

CITY OF COALINGA



2016

Consumer Confidence Report

Annual Drinking Water Quality Report for 2016

This report is designed to inform you about the quality of water delivered to you every day. It is our constant goal to provide you with a safe and dependable supply of water, and we want you to understand the efforts we make to continually improve the water treatment and distribution process and protect our water resources. We are committed to ensuring the quality of your water. For those new to the community, the City receives its water supply through a contract with the United States Bureau of Reclamation. This water is conveyed to the City's Water Treatment Plant from the Coalinga Canal, which originates at the California Aqueduct.

The purpose of this document is to report water quality and compare our water quality to Federal and State regulations. In an effort to bring consistency to water quality reporting, the State Water Resources Control Board (State Board), Division of Drinking Water, which has regulatory authority, has issued guidelines for all water agencies to use in providing water quality information to customers. Water Quality Reports are now only required to report those contaminants detected during sampling. The City's Utility Department sampled for many contaminants during 2016 and is providing analysis results that we feel might be of interest to our customers in addition to those mandated by the State.

If you have any questions about this report or concerning your water utility, please call the City of Coalinga Water Treatment Plant at (559)935-2981. If you want to learn more, you are encouraged to attend any of the regularly scheduled City Council Meetings. The City Council meets on the first Thursday of each month, starting at 6:00 p.m., in the City Council Chambers located at 155 W Durian.

The 2016 Consumer Confidence Report and past yearly reports may be found on the City of Coalinga's Website at:

<http://www.coalinga.com/?pg=11>

2016 Consumer Confidence Report

Water System Name: City of Coalinga Report Date: June 23, 2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Surface water

Name & general location of source(s): Coalinga Canal – which originates at the California Aqueduct

Drinking Water Source Assessment information: An assessment of the drinking water source for the City of Coalinga was completed in June 2003. The California Aqueduct originates at the Sacramento-San Joaquin Delta at Clifton Court Forebay. Water in the Delta originates in the Sacramento River watershed, the San Joaquin River watershed, and the watershed drainage from the Mokelumne River, Stanislaus River, Merced River and several smaller rivers that drain the western slopes of the Sierra Nevada. A broad variety of potential sources of contamination can be found in these drainage areas, including municipal, industrial, and agricultural land use activities. Also influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the natural occurring salt-water intrusion, which is dependent to a large extent on inflow from the contributing rivers into the Delta. A copy of the complete assessment may be viewed at the City of Coalinga, 155 W. Durian Ave., Coalinga, CA 93210.

Time and place of regularly scheduled board meetings for public participation: 1st Thursday of each month in the City Council Chambers at City Hall, 155 W. Durian Ave., Coalinga, CA 93210.

For more information, contact: City of Coalinga Water Treatment Plant Phone: (559) 935 - 1533

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.

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.

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 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.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

<p>Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</p>	<p>ppb: parts per billion or micrograms per liter (µg/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)</p>
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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, 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, and 6 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 State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM 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 (state Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(from 4/1/16-12/31/16) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

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)	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	6/10/16-6/15/16	26	0.0012	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/10/16-6/15/16	26	0.42	0	1.3	0.3	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)	01/27/16	73	N/A	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	01/27/16	130	N/A	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)	01/27/16	3	N/A	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	01/27/16	0.10	N/A	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors

Control of DBP precursors (Total Organic Carbon)	2016	2.2	1.6 - 3.6	TT	N/A	Various natural and man-made sources
Chloramines (Distribution) (ppm)	2016	1.7	0.8 – 2.9	[MRDL = 4.0 (as Cl ₂)]	[MRDLG = 4 (as Cl ₂)]	Drinking water disinfectant added for treatment

• **TTHM (Total Trihalomethanes) Monitoring (state Stage 2 D/DBPR)**

Contaminant (CCR units)	MCL	PHG (or MCLG)	Average	Range	Sample Date	Violation	Typical Source
TTHM (ppb)	80	N/A	75.5	38 – 75.5	2016	No	Byproduct of drinking water disinfection

TTHM MCL	0.080 ppm			
MCL in CCR units	80 ppb			
Location	2016 TTHM Results (ppb)			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Site 1	47	47	44	52
Site 1 LRAA*	75	59	49.8	47.3
Site 2	49	47	38	51

Site 2 LRAA*	75	59.3	50.3	46.3
Site 3	53	46	40	51
Site 3 LRAA*	75.5	59.5	50.5	47.5
Site 4	52	45	43	54
Site 4 LRAA*	75.5	59.3	50.3	48.5

* Locational running annual averages for quarters 1 – 3 are based on results from previous quarters not reported on this table.

• **HAA5 (Haloacetic Acids) Monitoring (state Stage 2 D/DBPR)**

Contaminant (CCR units)	MCL	PHG (or MCLG)	Average	Range	Sample Date	Violation	Typical Source
HAA5 (ppb)	60	N/A	16	7.8-27	2016	No	Byproduct of drinking water disinfection

HAA5 MCL	0.060 ppm			
MCL in CCR units	60 ppb			
Location	2016 HAA5 Results (ppb)			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Site 1	7.8	25	9.8	11
Site 1 LRAA*	14.2	16.0	14.4	13.4
Site 2	7.3	26	7.9	11
Site 2 LRAA*	13.3	15.3	13.8	13.1
Site 3	7.8	23	8.9	9.7
Site 3 LRAA*	13.2	15.0	13.4	12.4
Site 4	8	27	14	10
Site 4 LRAA*	13.5	15.8	15.8	14.8

*Locational running annual averages for quarters 1 – 3 are based on results from previous quarters not reported on this table.

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
Aluminum (ppb)	01/27/16	50	N/A	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Color (Units)	01/27/16	30*	N/A	15	N/A	Naturally-occurring organic materials
Copper (ppm)	01/27/16	0.05	N/A	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents (MBAS) (ppb)	01/27/16	<100	N/A	500	N/A	Municipal and industrial waste discharges
Iron (ppb)	01/27/16	120	N/A	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	01/27/16	31	N/A	50	N/A	Leaching from natural deposits

Odor Threshold (Units)	01/27/16	17*	N/A	3	N/A	Naturally-occurring organic materials
Turbidity (Units)	01/27/16	5*	N/A	5	N/A	Soil runoff
Total Dissolved Solids (TDS) (ppm)	01/27/16	360	N/A	1000	N/A	Runoff/leaching from natural deposits
Specific Conductance (μ S/cm)	01/27/16	690	N/A	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	01/27/16	130	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	01/27/16	48	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes
*(a) There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.						

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. The City of Coalinga 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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
LCR – Lead and Copper Rule	Failure to take a sample on time	2016	Took required sample at a later time	Health effects unknown

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - 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>1.0</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.25
Number of violations of any surface water treatment requirements	0

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

(b) 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 Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct zero Level 1 assessment(s). Zero Level 1 assessment(s) were completed. In addition, we were required to take zero corrective actions.

During the past year, zero Level 2 assessments were required to be completed for our water system. Zero Level 2 assessments were completed. In addition, we were required to take zero corrective actions, and we completed zero of these actions.