

2017 Consumer Confidence Report
Circle Oaks County Water District

April 2017

We want our customers to be informed about their water utility. If you wish to learn more, please attend any of our regularly scheduled Board of Directors Meetings. The Board normally holds meetings on the 2nd Wednesday of every month at 6:45pm.

All meetings convene in the Circle Oaks Water District Office at:
380 Circle Oaks Dr.
Napa, Ca 94558.

District business such as billing, payments, permits, policies, ordinances, and other general administrative matters may be addressed by calling Paul Quarneri at the district office, (707) 254-7796.

Este informe contiene informacion muy importante sobre su agua potable. Traduzaco o hable con Alguien que to entienda bien.

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

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).

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 Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

Primary Drinking Water Standards (PDWS): MCLs and MRDLs 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.

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

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

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter ($\mu\text{g/L}$)

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

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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.

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 storm-water runoff, industrial or domestic waste-water 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 USEPA 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.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the raw 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.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF CRUCIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	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>	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 (complete if lead or copper detected in the last sample set)	Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	08/23/16	10	4.3	1	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	08/23/16	10	.740	2	1.3	0.17	Internal corrosion of household 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)	07/27/16	9.9	NA	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	7/27/16	69	NA	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	07/27/16	0		10	N/A	Erosion from natural deposits.

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
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*Iron (ppb)	07/27/16	13000	N/A	300	N/A	Leaching from natural deposits.
Sulfate (ppm)	07/27/16	18	N/A	500	N/A	Runoff/leaching from natural deposits.
Total Dissolved Solids (ppm)	07/27/16	160	N/A	1000	N/A	Runoff/leaching from natural deposits.
*Color (units)	07/27/16	100	N/A	15	N/A	Naturally occurring organic material
*Manganese (ppb)	07/27/16	580	N/A	50	N/A	Leaching from natural deposits.
Specific Conductance (umhos)	07/27/16	190	N/A	1600	N/A	Substances that form iron when in water; seawater influence.
Odor Threshold (TON)	07/27/16	0	N/A	3	N/A	Naturally occurring organic material
*Turbidity (NTU)	07/27/16	47	N/A	5	N/A	Soil Runoff

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
None					

* Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking Water

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).

Lead-Specific Language for Community Water Systems: 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. Circle Oaks County Water District 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 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 <http://www.epa.gov/safewater/lead>.

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 7 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique ^(a) (Type of approved filtration technology used)	Conventional Filtration
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to <u>0.3</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>1.0</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>5.0</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100.00%
Number of violations of any surface water treatment requirements	0

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Iron, Color, Manganese, and Turbidity 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

Raw Water Asterisked Secondary Chemicals or Contaminates

TABLE 8

Chemical or Contaminate	Post Filtration Value	Explanation
Iron	ND	Because our raw water is provided by underground water which has a large amount of iron naturally occurring in it. Although the raw, or “pre-treated” water has large amounts of iron, the filtration process we use removes a large majority if not all of this contaminate. After treatment the water being produced by our plant has a well below MCL regulation.
Color	ND (Clear)	Because our raw water is provided by underground water a large amount of naturally-occurring minerals, many of which add color to our raw or “pre-treated” water. Because of the filtration process we are proud to say the the water being produced by our plant is free and clear of all color .
Manganese	ND	Because our raw water is provided by underground water which has Manganese naturally occurring in it. Although the raw, or “pre-treated” water has manganese, the filtration process we use removes a large majority if not all of this contaminate. After treatment the water being produced by our plant has a well below MCL regulation.
Turbidity	< 0.3 Range 0.05-0.28 Average 0.10	Turbidity is generally caused by the stirring up of contaminates like silt, dirt, and minerals during rain or when pumping/moving water. Although the turbidity is high during raw water testing we are happy to say that after treatment our water is well below the MCL regulations.