

2012 Consumer Confidence Report for

Circle Oaks County Water District

JUNE 2013

Circle Oaks Water District is very pleased to provide you with last year's Annual Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is a combination of a developed spring area and three groundwater water wells. This report shows our water quality and what it means.

Circle Oaks Water District routinely monitors for contaminants in your drinking water according to federal and state requirements. We are pleased to report that our drinking water is safe and meets all federal and state requirements.

Circle Oaks Water District works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. No trespassing is allowed on any District property or facilities, including wells sites, springs, treatment plant, piping and fire hydrants. Please report any concerns, unusual activity or trespassing to the District office or the Napa County Sheriff.

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board of Directors meetings. The meetings are held on the 3rd Thursday of the month at 7:00 PM at the Capell Valley Fire Station, 1192 Capell Valley Road, Napa, CA 94558

Phillips & Associates is a professional operations, management and maintenance firm contracted to provide water and wastewater utility services to the Circle Oaks Water District. Questions regarding this report can be addressed by contacting the District or by calling Phillips & Associates office at 707 254-1931. Phillips & Associates also maintains a 24/7 emergency response service at 707 254-1931. Utility outages or service delivery matters should be directed to Phillips & Associates.

District Business such as billing, payments, permits, policies, ordinances and other general administrative matters may be addressed by calling Mr. MacDonald at the District office, 707 254-7796.

TERMS USED IN THIS REPORT:

Maximum Contaminant Level (MCL): 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.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

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

pCi/L: picocuries per liter (a measure of radiation)

Public Health Goal (PHG): 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

Maximum Contaminant Level Goal (MCLG): 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 (USEPA).

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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

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

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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*, 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 chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants*, which 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 the state Department of Health Services (Department) 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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for

certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90 th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	10	0.0069	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	10	0.604	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	10/4/11	9.1	9.8-10	None	None	Generally found in ground and surface water
Hardness (ppm)	10/4/11	57	48-55	None	None	Generally found in ground and surface water

* Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent	Sample	Level	Range of	MCL	PHG	Typical Source of Contaminant
-------------------------	--------	-------	----------	-----	-----	-------------------------------

(and reporting units)	Date	Detected	Detections		(MCLG)	
Arsenic (ppb)	5/24/10	ND	2.2-2.7	10	N/A	Erosion from natural deposits.
Fluoride (ppm)	8/27/09	ND	0.11-0.15	2	N/A	Erosion from natural deposits.
Gross Alpha (pCi/L)	3/29/07	0.2155	N/A	15	N/A	Erosion of natural deposits
Trihalomethanes (ppb)	7/19/10	1.7	NA	80	NA	By-product of drinking water disinfection
Haloacetic Acid (ppb)			NA	60	NA	By-product of drinking water disinfection

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD (1)

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
* Iron (ppb)	5/24/10	1300	4600-5000	300	N/A	Leaching from natural deposits.
Chloride (ppm)	5/24/10	4.3	4.6-4.7	500	N/A	Runoff/leaching from natural deposits.
Sulfate (ppm)	5/24/10	23.0	10-12	500	N/A	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	5/24/10	160	160-170	1000	N/A	Runoff/leaching from natural deposits
*Color (units)	5/24/10	22	7-27	15	N/A	Naturally occurring organic material
Manganese (ppb)	10/4/11	0.472	370-400	50	N/A	Leaching from natural deposits
Specific Conductance (umhos)	5/24/10	170	140-180	1600	N/A	Substances that form iron when in water; seawater influence.
Odor Threshold (TON)	5/24/10	2.0	ND - 1.0	3	NA	Naturally-occurring organic materials.

(1) There are no PHGs, MCLGs, or mandatory standard health effects language for constituents with secondary drinking water standards because secondary MCLs are set on the basis of aesthetics.

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent	Sample Date	Level Detected	Action Level	Health Effects Language
Boron (ppb)	7/23/02 2/14/03 10/29/03 8/06/03	110 132 150 230	1000	Some men who drink water containing boron in excess of the action level over many years may experience reproductive effects, based on a study in dogs.

* Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.

Additional General Information On Drinking Water

All 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 the 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).

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* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

Iron, Color, Turbidity and Manganese exceeded the MCL limits. These samples are collected from the Raw Water Source before any treatment. The treatment process is designed to substantially reduce these minerals in the finished water. There are no PHGs, MCLGs, or mandatory standard health effects language for constituents with secondary drinking water standards because secondary MCLs are set on the basis of aesthetics.

For Systems Providing Surface Water As A Source Of Drinking Water:

(Refer to page 1, "Type of Water Source" to see if your source of water is surface water or groundwater.)

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
<i>Treatment Technique*</i> (Type of approved filtration technology used)	Conventional Filtration
<i>Turbidity Performance Standards**</i> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 - Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 - Not exceed 1.0 NTU for more than eight consecutive hours. 3 - Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.28
The number of violations of any surface water treatment requirements	0

* A required process intended to reduce the level of a contaminant in drinking water.

** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Surface Water Treatment

Compliance with the surface water treatment turbidity performance standards were met 100% for the year
