



DEPARTMENT OF THE ARMY
CALIFORNIA ARMY NATIONAL GUARD
HEADQUARTERS, CAMP ROBERTS
Building 109, PO Box 5000
Camp Roberts, California 93451-5000

NGCA-CR-DPW

1 July 2012

MEMORANDUM FOR See Distribution

SUBJECT: 2011 Consumer Confidence Report for Camp Roberts Drinking Water System

1. Enclosed is the 2011 Consumer Confidence Report. This report shows the drinking water quality monitoring results for the past year.
2. Please post this Report on bulletin boards in your offices and provide for widest dissemination possible.
3. Any questions or concerns may be directed to Mr. John Morrow, Staff Environmental Scientist at (805) 238-8922, or CPT Ryan Adams, Camp Roberts Director of Public Works at (805) 238-8576.

A handwritten signature in blue ink, appearing to read "Ryan Adams".

RYAN J. ADAMS
CPT, MI, CA ARNG
Interim Director of Public Works

DISTRIBUTION:

CAJS-ENV, Mr. Michael Holder, Mr. Mark Williams
CACR-EV, Mr. John Morrow
AAFES
Billeting/Mobile Home Tenants
Emergency Services
Military Police Front Desk
Visitor Center
MATES, MAJ Charles Jarvis
RTS-M, CW3 Mark Walton
TSC, Mr. Dale Basham
BAE Systems, Mr. Kevin Handly
Safety Officer, CPT Karina Fletcher
Bulletin Boards, CACR HQ and all Camp Roberts Directorates

2011 Consumer Confidence Report

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

Report Date: July 1, 2012

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, 2011.

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: **Four Groundwater wells: C-1; B-3, 3-A, and C-4A**

Name & location of source(s): **All the wells draw water from the Paso Robles Groundwater Basin**

Drinking Water Source Assessment information:

An assessment of the drinking water sources (well C-1, 3-A, B-3, and C-4A) for the Water System was completed in February 2002 by The California Department of Public Health. The 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 area.

**A copy of the complete assessment is available at the Drinking Water System Operator's office and at The California Department of Public Health office:
1 Lower Ragsdale Dr.
Bidg.1, Suite 120
Monterey CA 93940**

Time and place of regularly scheduled board meetings for public participation: **Open Base Policy per Camp Roberts Post Commander**

For more information, contact: **CPT Ryan Adams, Interim Director of Public Works** Phone: **(805) 238-8576**

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

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.

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.

Variances and Exemptions: Department 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 (ug/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)

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 Department of Public Health (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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 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 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.

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	(In a mo.) <u>1</u>	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) <u>1</u>	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)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20	7	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	20	0.11	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)	7/11/2011	220	104-282	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	7/11/2011	282	81.9-668	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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

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)	6/18/2009	4.7	ND - 8.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production waste.
Fluoride (ppm)	7/13/10	0.30	0.3 – 0.3	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Selenium (ppb)	6/18/2009	4.7	ND - 24	50	(50)	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Nitrate (as nitrate, NO ₃) (ppm)	6/20/11	1.63	0.8-11	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contamination
TTHMs [Total Trihalomethanes] (ppb)	10/11/11	20.1	28.1-33.1	80	N/A	Byproduct of drinking water disinfection
HAA5 [Haloacetic Acids] (ppb)	9/12/11	5.65	3-5	60	N/A	Byproduct of drinking water disinfection
Chlorine (ppm)	(5 samples per week) 2011	1.55	1.11-1.72	[MRDL = 4.0 (as Cl ₂)]	[MRDLG =4.0 (as Cl ₂)]	Drinking water disinfectant added for treatment

RADIOACTIVE CONTAMINANTS						
Gross Alpha (pCi/L)	2011	11.4	3.51	15	NA	Erosion of natural deposits
Radium 226 (pCi/L)	2011	0.228	0.435 - 0.94	5	0.05	Erosion of natural deposits
Radium 228 (pCi/L)	2011	0.398	ND - 0.54	5	0.019	Erosion of natural deposits
Uranium (pCi/L)	2011	3.51	2.37-5.51	20	0.5	Erosion of 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
Chloride (ppm)	7/11/2011	108	42-154	500	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (uhmos/cm)	7/11/2011	1367	730-1520	1,600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	7/11/2011	293	94-610	500	N/A	Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids (ppm)	7/11/2011	947	110-1170	1,000	N/A	Runoff/leaching from natural deposits
Calcium(mg/L)	7/11/2011	1	18-24	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)	7/11/2011	50	ND-130	300 ²	N/A	Leaching from natural deposits; industrial wastes
Magnesium(mg/L)	7/11/2011	1	9-66	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)	6/18/2009	0.2	0.1 - 0.2	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
Boron (ppm)	7/11/2011	2.4	0.36 – 2.4	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.

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

Summary:

Boron:

In 2011, Camp Roberts detected Boron in two of the wells, see Table 6. This level exceeded the 1mg/L notification level. As required by the California Health and Safety Code (CHSC) notification was sent out to Monterey Office – Drinking Water Field Operations Branch on March 19, 2012

Gross Alpha:

Well B-3 exceeded the MCL for Gross Alpha in 2010. This event triggered quarterly sampling which began in March of 2011. Camp Roberts has completed four (4) out of four (4) quarterly sampling events, summarized as follows (in units of pCi/L) The average of the 4 quarter results = 3.51 < 5 pCi/L The average result satisfies the 5 pCi/L requirement for Alpha Emitters.

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).

For Water Systems Providing Ground Water as a Source of Drinking Water

**TABLE 7 – SAMPLING RESULTS SHOWING
FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES**

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year)	N/A	0	(0)	Human and animal fecal waste
Enterococci	(In the year)	N/A	TT	n/a	Human and animal fecal waste
Coliphage	(In the year)	N/A	TT	n/a	Human and animal fecal waste

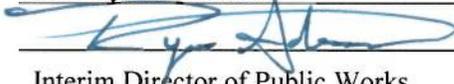
ATTACHMENT 6

Consumer Confidence Report Certification Form (to be submitted with a copy of the CCR)

Water System Name: California Army National Guard, Camp Roberts

Water System Number: 2710705

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 29 Jun 2012 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the Department of Public Health.

Certified by: Name: CPT Ryan J. Adams
Signature: 
Title: Interim Director of Public Works
Phone Number: (805) 238-8576 Date: 29 JUN 2012

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: email

"Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

Posting the CCR on the Internet at www.

Mailing the CCR to postal patrons within the service area (attach zip codes used)

Advertising the availability of the CCR in news media (attach copy of press release)

Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)

Posted the CCR in public places (see distribution memo for a list of locations)

Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools

Delivery to community organizations (attach a list of organizations)

For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following address: www.

For privately-owned utilities: Delivered the CCR to the California Public Utilities Commission