	range	ND	N/A	ND - .89	ND	Discharge from industrial manufacturers; erosion of natural deposits.
			average	ND	ND	.003	ND	
Mercury [ppm]	2000	1200	range	ND	N/A	ND - 340	ND	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
			average	ND	ND	10	ND	
Nitrate (as N03) [ppm]	45	45	range	ND - 37	N/A	.7 - 34	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
			average	24	12	9.5	ND	
Nitrate (as N) e [ppm]	10	10	range	ND	N/A	ND	ND - 0.6	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
			average	ND	ND	ND	0.3	
Nitrate 1 (as N) [ppm]	1 (as N)	1 (as N)	range	ND	N/A	ND - .81	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
			average	ND	ND	0.012	ND	
Nitrate and Nitrate (as N) [ppm]	10	10	range	ND	N/A	ND	ND - .6	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
			average	ND	ND	ND	0.3	
Perchlorate [ppb]	6	6	range	ND	N/A	ND - 6.1	ND	Industrial waste discharge.
			average	ND	ND	.3	ND	
Selenium [ppb]	50	30	range	ND - 15	N/A	ND	ND	Refineries, mines, and chemical waste discharge; runoff from livestock.
			average	5.9	ND	ND	ND	
<b>SYNTHETIC ORGANIC CONTAMINANTS</b>								
Dibromochloropropane (DBCP) [ppt]	200	1.7	range	ND	N/A	ND - .19	ND	Banned nematocide that may still be present in soils due to leaching from former agricultural uses.
			average	ND	ND	0.01	ND	
<b>VOLATILE ORGANIC CONTAMINANTS</b>								
1,1 Dichloroethylene (1,1-DCE) [ppb]	6000	10000	range	ND	N/A	ND - 520	ND	Discharge from industrial, chemical factories.
			average	ND	ND	70	ND	
Dichloromethane [ppb]	5	4	range	ND	N/A	ND - 1.4	ND	Discharge from pharmaceutical and chemical factories; insecticide.
			average	ND	ND	ND	ND	
<b>DISINFECTION BYPRODUCTS, DISINFECTION RESIDUALS, &amp; DISINFECTION BYPRODUCTS PRECURSORS</b>								
Total Trihalomethanes* [ppb]	80	N/A	range	ND - 68	N/A	ND - 52	37-78	Byproduct of drinking water disinfection.
			average	16.6	ND	36.4	47	
Haloacetic Acids* [ppb]	60	N/A	range	ND-15	N/A	ND -11	1-11	Byproduct of drinking water disinfection.
			average	2.6	ND	5.9	8	
DBP Precursors Control (TOC) [ppm]	TT	N/A	range	ND	N/A	ND	TT	Various natural and man-made sources.
			average	ND	ND	ND	TT	
Total Chlorine Residual System [ppm]	4	4	range	.21 - 1.28	N/A	.01 - 1.79	1.00 - 1.68	Drinking water disinfectant added for treatment.
			average	0.5	ND	1.04	1.27	

**Abbreviations:**

mS/cm = microsiemens  
 N/A = not applicable  
 ND = not detectable at testing limit  
 ppb = parts per billion or micrograms per liter

ppm = parts per million or milligrams per liter  
 ppt = parts per trillion  
 TT = Treatment Techniques  
 AL = Action Level  
 NL= Notification Level

pCi/L = picocuries per liter (a measure of radiation)  
 DLR = Detection Limits for Purpose of Reporting  
 NTU = Nephelometric Turbidity Units  
 TON = Threshold Odor Number  
 TDS = Total Dissolved Solids

Parameters [Units]	State MCL	PHG [MCLG]	Range and Average	Chino Hills Water System				Typical Source of Contaminant
				Chino Hills Wells	Chino 1 Desalter	Monte Vista Water	Water Facilities Authority	
<b>PRIMARY STANDARDS (Continued...) - Mandatory Health Related Standards - Sampled 2010 - 2012, No MCL Violations</b>								
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Fecal Coliform and E. Coli	(a)	[0]	range	ND	ND	ND	ND	Human and animal fecal waste.
			average	ND	ND	ND	ND	
Total Coliform Bacteria	5% per month	[0]	range	ND	ND	ND	ND	Naturally present in the environment.
			average	ND	ND	ND	ND	
<b>RADIOLOGICAL CONTAMINANTS</b>								
Gross Alpha [pCi/L]	15	[0]	range	.85-6.4	N/A	ND-4.4	ND	Erosion of natural deposits.
			average	3.5	ND	1.5	ND	
Gross Beta [pCi/L]	50	[0]	range	ND	N/A	ND-4	ND-4	Decay of natural and man-made deposits.
			average	ND	ND	ND	ND	
Uranium [pCi/L]	20	0.43	range	ND	N/A	ND-3.1	ND-1	Erosion of natural deposits.
			range	ND	ND	0.8	1	

Parameters [Units]	State MCL	PHG	Range and Average	Chino Hills Water System				Typical Source of Contaminant
				Chino Hills Wells	Chino 1 Desalter	Monte Vista Water	Water Facilities Authority	
<b>SECONDARY STANDARDS - Sampled 2010-2012, No MCL Violations</b>								
<b>AESTHETIC STANDARDS</b>								
Aluminum [ppb]	200	N/A	range	ND	N/A	ND - 110	83 - 150	Erosion of natural deposits; residue from some surface water.
			average	ND	ND	80	110	
Color [Units]	15	N/A	range	ND	N/A	<3	<3	Naturally-occurring organic material.
			average	ND	ND	<3	<3	
Chloride [ppm]	500	N/A	range	9.5-81	N/A	6.2 - 52	27-45	Runoff/leaching from natural deposits and seawater influence.
			average	42	76	31.4	35	
Iron [ppb]	300	N/A	range	ND - 180	N/A	ND - .001	ND	Leaching from natural deposits; industrial waste.
			average	30	ND	ND	ND	
Maganese [ppb]	50	N/A	range	ND	N/A	ND - 2.8	ND	Leaching from natural deposits.
			average	ND	ND	0.04	ND	
Odor Threshold [Units]	3	N/A	range	ND	N/A	1	1-3	Naturally-occurring organic material.
			average	ND	ND	1	2	
Specific Conductance [mS/cm]	1600	N/A	range	350 - 1100	N/A	300 - 550	360 - 510	Substances that form ions when in water; seawater influence.
			average	748	520	452	455	
Sulfate [ppm]	500	N/A	range	22 - 220	N/A	19 - 50	28 - 49	Runoff/leaching from natural deposits; industrial wastes.
			average	105	7.5	31	29	
Total Dissolved Solids [ppm]	1000	N/A	range	210 - 740	N/A	ND	280-360	Runoff/leaching from natural deposits.
			average	470	260	ND	315	
Total Filterable Residual (TDS) [ppm]	500 - 1000 - 1500	N/A	range	ND	N/A	210 - 350	ND	Runoff/leaching from natural deposits.
			average	ND	ND	304	ND	
Turbidity [Units]	5	N/A	range	ND - 1	N/A	ND - 1.3	.09 - .18	Soil runoff.
			average	0.32	ND	0.16	0.12	

**Footnotes:** (a): Fecal coliform/E.coli MCLs: The occurrence of two (2) consecutive total coliform-positive samples, one of which contains fecal coliform/E.coli, constitutes an acute MCL violation. The MCL was not violated in 2012. (b): Aluminum has both primary and secondary standards. The City strives to deliver water at levels well below the set MCL. \*Trihalomethanes and Haloacetic Acids are a collection of sample results taken throughout the City from imported and blended water as a blended supply of all water.

The Water Quality table lists all drinking water contaminants that were detected during the 2012 calendar year. The presence of the contaminants in the water does not necessarily indicate that the water poses or did pose a health risk. Unless otherwise noted, the data presented in this table is from testing conducted January 1, 2012 through December 31, 2012. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

Parameters [Units]	State MCL [DLR]	PHG	Range and Average	Chino Hills Water System			
				Chino Hills Wells	Chino 1 Desalter	Monte Vista Water	Water Facilities Authority
<b>ADDITIONAL CONTAMINANTS - Sampled 2010 - 2012</b>							
Aggressive Index	N/A	N/A	range	12 - 12.6	N/A	ND	ND
			average	12.3	ND	ND	ND
Alkalinity [ppm]	N/A	N/A	range	120 - 240	N/A	74 - 150	68 - 84
			average	182	110	99.7	74
Bicarbonate [ppm]	N/A	N/A	range	140 - 290	N/A	83 - 180	77 - 91
			average	218	130	116.2	83
Bromoform [ppb]	[1]	N/A	range	ND - 1	N/A	ND	ND
			average	0.17	ND	ND	ND
Calcium [ppm]	N/A	N/A	range	33 - 160	N/A	20 - 66	16 - 24
			average	96	52	27.5	20
Chloroform [ppb]	[1]	N/A	range	ND - 1.4	N/A	ND	ND
			average	0.23	ND	ND	ND
Hardness [ppm]	N/A	N/A	range	110 - 520	N/A	94 - 240	84 - 110
			average	316	180	113.9	97
Langlier Index at Source Temp	N/A	N/A	range	ND - .75	N/A	ND	ND
			average	0.13	ND	ND	ND
Magnesium [ppm]	N/A	N/A	range	6.2 - 29	N/A	2.6 - 19	9.8 - 13
			average	18	12	11.4	11.7
pH [Units]	N/A	N/A	range	7.6 - 8	N/A	7.6 - 8.3	7.78 - 8.50
			average	7.8	7.3	8.1	8.26
Potassium [ppm]	N/A	N/A	range	1.6 - 3.3	N/A	1.4 - 2.9	1.9 - 2.9
			average	2.3	1.3	2.4	2.5
Sodium [ppm]	N/A	N/A	range	18 - 42	N/A	18 - 53	36 - 66
			average	26	28	47.4	53
Total Organic Carbon (TOC) [ppm]	[.3]	N/A	range	ND	N/A	ND	1.7 - 2.4
			average	ND	ND	ND	2
Total Silica [ppm]	N/A	N/A	range	ND	N/A	ND	ND
			average	ND	10	ND	ND
<b>STATE REGULATED CONTAMINANTS WITH NO MCL'S - Sampled 2010 - 2012</b>							
Boron [ppb]	N/A	NL=1000	range	ND	N/A	ND - 160	ND-160
			average	ND	120	80	108
Chromium VI [ppb]	N/A	N/A	range	2.3 - 9.1	N/A	ND	ND
			average	5.3	ND	ND	ND
Trichloropropane (1,2,3-TCP) [ppt]	N/A	NL=5	range	ND	N/A	ND	ND
			average	ND	18	ND	ND
Vanadium [ppb]	N/A	NL=50	range	ND	N/A	.59-15	ND - 3.8
			average	ND	ND	3.8	2.6

# WATER QUALITY TERMS

**Blending:** The mixing of high-quality water with lower quality water to a calculated ratio to meet or exceed approved standards before delivery to customers.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the Primary Health Goal (PHG) or the Maximum Contaminant Level Goal [MCLG] as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the U.S. EPA.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**Public Health Goal (PHG):** The level of contaminant in drinking water below which there is no known or expected health risk. PHG's are set by the California Environmental Protection Agency.

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

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

**Turbidity:** A measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

**Units:** A unit of measurement is a definite magnitude of a physical quantity, defined and adopted by convention and/or by law, that is used as a standard for measurement of the same physical quantity.

## COMMON CONTAMINANTS

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.

- Microbial contaminants - such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants - such as salts and metals that can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.

- Organic chemical contaminants - including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants - that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.