

# **2017 Water Quality Report**

For more than 60 years, the Vallecitos Water District (Vallecitos) has taken pride in the water it delivers to its now more than 103,000 residents. As a result of its commitment to excellence, Vallecitos is proud to provide the 2017 water quality test results for drinking water delivered to its customers.

After more than 150 types of tests conducted by its wholesalers – Metropolitan Water District of Southern California (MWD) and San Diego County Water Authority (SDCWA) – and additional tests performed by the City of Oceanside and Vallecitos, it has been concluded that your water either met or exceeded all state and federal potable drinking water standards.

Along with these tests, your drinking water went through a treatment process that included filtering and disinfecting to ensure acceptable quality. Results of our own testing, along with the City of Oceanside's and our wholesalers' monitoring are found in the tables of this report.

This publication is a summary of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards.

# **Origins of Your Drinking Water**

As of 2014, Vallecitos customers received 100 percent imported water from SDCWA, which purchased the water from MWD from Northern California and the Colorado River. In November of 2015, to reduce dependence on imported water and provide customers an increased level of reliability despite drought and other regulatory issues, Vallecitos customers began receiving ocean water from the Western Hemisphere's largest desalination treatment plant. The Carlsbad Claude "Bud" Lewis Desalination Plant provides superior quality water free of salt and

Sacramento-San Joaquin Delta via the 444-mile CA Aqueduct



Colorado River via the 242-mile Colorado River Aqueduct



Claude "Bud" Lewis Desalination Plant in Carlsbad

virtually any mineral, biological or organic compounds by taking water from Carlsbad's Agua Hedionda Lagoon, processing it, and then distributing it through a 54-inch pipeline 10 miles eastward before being delivered to your faucet. In 2015, Vallecitos began receiving a blend of desalinated and imported water from SDCWA. However, in 2016, Vallecitos began receiving water directly from the plant.

Whether imported or local, your water remains safe during its journey due to increased security at key facilities, increased water sampling, and aerial and ground patrols. Protecting your water doesn't end with the thousands of tests performed throughout the year. Vallecitos also supports regulatory changes in public policy to improve water quality.

The end result is more than 5 billion gallons of an exceptional product delivered annually through 19 operational storage reservoirs and 350 miles of pipeline to a 45-square-mile area that includes San Marcos; Lake San Marcos; portions of Escondido, Carlsbad, and Vista; and unincorporated areas in San Diego County.

# The Water We Drink

The U.S. Congress has directed the U.S. Environmental Protection Agency (USEPA) to require water systems to report the quality of the drinking water they serve annually. Vallecitos supports this regulation and has provided Water Quality Reports and other water quality data to all of its customers for many years.

# The Reason for Contaminants

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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by

public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Vallecitos and its water wholesalers treat the water according to these regulations.

The sources of drinking water (both bottled and tap water) include rivers, lakes, streams, reservoirs, ponds, 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 human activity.

# Contaminants possibly present in source water before treatment include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- <u>Inorganic contaminants</u>, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- <u>Pesticides and herbicides</u>, 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 compounds that are by-products of industrial processes and petroleum production and can come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, which can be naturally-occurring or the result of oil and gas production and mining activities.



# **Health Advisories Regarding Your Water**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons 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. USEPA/Center for Disease Control guidelines on the appropriate means to lessen the risk of infection by Cryptosporidium or other microbial contaminants are available from the **Safe Drinking Water Hotline (800) 426-4791.** 

The tables below list all the drinking water contaminants tested for during the 2017 calendar year. Thousands of water quality tests were performed on your drinking water last year. Many more parameters were tested for and not found. The results in this report show that your water met, and in most cases exceeded, all of the stringent state (State Water Resources Control Board) and federal (U.S. Environmental Protection Agency) water quality standards relating to public health and aesthetics, such as taste, odor and color. Unless otherwise noted, the data in the following tables reflect testing from January 1, 2017, through December 31, 2017. The monitoring of certain contaminants is not required annually since they are not expected to vary significantly from year to year. Therefore, though representative of the water quality, some of the data may be more than one year old.

# **Summary of Vallecitos Water District's 2017 Water Quality Analysis**

		State or				Treat				
		Federal	PHG		Twin Oaks	Skinner	Weese	Carlsbad	Olivenhain	
		MCL	(MCLG)	Range	Treatment	Treatment	Treatment	Desalination	Treatment	Major Sources in
Parameter	Units	[MRDL]	[MRDLG]	Average	Plant	Plant	Plant	Plant	Plant	Drinking Water
Percent State	%	NA	NA	Range	NR	0 - 100	NR	NA	0-36	NA NA
Project Water	70	INA	INA	Average	NR	62	NR	NA	9	NA
PRIMARY STANDARDS -	- Mandator	y Health-R	elated Stan	dards - Data p	provided by the	San Diego C	ounty Water A	authority (Twin	Oaks Treatme	nt Plant), the Metropolitan Water District
•	,,		•		ant), San Diego	County Wate	r Authority (C	laude "Bud" Le	wis Carlsbad	Desalination Plant), and the Olivenahain
Municipal Water District	(David C. I	McCollom V	Vater Treat	ment Plant).						
CLARITY										
Combined Filter	NTU	0.3	NA	Average	0.01 -0.02	0.10	0.20	1	0.10	Soil runoff
Effluent Turbidity	%	95 (a)	INA	% ≤ 0.1	100%	100%	100%	99.7%	100%	30ii Turioii
MICROBIOLOGICAL										
Total Coliform Bacteria (b)	%	5.0	(0)	Range	ND	0	ND	ND	ND - 1.09%	Naturally present in the environment
Total Collionii Bacteria (b)	/6	3.0	(0)	Average	ND	0	ND	ND	ND	ivaturally present in the environment
F and (a)	(a)	(a)	(0)	Range	ND	0	NR	ND	ND - 1	Human and animal fecal waste
E. coli (c)	(c)	(c)	(0)	Average	ND	0	NR	ND	ND	Human and animal lecal waste
Hataratrankia Diata	CFU/mL	П	NA	Range	ND	ND - 1	NR	ND - 6.2	ND - 16	Naturally present in the environment
Heterotrophic Plate	CFU/IIIL	- 11	INA	Average	ND	ND	NR	1.2	0.73	
INORGANIC CHEMICA	ALS									
Arsenic	nnh	10	0.004	Range	Single Sample	ND	NA	ND	NR	Natural deposits erosion; runoff from orchards; glass and electronics production wastes
	ppb			Average	2.0	ND	ND	ND	NR	
Destina	nnm	1,000	2,000	Range	Single Sample	ND	NA	ND	NR	Oil and metal refineries discharges; natural
Barium	ppm	1,000	2,000	Average	ND	ND	100	ND	NR	deposits erosion
		Optimal F	luoride Cont	rol Range	0.6 - 1.2	0.6 - 1.2	NA	NA	NA	Erosion of natural deposits; water additive for
Fluoride Treatment-Related		2.0	1	Range	0.5 - 1.1	0.5 - 0.9	Not Added	0.55 - 0.90	0.26 - 1.01	dental health; discharge from fertilizer and aluminum factories
	ppm			Average	0.7	0.7	Not Added	0.746	0.69	
Nitrata (aa NI) (f)		10	40	Range	0.3 - 0.6	ND	0.2 - 0.4	ND	NR	Runoff and leaching from fertilizer use; sewage;
Nitrate (as N) (f)	ppm	10	10	Average	0.5	ND	0.3	ND	NR	natural deposits erosion
RADIOLOGICALS										
Gross Alpha	pCi/L	15	(0)	Range	4 - 7	ND - 4	NA	0 - 2.265	NR	Erosian of natural deposits
Particle Activity	pCI/L	15	(0)	Average	5	ND	2.1	0.075	NR	Erosion of natural deposits
Gross Beta	*C:/I	50	(0)	Range	4 - 6	ND - 5	NA	0 - 3.56	NR	Descriptional and man made describe
Particle Activity (g)	pCi/L	50	(0)	Average	5	ND	NA	1.59	NR	Decay of natural and man-made deposits
Uranium	nCi/l	20	0.43	Range	2.7 - 3.1	ND - 3	NA	0.029 - 0.161	NR	Erosian of natural deposits
	pCi/L			Average	2.9	ND	2.0	0.085	NR	Erosion of natural deposits
DISINFECTION BY-PR	ODUCTS	<b>PRECURS</b>	SORS							
Donate (b)	nnh	10	0.1	Range	2 - 13	ND - 12	NR	NA	NR	By product of drinking water exentics
Bromate (h)	ppb			Highest RAA	6	4.1	NR	NA	NR	By-product of drinking water ozonation
DBP Precursors	nnm	П	NA	Range	TT	1.9 - 3.1	NR	ND	NR	Various natural and man-made sources
Control (TOC)	ppm	''	INA	Average	TT	2.5	NR	ND	NR	various natural and man-made sources

This analysis report lists only the detected parameters which are required by law to be published. However, more than 150 parameters were monitored. If you would like a copy of the full reports, including the non-detected contaminants, call the District's Public Information Office at (760) 744-0460 or the reports can be viewed on our website at <a href="https://www.vwd.org">www.vwd.org</a>.

Summary of Vallecitos Water District's 2017 Water Quality Analysis - Continued

<u></u>	IIIIIIIai	y Oi Ve	ancon	JS Wate		13 2017	vvalei v	Quality A	ilalysis	- Continueu	
		State or				Treatr					
		Federal	PHG		Twin Oaks	Skinner	Weese	Carlsbad	Olivenhain	Major Sources in Drinking	
		MCL	(MCLG)	Range	Treatment	Treatment	Treatment	Desalination	Treatment	Major Sources in Drinking	
Parameter	Units	[MRDL]	[MRDLG]	Average	Plant	Plant	Plant	Plant	Plant		
SECONDARY STANDARI	DS - Aesth	etic Standa	ards - Data	provided by t	he San Diego	County Water	Authority, Me	tropolitan Wate	r District, Oliv	venhain Muncipal	
Water District, and the Ci	ty of Ocea	nside.									
	ppb	200	600	Range	ND	ND	53 - 450	ND	NR	Residue from water treatment process; natural	
Aluminum (i)	ppb	200	600	Highest RAA	ND	ND	115	ND	NR	deposits erosion	
Chloride	nnm	500	NA	Range	Single Sample	56 - 72	35 - 94	39.7 - 127	NR	Runoff/leaching from natural deposits; seawater	
Chionae	ppm	300	INA	Average	59	64	66	76.9	NR	influence	
Color	Units	15	NA	Range	ND	1	ND - 3	ND	ND - 6.0	Naturally occurring organic materials	
Coloi	Ullits	15	INA	Average	ND	1	1	ND	2.65	Naturally occurring organic materials	
Manganese ppb	nnh	50	NL = 500	Range	ND	27	NR	ND	NR	Leaching from natural deposits	
	ppb	50		Average	ND	27	NR	ND	NR		
Odor Threshold (j) TOI	TON	3	NA	Range	Single Sample	3	ND	ND	ND - 1.4	Naturally occurring organic materials	
	TON	,		Average	1	3	ND	ND	ND	ivaturally occurring organic materials	
Silver ppb	ppb	100	NA	Range	Single Sample	ND	NR	ND	NR	Industrial discharges	
Oliver	ррь	100	INA	Average	ND	ND	NR	ND	NR	industrial discriarges	
Specific Conductance	μS/cm	1.600	NA	Range	Single Sample	455 - 571	NR	304.26 - 694.09	NR	Substances that form ions in water; seawater	
Specific Conductance	μο/σπ	1,000	INA	Average	470	513	NR	430.70	NR	influence	
Sulfate p	ppm	500	NA	Range	Single Sample	66 - 81	41 - 244	11.4 - 41.0	NR	Runoff/leaching from natural deposits; industria wastes	
	ррііі			Average	56	74	115	16.6	NR		
Total Dissolved Solids	ppm	1,000	NA	Range	Single Sample	259 - 321	200 - 612	80 - 426	NR	Runoff/leaching from natural deposits	
(TDS)	ppiii	1,000	INA	Average	280	290	394	232.7	NR	Transmissing non-natural deposits	
Turbidity (a)	NTU	5	NA	Range	ND	ND	0.05 - 0.50	0.03 - 1.01	ND - 0.48	Soil runoff	
ruibidity (a)	1410			Average	ND	ND	0.15	0.06	0.06	CONTRACTOR	

### ABBREVIATIONS AND DEFINITIONS

- Absent

CFU/mL - Colony-Forming Units per milliliter

DBP - Disinfection By-Products

LRAA - Locational Running Annual Average; highest LRAA is the highest of all Locational Runnung Annual Averages calculated as average of all samples collected within a 12-month period

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 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. Environmental Protection Agency.

MPN - Most Probable Number

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.

N - Nitrogen

NA - Not Applicable

NRA - No Running Average - Single Sample Collected

NR - Not Reported ND - Not Detected

NTU - Nephelometric Turbidity Units

NL - Notification Level - The level at which notification of the public water system's governing body is required.

pCi/L - picoCuries per liter

PHG - Public Health Goal - The level of a contaminant in drinking water below which there is no known or drinking water below which expected risk to health. PHGs are set by the California Evironmental Protection Agency.

ppb - parts per billion or micrograms per liter (µg/L)

ppm - parts per million or milligrams per liter (mg/L) RAA - Running Annual Average

SI - Saturation Index (Langelier)

TOC - Total Organic Carbon

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

**μS/cm** - microSiemen per centimeter; also equivalent to μmho/cm (micromho per centimeter)

<u>Primary Standards</u> - (Primary Drinking Water Standards) - MCLs and MRDLs are set to provide the maxiumum feasable protection to public health. They regulate contaminant levels based on toxicity and adverse health affects.

Secondary Standards - (Secondary Drinking Water Standards) - Requirments that ensure appearance, taste and smell of drinking water are acceptable.

# **FOOTNOTES**

- (a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU (0.1 NTU at Twin Oaks Treatment Plant) in 95% of the measurements taken each month and shall not exceed 1 NTU at anytime. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards section were based on the treatment plant effluents.
- (b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. The MCL was not violated.
- (c) E. Coli MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/E coli, constitutes an acute MCL violation. The MCL was not violated.
- (d) All distribution samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL.
- (e) MWD and SDCWA were in compliance with all provisions of the State's Fluoridation System Requirements.
- (f) State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.
- (g) SWRCB considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. monochloroacetic acid.
- (h) Reporting level is 3.0 ppb for Bromate.
- (i) Aluminum, copper, MTBE and thiobencarb have both primary and secondary standards.
- (j) Metropolitan utilizes a flavor-profile analysis method that can detect odor occurrences more accurately. Call MWD at (213) 217-6850 for more information.

### Summary of Vallecitos Water District's 2017 Water Quality Analysis - Continued

# Other Detected Constituents That May be of Interest to Consumers

		0	BUIG			Trea				
		State or	PHG	Range	Twin Oaks	Skinner	Weese	Carlsbad	Olivenhain	Ĭ l
		Federal	(MCLG)	_	Treatment	Treatment	Treament	Treatment	Treatment	
Parameter	Units	MCL	[MRDLG]	Average	Plant	Plant	Plant	Plant	Plant	Major Sources in Drinking Water
A.H P. %			NA	Range	Single Sample	62 - 78	52 - 122	48 - 88	NR	
Alkalinity	ppm	NA		Average	77	70	86	59.7	NR	
D	nnh	NL = 1.000	NA	Range	Single Sample	110	NA	0.33 - 0.95	NR	Runoff/leaching from natural deposits; industrial
Boron	ppb	INL = 1,000		Average	120	110	NA	0.59	NR	wastes
Calcium	ppm	NA	NA	Range	Single Sample	27 - 32	20 - 74	19.4 - 43.9	NR	
Calcium	ррпп	INA	INA	Average	26	30	42	23.9	NR	
Chlorate	ppb	NL = 800	NA	Range	180 - 360	23	28 - 41	NA	NR	By-product of drinking water chlorination;
Criticiate	ppb	142 - 000	10/	Average	244	23	34	NA	NR	industrial processes
Chromium VI (a)	ppb 10	10	0.02	Range	0.03 - 0.16	ND	NR	NA	NR	Industrial waste discharge; could be naturally present as well
Omomum vi (a)	ppb	10		Average	0.11	ND	NR	NA	NR	
Corrosivity (b) (Agressiveness	AI	NA	NA	Range	Single Sample	11.8 - 12.0	NR	11.30 - 12.01	NR	Elemental balance in water; affected by
Index)	711	10.0	10/	Average	12	11.9	NR	11.57	NR	temperature, other factors
Corrosivity (c) (Saturation	SI	NA	NA	Range	Single Sample	0.04 - 0.25	NR	0.02 - 0.66	NR	Elemental balance in water; affected by temperature, other factors  The sum of naturally occurring poly-valent
Index)	0.			Average	0.55	0.14	NR	0.28	NR	
Hardness pp	ppm	NA	NA	Range	Single Sample	109 - 129	86 - 308	43.4 - 96.2	NR	
. iai ai iooo	рр			Average	110	119	171	53.3	NR	cations present in the water
Magnesium	ppm	NA	NA	Range	Single Sample	11 - 13	8 - 27	0.483 - 1.09	NR	
agocia	PP			Average	10	12	16	0.745	NR	
N-Nitrosodimethylamine	ppt	NL = 10	3	Range	Single Sample	ND - 3.1	NR	NA	NR	By-product of drinking water chloramination;
(NDMA)	PP.	112 - 10	Ů	Average	ND	NR	NR	NA	NR	industrial processes
pH	pH Units	NA	NA	Range	7.3 - 8.9	8.2	7.3 - 8.6	7.41 - 8.93	NR	
P. 1	pri orino			Average	8.3	8.2	8.1	8.52	NR	
Potassium	ppm	NA	NA	Range	Single Sample	2.8 - 3.2	NR	1.31 - 4.36	NR	
	ppiii			Average	2.7	3.0	NR	2.46	NR	
Sodium	ppm	NA	NA	Range	Single Sample	48 - 56	NA	32.7 - 80.4	NR	The salt present in the water, generally naturally
Sodium	ppiii			Average	50	52	57	52.3	NR	occurring

# ABBREVIATIONS, DEFINITIONS AND FOOTNOTES

Abbreviations and Definitions- (Please refer to main table for other abbreviations and definitions)

NR - Not Reported

NL - Notification Level - The level at which notification of the public water system's governing body is required.

ppt - parts per trillion or nanograms per liter (ng/L).

NRA - No Running Average - Single Sample Collected

### Footnotes:

(a) - Reporting level is 0.03 ppb for Chromium VI.

(b) - Al <10.0 = Highly aggressive and very corrosive water
Al ≥ 12.0 = Non-aggressive water
Al (10.0 - 11.9) = Moderately aggressive water

(c) - Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes

Negative SI index = corrosive; tendency to dissolve calcium carbonate

Summary of Vallecitos Water District's 2017 Water Quality Analysis - Continued

		State or Federal MCL	PHG (MCLG)	Range	Within VWD's	Major Sources in Drinking				
Parameter	Units	[MRDL]	[MRDLG]	Average	System	Water				
	ests With	_				ded by Vallecitos Water District				
			(0)	Range	ND - Present					
Total Coliform Bacteria (a)	%	5.0 (a)		Average	0.07%	Naturally present in the environment				
Fecal Coliform & E. coli (b)	(b)	(b)	(0)	Range	ND	Human and animal fecal waste				
r coar comorni d E. con (b)	(0)	(6)	(0)	Average	ND	Truman and animal recal waste				
Total Trihalomethanes (TTHM) (c)	ppb	80	NA	Range	0.0 - 81	By-product of drinking water chlorination				
,,,,,	- 11			Highest RAA	41	,,				
Haloacetic Acids (five) (HAA5) (d)	ppb	60	NA	Range	0.0 - 36	By-product of drinking water chlorination				
				Highest RAA	16					
Total Chlorine Residual (e)	ppm	[4.0]	[4.0]	Range Highest RAA	0.2 - 4.0 2.08	Drinking water disinfectant added for treatment				
General Physical Sampling (f)	(f)	(f)	(f)	•		s) testing required by SWRCB within VWD's Distribution System				
Harramalata d Oantamin anta	(LOMBO)	(1)								
Unregulated Contaminants	UCMR3)	()								
Molybdenum	ppb	NA	NA	Range	3.8 - 4.6 4.18	Naturally present in the environment				
				Average Range	4.18 910 - 1100					
Strontium	ppb	NA	NA	Average	1027.5	Naturally present in the environment				
		NA	NL = 50	Range	<0.2					
Vanadium	ppb			Average	<0.2	Naturally present in the environment				
Chromium, Hexavalent	nnh	NA	0.02	Range	0.05 - 0.06	By-product of industrial process				
Chromium, nexavalent	ppb			Average	0.053	by-product of industrial process				
Chlorate	ppb	NA	NL = 800	Range	46 - 88	By-product of drinking water chlorination				
				Average	72.3	by product of dimining water emornation				
MONITORED AT CUSTOMERS	S' TAP									
Copper (g)	ppb	AL = 1,300	300	90th Percentile	410	House pipes internal corrosion; erosion of natural deposits; leaching from wood preservatives				
Lead* (g)	ppb	AL = 15	0.2	90th Percentile	ND	House pipes internal corrosion; erosion of natural deposits; discharges from industrial manufacturers				
Special Lead and Copper Mon	itoring du	e to new so	urce as rec		WRCB					
	I			90th	May = 160	House pipes internal corrosion; erosion of natural deposits;				
Special Copper (h)	ppb	AL = 1,300	300	Percentile	Aug = 280	leaching from wood preservatives				
Special Lead* (h)	ppb	AL = 15	0.2	90th	May = ND	House pipes internal corrosion; erosion of natural deposits;				
. ,,				Percentile	Aug = ND	discharges from industrial manufacturers				
School Lead Testing Issuance	of Permit	Amendmer	t 2017PA_	Schools						
School Lead (i)	ppb	AL = 15	0.2	90th Percentile	2.7	School pipes internal corrosion; erosion of natural deposits; discharge from industrial manufacturers				

#### AL - Action Level

- Haloacetic Acids (five)
- 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 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. Environmental Protection Agency
- 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 kno or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants
  - NL Notification Level
- 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 Environmental Protection Agency
- ppb parts per billion or micrograms per liter (ug/L) ppm - parts per million or milligrams per liter (mg/L)
- TTHM Total Trihalomethanes
- RAA Running Annual Average

### **FOOTNOTES**

- The District tested more samples than required by the SWRCB. 1,355 samples were analyzed in 2017 and all samples tested negative for Total Coliform bacteria. The District was in compliance with the Total Coliform MCL for 2017.
- The District tested more samples than required by the SWRCB, 1,355 samples were analyzed in 2017 and all samples tested negative (b)
- for Fecal/E. Coli bacteria. The District was in compliance with the Fecal/E. Coli MCL for 2017. - The MCL for Total Trihalomethanes (TTHM) is determined by using a running annual average of the last four quarterly tests. The District (c) was in compliance with the regulations concerning Total Trihalomethanes (TTHM) for 2017.
- The MCL for Haloacetic Acids (HAA5) is determined by using a running annual average of the last four quarterly tests. The (d)
- District was in compliance with the regulations concerning Haloacetic Acids (HAA5) for 2017.
- Total chlorine is the sum of free and combined chlorine. Free chlorine is defined as the concentration of residual chlorine in water present as dissolve hypochlorous acid (HOCI), and/or hypochlorite ion (OCI-). Combined chlorine is defined as the residual chlorine existing in water in chemical combin or organic amines which can be found in natural or polluted waters. Ammonia is sometimes deliberately added to chlorinated public water supplies to inorganic chloramines. This process is generally referred to as "chloramination". The water provided to you has had inorganic chloramines added as
- These samples were tested for turbidity, odor, and color. The District was in compliance with the Secondary Standards for these (f) tests in 2017.
- (g) - The federal and state standards for Lead and Copper are treatment techniques requiring agencies to optimize corrosion control treatment. The District is required to take 30 samples every three years. The data shown is from 31 samples taken during the 2015
- period. Our next sample period is scheduled for June, 2018. The District was in compliance with the "Lead and Copper Rule" in 2015. - The federal and state standards for Lead and Copper are treatment techniques requiring agencies to optimize corrosion control
- treatment. The District received water from a new source the Carlsbad Desalination Plant and was required to collect 30 samples in 2016. The SWRCB has issued a permit amendment to VWD. It establihes requirements for lead monitoring and lead sample result interpretation
- at Kindergarten to 12th grade schools served by our water system in 2017. The District collected 73 samples from 19 schools and one daycare came
- (j) UCMR3 = Unregulated Contaminants Monitoring Rule 3. The EPA requires monitoring in order to determine if there is a need to regulate these compounds. This monitoring occurred in 2015.

"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. Vallections 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 for 30 seconds to 2 minitutes before using water for drinking or cooking. If you are concerned about lead in your drinking 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.



201 Vallecitos de Oro San Marcos, CA 92069 (760) 744-0460 www.vwd.org

# - Special Edition -2017 Water Quality Report

### **Board of Directors**

Division 1: Betty Evans Division 2: Jim Hernandez Division 3: Craig Elitharp Division 4: Mike Sannella Division 5: Hal Martin

### **Management Staff**

Glenn Pruim, General Manager Rhondi Emmanuel, Administrative Services Manager James Gumpel, District Engineer Ed Pedrazzi, Operations and Maintenance Manager Wes Owen, Finance Manager

The public is welcome to attend the Vallecitos Board

Meetings the first and third Wednesday of each month at 5:00 pm
in the Administration building—201 Vallecitos de Oro in San Marcos.

Meetings are also aired on San Marcos TV on Cox Communications Channel 19, Time Warner Channel 24 or AT&T U-verse Channel 99, which air on the Monday following the Wednesday meeting at 6:30 pm. Visit <a href="https://www.san-marcos.net/smtv">www.san-marcos.net/smtv</a> for programming schedule.



Parts per million (ppm) =
One drop in a 10-gallon aquarium



Parts per billion (ppb) =
One drop in a residential
swimming pool

**FOR MORE INFORMATION:** This report is only a summary of the water quality activities during the past year. If you have any questions about your water quality or Vallecitos Water District, please visit our web site at <a href="https://www.vwd.org">www.vwd.org</a> or call (760) 744-0460 during business hours (Monday through Friday, 8 a.m. to 5 p.m.). The District's headquarters is located at 201 Vallecitos de Oro, San Marcos, CA 92069. Questions specific to water quality can be directed to Shawn Askine, Water Systems Supervisor, at (760) 744-0460, ext. 268. Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para más información llame al (760) 744-0460. For additional information, contact:

- \* U.S. Environmental Protection Agency (USEPA) (800) 426-4791 http://water.epa.gov/drink/index.cfm
- \* National Center for Disease Control (404) 639-3311 www.cdc.gov
- \* State Water Resources Control Board Division of Drinking Water (916) 449-5577 <a href="http://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/CCR.shtml">http://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/CCR.shtml</a>
- \* Metropolitan Water District of Southern California (213) 217-6000 www.mwdh2o.com