

This annual report communicates the results of CVWD's water quality monitoring. The State Water Resources Control Board Division of Drinking Water (DDW) and the U.S. Environmental Protection Agency (USEPA) requires routine and comprehensive monitoring of CVWD's drinking water supply.

CVWD's commitment

Coachella Valley Water District (CVWD) is committed to delivering high quality drinking water. Water is delivered to customers from wells drilled into the Coachella Valley's groundwater basin.

Highly trained employees monitor the water systems and collect drinking water samples that are tested at CVWD's state-certified laboratory.

A few specialized tests are performed by other certified laboratories. In addition to the detected constituents listed in the table on pages 6-7, CVWD's Water Quality staff monitors for more than 100 other regulated and unregulated chemicals that are not detected during this monitoring.

CVWD is governed by a locally elected, five-member board of directors who normally meet in public session at 9 a.m., on the second and fourth Tuesdays of each month. Meeting locations rotate between CVWD's Coachella office at 51-501 Tyler Street and the Steve Robbins Administration Building at 75-515 Hovley Lane East in Palm Desert. Call CVWD to confirm meeting time, date and location.

Sensitive populations

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, 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.

USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* (a microbial pathogen found in surface water throughout the United States) and other microbial contaminants are

available from the **Safe Drinking Water Hotline 1-800-426-4791 or www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline. Call Safe Drinking Water Hotline to obtain updated link if needed.**

Naturally occurring elements

Arsenic

While all of CVWD's domestic water supply meets state and federal standards for arsenic, drinking water supplied to some service areas does contain low levels of naturally occurring arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA 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. All drinking water delivered by CVWD last year complied with the 10 microgram per liter (ug/L) maximum contaminant level (MCL).

Radon

Radon is a naturally occurring, radioactive gas — a byproduct of uranium — that originates underground but is found in the air. Radon moves from the ground into homes primarily through cracks and holes in their foundations. While most radon enters the home through soil, radon from tap water typically is less than two percent of the radon in indoor air.

The USEPA has determined that breathing radon gas increases an individual's chances of developing lung cancer, and has proposed an MCL of 300 picoCuries per liter (pCi/L) for radon in drinking water. This proposed standard is far less than the 4,000 pCi/L in water that is equivalent to the radon level found in outdoor air. The radon level in CVWD wells ranges from

none detected to 460 pCi/L, significantly lower than that found in the air you breathe.

Potential contaminants

About Nitrate

Nitrate in drinking water at levels above 45 milligrams per liter (mg/L) is a health risk for infants younger than six months old. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of 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 enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask for advice from your health care provider.

Wells that confirm with nitrate levels above 45 mg/L are removed from service.

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.

Responsibility

CVWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components.

Tip

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds before using water for drinking or cooking. You can capture this flushed water in a container and use it for watering plants.

Resource information

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>.**

As noted, all drinking water served by CVWD comes from wells. DDW requires water agencies to state, however, "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."

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 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff 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, USEPA and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

USEPA and DDW regulations also establish

limits for contaminants in bottled water that must 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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791) or the National Safety Council Radon Hotline (1-800-767-7236)."

Drinking Water Source Water Assessments:

CVWD has conducted source water assessments that provide information about the vulnerability CVWD wells to contamination. In 2002, CVWD completed a comprehensive source water assessment that evaluated all groundwater wells supplying the CVWD's six public water systems. An assessment is performed on each new well added to CVWD's system.

Groundwater from these CVWD wells are considered vulnerable to activities associated with urban and agricultural uses.

Urban land uses include the following activities: known contaminant plumes, dry cleaners, underground storage tanks, septic systems, automobile gas stations (including historic), automobile repair shops, historic waste dumps/landfills, illegal/unauthorized dumping, sewer collection systems and utility stations' maintenance areas.

Agricultural land uses include the following activities: irrigation/agricultural wells, irrigated crops, pesticide/fertilizer/petroleum and transfer areas.

The following activities have been associated with detected contaminants: known contaminant plumes, dry cleaners and irrigated crops.

CVWD is committed to supplying high quality drinking water from CVWD's wells to our communities.

For information about chromium-6, see story on page 9 or visit our website at www.cvwd.org/cr6.



Definitions & Abbreviations

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

MCL or Maximum Contaminant Level — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to public health goals or maximum contaminant level goals as economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

MCLG or Maximum Contaminant Level Goal — 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.

mg/L — Milligrams per liter (parts per million). One mg/L is equivalent to 1 second in 11.6 days.

MRDL or 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 or 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/A — Not applicable. The government has not set a Public Health Goal, Maximum Contaminant Level Goal or Maximum Contaminant Level for this substance.

ND — None detected

ng/L — Nanograms per liter (parts per trillion). One ng/L is equivalent to 1 second in 31,700 years.

NL or Notification Level — Health based advisory level established by the DDW for chemicals in drinking water that lack maximum contaminant levels (MCLs) as stated by DDW.

NTU — Nephelometric turbidity units (measurement of suspended material)

pCi/L — picoCuries per liter. For uranium, one pCi/L is equivalent to one second in 21.1 years.

PDWS or Primary Drinking Water Standard — MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirement.

PHG or Public Health Goal — Level of a contaminant in drinking water below which there is no known or expected risk to health. Public Health Goals are set by the California Environmental Protection Agency.

Secondary Drinking Water Standard — Based on aesthetics, these secondary maximum contaminant levels have monitoring and reporting requirements specified in regulations.

ug/L — Micrograms per liter (parts per billion). One ug/L is equivalent to 1 second in 31.7 years.

uS/cm — Microsiemens per centimeter

What's in my water?

CVWD analyzed more than 18,000 water samples last year to monitor the water quality of drinking water delivered to its customers. Every year, CVWD is required to analyze a select number of these samples for more than 100 regulated and unregulated substances.

This table lists those substances that were detected in CVWD's three service areas. Gray boxes indicate the substance was not detected (ND), existing data is no longer reportable or there is no available data. The data on the chart, which summarizes results of the most recent monitoring completed between 2007 and 2015. CVWD did not have any MCL violations in 2015.

To read this table:

First, determine in which service area you live, by using the footnotes on the opposite page. Then move down the column, comparing the detection level of each chemical or other contaminant with the Public Health Goal (PHG), Maximum Contaminant Level Goal (MCLG) and Maximum Contaminant Level (MCL).

For example, if you live in La Quinta and want to know the level of fluoride detected in your service area, you would look down the Cove Communities column and stop at the fluoride row. The average fluoride level in that service area is 0.6 mg/L with the range of results varying between 0.1 mg/L and 1.0 mg/L.

Compare these values to the Maximum Contaminant Level in the third column. Fluoride levels in this water comply with the Maximum Contaminant Level of 2.0 mg/L. The range can show a level above the Maximum Contaminant Level and still comply with the drinking water standard when compliance is based on average levels found in each water source or water system.

CVWD 2016 Domestic Water Quality Summary

(Covering the reporting period January - December 2015)

Detected parameter, units	PHG or (MCLG)	MCL ⁽¹⁾	Cove Communities ⁽²⁾ Range (Average)	ID No. 8 ⁽³⁾ Range (Average)	ID No. 11 ⁽⁴⁾ Range (Average)	MCL Violation? (Yes/No)	Major source(s)
Arsenic, ug/L	0.004	10	ND-12 ⁽⁵⁾ (ND)			NO	Erosion of natural deposits
Barium mg/L	2	1	ND-0.1 (ND)			NO	Erosion of natural deposits
Chloride, mg/L	N/A ⁽⁶⁾		7.2-110 (20)	8.9-26 (16)	260-530 (350)	NO	Leaching from natural deposits
Chlorine (as Cl ₂), mg/L ⁽⁷⁾	MRDLG 4	MRDL 4.0	ND-3.0 (0.4)	0.2-1.4 (0.5)	ND-1.6 (0.6)	NO	Result of drinking water chlorination
Chromium, ug/L ⁽⁸⁾	(100)	50	ND-25 (ND)	15-23 (18)		NO	Erosion of natural deposits
Chromium-6, ug/L ⁽⁸⁾	0.02	10 ⁽⁹⁾	ND-22 ^(10,11) (8.6)	13-22 (17) ⁽¹¹⁾		NO	Erosion of natural deposits
Color, units	None	15 ⁽¹⁾	ND-1 (ND)			NO	Naturally-occurring organic materials
Copper, mg/L ⁽¹²⁾ [homes tested/ sites exceeding AL]	0.3	AL=1.3	0.13 [52/0]	0.14 [22/0]	0.18 [21/0]	NO	Internal corrosion of household plumbing
Copper, mg/L	None	1 ⁽¹⁾	ND-0.4 (ND)		ND-0.2 (ND)	NO	Leaching from natural deposits
Dibromochloropropane (DBCP), ng/L	1.7	200	ND-65(ND)			NO	Leaching of banned nematocide which may still be in soils
E. coli, positive samples/month	(0)	#positive ⁽¹³⁾	ND-1 (ND)			No	Presence indicates possible animal or human waste contamination
Fluoride, mg/L	1	2.0	0.1-1.0 (0.6)	0.4-0.7 (0.6)	0.5-1.8 (1.2)	NO	Erosion of natural deposits
Gross alpha particle activity, pCi/L	(0)	15	ND-11 (ND)	ND-7.3 (5.1)	ND-4.6 (ND)	NO	Erosion of natural deposits
Haloacetic Acids, ug/L ⁽¹⁴⁾	N/A	60	(ND-6.6) 3.4			NO	By-product of drinking water chlorination
Hardness (as CaCO ₃), mg/L	N/A		11-300 (110)	65-210 (140)	210-430 (300)	NO	Erosion of natural deposits
Iron, ug/L	None	300 ⁽¹⁾	ND-230 (ND)			NO	Leaching from natural deposits
Nitrate (as NO ₃), mg/L	45	45	ND-56 ⁽¹⁵⁾ (5.8)	ND-6.4 (2.5)	5.0-10 (7.9)	NO	Leaching of fertilizer, animal wastes or natural deposits
Odor as threshold, units	None	3 ⁽¹⁾	ND-1.0 (ND)			NO	Naturally occurring organic materials
pH, units	N/A		7.4-9.1 (8.2)	8.0-8.2 (8.2)	7.7-8.1 (7.9)	NO	Physical characteristic
Selenium, ug/L	30	50	ND-5.8 (ND)		ND-5.6 (ND)	NO	Erosion of natural deposits
Sodium, mg/L	N/A		18-120 (30)	58-89 (73)	220-300 (250)	NO	Erosion of natural deposits
Specific conductance, uS/cm	N/A ⁽⁶⁾		230-1,100 (390)	520-830 (640)	1,500-2,500 (1,900)	NO	Substances that form ions when in water
Sulfate, mg/L	N/A ⁽⁶⁾		ND-270 (47)	150-240 (180)	220-340 (290)	NO	Leaching from natural deposits
Tetrachloroethylene (PCE),ug/L	0.06	5	ND-0.5 (ND)			NO	Discharge from dry cleaners and auto shops
Total Coliform bacteria, positive samples/month	(0)	more than 5% ⁽¹⁶⁾	ND-1% (ND)			NO	Naturally present in the environment
Total dissolved solids, mg/L	N/A ⁽⁶⁾		83-680 (240)	260-570 (400)	920-1,500 (1,200)	NO	Leaching from natural deposits
Total trihalomethanes, ug/L ⁽¹⁴⁾	N/A	80	ND-16 (12)	7.4-11 (11) ⁽¹⁷⁾	6.4-7.8 (7.8) ⁽¹⁷⁾	NO	By-product of drinking water chlorination
Turbidity, NTU	None	5 ⁽¹⁾	ND-0.7 (ND)	ND-0.3 (ND)	ND-0.6 (0.2)	NO	Leaching from natural deposits
Uranium, pCi/L	0.43	20	ND-14 (4.4)	1.9-4.1 (3.3)	2.4-2.9 (2.7)	NO	Erosion of natural deposits
2015 Unregulated contaminant monitoring							
Chlorate, ug/L ⁽¹⁹⁾	N/A	NL=800	ND-52 (6.5)			NO	By-product of drinking water chlorination
Chlorodifluoromethane (HCFC-22), ug/L ⁽¹⁹⁾	N/A		ND-0.18 (ND)			NO	Refrigerant
1,4-Dioxane, ug/L ⁽¹⁹⁾	N/A	NL=1	ND-0.14 (ND)			NO	Leaching from historical disposal sites
Molybdenum, ug/L ⁽¹⁹⁾	N/A		ND-19 (8.7)			NO	Erosion of natural deposits
Strontium, ug/L ⁽¹⁹⁾	N/A		140-2,000 (420)			NO	Erosion of natural deposits
Vanadium, ug/L ⁽¹⁹⁾	N/A	NL=50	4.9-36 (17)			NO	Erosion of natural deposits

Footnotes:

- (1) Values with this footnote have fixed Secondary MCLs, remaining values are Primary MCLs unless identified otherwise.
- (2) Includes the communities of Rancho Mirage, Thousand Palms, Palm Desert, Indian Wells, La Quinta, Mecca, Bombay Beach, North Shore, Hot Mineral Spa, and portions of Bermuda Dunes, Cathedral City, Indio, Oasis, Riverside County, Thermal and Valerie Jean.
- (3) Includes the communities of Indio Hills, Sky Valley & select areas within and adjacent to Desert Hot Springs.
- (4) Includes the communities of Desert Shores, Salton Sea Beach & Salton City.
- (5) Although an individual sample may exceed the MCL, compliance is based on a running annual average.
- (6) This constituent monitored for aesthetics such as taste and odor. No fixed consumer acceptance contaminant level has been established for this constituent.
- (7) The reported average represents the highest running annual average based on distribution system monitoring.
- (8) Although regulated, chromium and chromium-6 were included in 2015 unregulated contaminant monitoring per USEPA. CVWD performed this monitoring at select CVWD domestic facilities in Cove Communities. Chromium monitoring results: 0.3 ug/L-20 ug/L (9.2) and Chromium-6 results: 0.1 ug/L - 20 ug/L (9.1).
- (9) California's Chromium-6 drinking water MCL became effective on July 1, 2014.
- (10) Data includes results prior to state adoption of Chromium-6 (Cr6) MCL effective July 1, 2014.
- (11) Initial compliance monitoring for Chromium-6 ongoing in 2015. CVWD has a DDW approved compliance plan that includes construction of ion exchange treatment plants to lower naturally occurring Chromium-6 in local groundwater.
- (12) The reported values are 90th percentile levels for samples collected from faucets in water user homes.
- (13) An MCL violation occurs when a routine sample and a repeat sample are total coliform positive and one of these samples is E. coli positive.
- (14) The reported average represents the highest locational running average (LRAA) based on distribution system monitoring.
- (15) Nitrate was detected in one well above 45 mg/L and was removed from service resulting in no MCL violation.
- (16) Systems that collect 40 or more samples per month (Cove Communities).
- (17) Annual monitoring results.
- (18) In 2015, USEPA required unregulated contaminant monitoring (identified as UCMR3) for select CVWD domestic facilities in Cove Communities.
- (19) Unregulated contaminants are those for which USEPA and DDW have not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist both regulatory agencies in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

More information:

To receive a summary of CVWD's source water assessments or additional water quality data or clarification, call CVWD's Water Quality Division at (760) 398-2651.

Complete copies of source water assessments may be viewed at CVWD's office at 51-501 Tyler St., Coachella, CA 92236.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. También puede llamar al CVWD al número de teléfono (760) 398-2651.