

2018 Camp Roberts Annual Water Quality Report

California Army National Guard
Camp Roberts Drinking Water System
No 2710705.

CAMP ROBERTS
Est. 1941

We test the drinking water quality for many constituents as required by state and federal regulations. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection and water conservation while continuing to serve the needs of all of our water users. Camp Roberts water sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: Military installation operations, grazing, transportation corridors (roads/streets), storm drain discharge points and recreational areas. These findings mean that these activities take place in the general vicinity of some wells. It does not mean there are any problems resulting from these activities, only that a potential vulnerability exists.

Camp Roberts uses 4 groundwater wells as its water sources (C-1, 3-A, C-4A and C-5A). All wells draw water from the Paso Robles Groundwater Basin.



Well 3A



Well C-4A



Well C-5A

Water Source Assessment

Camp Roberts Drinking Water System had no violations for 2018.

Last year, as in years past, your tap water met all U.S. EPA and State drinking water health standards.

This report shows the results of our monitoring for the period of January 1 - December 31, 2018 and may include earlier monitoring data.

Drinking Water Source Assessment Information

An assessment of the drinking water sources for the Water System was completed in February 2002 and January 2012 by the California State Water Resources Control Board. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: Military installations. The sources are considered most vulnerable to the following activities: Military installations, grazing, transportation corridors – surface water source, storm drain discharge points, and recreational area – surface water source. No contaminants associated with these activities have been detected in the water supply.

A copy of the complete assessment is available at the Camp Roberts Drinking Water System Operator's office and at the State Water Resources Control Board Division of Drinking Water District 5 Office located at:

1 Lower Ragsdale Dr.
Bldg.1, Suite 120
Monterey CA 93940

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. Immunocompromised 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).

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. Camp Roberts 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/lead>.

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None	N/A	N/A	N/A	N/A

Substances That Could be in Drinking Water

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 wastewater 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.

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.

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

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

uhmos/cm: micromhos per centimeter (a measure of conductivity)

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.

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.

Variances 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 (µg/L)

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

NTU: Nephelometric Turbidity Units (a measure of turbidity)

Drinking Water Sample Results

Tables 1 through 8 list all 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.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA							
Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria		
Total Coliform Bacteria	0	0	1 positively monthly sample	0	Naturally present in the environment		
Fecal Coliform or <i>E. coli</i>	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>	0	0	(a)	0	Human and animal fecal waste		
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .							
TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2018	10	3.2	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2018	10	0.19	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)	2018	115	20-200	none	none	Salt present in the water and is generally naturally occurring	
Hardness (ppm)	2018	198	120-290	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring	

Drinking Water Sample Results Continued

TABLE 4 – DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD						
Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL (MRD)	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppb)	2017	3.9	ND-3.9	10	0.004	Erosion of natural deposits; runoff from orchards
Fluoride (ppm)	2017	0.34	ND-0.34	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen, N) (ppm)	2018	1.06	ND-2.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Selenium (ppb)	2017	1.3	ND-1.3	50	30	Erosion of natural deposits discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive).
DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS						
TTHMs [Total Trihalomethanes] (ppb)	2018	19	17-21	80	N/A	Byproduct of drinking water disinfection.
HAA5 (Halo acetic Acids) (ppb)	2018	1.65	ND-3.3	60	N/A	Byproduct of drinking water disinfection.
Chlorine (ppm)	4 samples per month	1.00	0.25-1.5	MRDL = 4.0	MRDLG= 4.0	Drinking water disinfectant added for treatment. Some people who use water containing chlorine well per in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
RADIOACTIVE CONTAMINANTS						
Gross Alpha (pCi/L)	2018	4.5	4.37-4.68	15	(0)	Erosion of natural deposits
Total Alpha Radium (for nontransient-noncommunity water systems) (pCi/L)	2018	0.37	0.0950-0.651	5	N/A	Erosion of natural deposits
Uranium (pCi/L)	2018	1.9	1.9	20	0.43	Erosion of natural deposits

Drinking Water Sample Results Continued

TABLE 5 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD						
Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2018	49	12.5-80	500	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (uhms/cm)	2018	805	490-1050	1,600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2018	102	39-170	500	N/A	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids (ppm)	2018	518	325-640	1,000	N/A	Runoff/leaching from natural deposits
Calcium (mg/L)	2018	42	26-56	none	N/A	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Iron (ug/L)	2018	901	30-2525	300	N/A	Leaching from natural deposits; industrial wastes
Magnesium (mg/L)	2018	21	12-33.5	none	N/A	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Turbidity (NTU)	2015	1.8	ND-11.3	5	N/A	Soil runoff
TABLE 6 -DETECTION OF UNREGULATED CONTAMINANTS						
Chemical or Constituent	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language	
Boron (ppm)	2018	0.67	ND-1.5	1.0	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.	
Vanadium (ppb)	2015	13	6-19	50		

Questions?

For a complete copy of the assessment or for more information relating to your drinking water please contact John Morrow, Camp Roberts Environmental Office at 805-238-8922