2023 ANNUAL CONSUMER CONFIDENCE REPORT

JANUARY THROUGH DECEMBER 2023



Marine Air Ground Task Force Training Command | Marine Corps Air Ground Combat Center

ENVIRONMENTAL AFFAIRS MCAGCC BOX 788110 TWENTYNINE PALMS, CA 92278-8110





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CCR and You!

Marine Air Ground Task Force Training Command (MAGTFTC), Marine Corps Air Ground Combat Center (MCAGCC) is proud to present the 2023 Annual Consumer Confidence Report (CCR). Under the CCR Rule of the federal Safe Drinking Water Act (SDWA), and the America's Water Infrastructure Act of 2018, community water systems with a population greater than 10,000 are required to report water quality information to the consuming public twice a year.

This CCR covers all drinking water testing completed from January 1, 2023 through December 31, 2023 (12 months of data). As always, MAGTFTC, MCAGCC is committed to delivering the best quality drinking water to all base personnel. Through continued vigilance, we provide source water protection, water conservation, and community education while ensuring the needs of all our water users.

MAGTFTC, MCAGCC is dedicated to sustaining and protecting the environment. This report is printed on 100% recycled paper to help reduce waste and minimize impact on the environment while meeting the Marine Corps mission.

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

This report was compiled by the MAGTFTC, MCAGCC Environmental Affairs (EA) Water Resources Office. For more information about this report, or for any questions relating to your drinking water, please contact:

Plessie Ellitt, Branch Head, EA (760) 830-7695 plessie.ellitt@usmc.mil

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (USEPA) and Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA **Safe Drinking Water Hotline (1-800-426-4791)**.

Contaminants In My 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA **Safe Drinking Water Hotline (1-800-426-4791)**.

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 byproducts 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, USEPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

Lead Information

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. MAGTFTC, MCAGCC 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 **USEPA Safe Drinking Water Hotline (1-800-426-4791)** or at <u>http://www.epa.gov/safewater/lead</u>.

Arsenic Information

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Source Water Assessment

A source water assessment was conducted for Wells 2A, 3B, 4A, 5A, 6A, 7A, 8A, 9A, 10A, 11A, and 12A for the MCAGCC water system in December 2001 and is summarized in the table below.

Source	Most Vulnerable Activities (PCAs)	Chemical Detected
Well 2A	None	None
Well 3B	Monitoring well	None
Well 4A	Above ground storage tank (500-gallon diesel fuel tank)*	None
Well 5A	Above ground storage tank (500-gallon diesel fuel tank)*	None
Well 6A	Above ground storage tank (500-gallon diesel fuel tank)*	None
Well 7A	Above ground storage tank (500-gallon diesel fuel tank)*	None
Well 8A	Military installation (VSTAL) (Inactive)	None
Well 9A	None	None
Well 10A	Monitoring well	None
Well 11A	None	None
Well 12A	Monitoring well	None

Table 1. Source Water Assessment Results, December 2001

* These 500-gallon fuel tanks are fuel sources for backup power to support the well pump at these locations and are regularly inspected. PCA = possible contaminating activity

A source water assessment was conducted for Deadman Well 1 and Deadman Well 2 for the MCAGCC water system in January 2021 and is summarized in the table below.

Table 2. Source Water Assessment Results, January 2021

Source	Most Vulnerable Activities (PCAs)	Chemical Detected	
Deadman Well 1	Military installations NPDES/WDR permitted discharges Low density septic systems Monitoring wells, test holes Drinking water treatment plants	None	
Deadman Well 2	Military installations	None	

NPDES = National Pollutant Discharge Elimination System

WDR = Waste Discharge Report

A copy of the complete assessment may be viewed at the DHS San Bernardino District Office, 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessment be sent to you by contacting the DHS District Engineer at (909) 383-4328.

Water Conservation

MAGTFTC, MCAGCC continues to pursue water conservation efforts to ensure this resource is not just going down the drain. MCAGCC remains in a constant state of drought, and water is a precious commodity, especially in our desert environment.

MAGTFTC, MCAGCC is committed to water conservation and sustainment of this precious resource. MAGTFTC, MCAGCC has implemented a number of water conservation practices across the installation. Working together, the installation continues to pursue reductions in water usage and improve long-term water resource sustainability.

With everyone's continued support, MAGTFTC, MCAGCC will remain an example for water reduction and conservation efforts within the U.S. Department of Defense (DoD). MAGTFTC, MCAGCC is committed to conserving water to the maximum extent possible while still meeting the Marine Corps mission. To report water waste, call the **Water Conservation Hotline at 760-830-SAVE** (7283).

Where Does My Water Come From?

MAGTFTC, MCAGCC domestic water is supplied by groundwater from the Surprise Springs and Deadman sub aquifer of the Twentynine Palms Groundwater Basin. Thirteen potable water wells at a depth between 500 and 700 feet extract water located in a protected and isolated area of MAGTFTC, MCAGCC, which is separate from the aquifers used by the city of 29 Palms.

Water extracted from groundwater is fed to our Drinking Water Treatment Facility. This facility utilizes reverse osmosis treatment to ensure water quality meets or exceeds all USEPA and SWRCB primary and secondary drinking water standards. After treatment, water receives basic disinfection before distribution. SWRCB requires basic disinfection as a safeguard against possible microbial contamination due to repairs or maintenance of the system.

Program Spotlight

The EA Water Resources Program ensures water quality needs of MAGTFTC, MCAGCC are met and provides a central point for collection and dissemination of water quality information. This is accomplished through comprehensive water quality monitoring, analysis, and assessment; applied research; and implementation of a rigorous quality assurance and control program. The Water Resources Office provides water quality data and information in support of long-range resource planning, regulatory compliance, project operations, scientific research, and policy development.

Every effort is made to prevent negative impacts on surrounding watersheds and ecosystems. Through our inspection process, we ensure compliance with federal, state, local, and Marine Corps regulations as well as performing water sampling to detect and correct deficiencies.

The program also provides water quality information to MAGTFTC, MCAGCC personnel, dependents, and civilian employees on pollution prevention related issues, permitting requirements, protecting our environment, water quality, and water resources. For more information about the Water Resources Program or questions related to water quality, contact:

Plessie Ellitt, EA Branch Head, EA (760) 830-7695 plessie.ellitt@usmc.mil

NO DRUGS Down the Drain

Pharmaceutical waste remains a threat to water supplies. One way to reduce this threat is to dispose of all over-the-counter drugs and prescriptions properly. **DO NOT FLUSH DRUGS DOWN THE DRAIN.**

Old medicines should be taken to:

Naval Hospital (NHTP) pharmacy drop box or Adult Medical Care Clinic (AMCC) drop box for disposal. The NHTP drop location is available 24/7 and the AMCC is available during normal business hours Monday - Friday (0730 to 1600).

These drop locations **may not** be used for disposal of sharps (e.g., needles or syringes), aerosols, inhalers, illegal drugs, chemotherapy or radioactive substances, or other hazardous substances (e.g., batteries). Disposal of these wastes may result in regulatory violations (e.g., Drug Enforcement Administration, USEPA) and loss of the program.

For more information on proper disposal of unwanted medicines, please visit www.nodrugsdownthedrain.org.

Water Quality Data

MAGTFTC, MCAGCC conducts extensive water quality testing throughout the year. The sampling and analysis are conducted at various intervals (weekly, monthly, quarterly, etc.) as required by California, USEPA, and the Marine Corps. MAGTFTC, MCAGCC is committed to providing the safest, best quality water to everyone at the installation by ensuring water quality continually meets or exceeds all primary drinking water standards.

The table below provides last year's (2023) water quality results. The table includes details about what your water contains and how it compares to standards set by regulatory agencies. The presence of contaminants in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done in the calendar year of the report. The USEPA or the state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change. Additional information regarding maximum contaminant level and water quality standards can be found under California Code of Regulations Title 22.

Substance	Unit of Measure	MCL	PHG (MCLG)	Average Detection	Range of Detection	Sample Date	Violation Yes/No	Typical Source	
Primary Drinking Water Standard									
Arsenic	mg/L	0.01	0	0.0030	< 0.0020 - 0.0085	2023	No	Erosion of natural deposits	
Boron	μg/L	NA	1000	426	130 - 830	2023	No	Erosion of natural deposits	
Chromium VI	μg/L	10	0.02	0.81	0.061 - 1	2023	No	Erosion of natural deposits or industrial discharges	
Fluoride (mg/L)	mg/L	2	1	0.33	0.26 - 0.47	2023	No	Erosion of natural deposits	
Total Coliform Bacteria		1	ND	ND	ND	2023	No	Naturally present in the environment	
Secondary Drinking Water Standard									
Color	CU	15	15	3.0	< 3.0 - 3.0	2023	No	Naturally occurring organic materials	
Iron	mg/L	0.3	0.3	0.05	< 0.05 - 0.07	2023	No	Erosion of natural deposits	
Manganese	mg/L	0.5	0.05	0.01	< 0.01 - 0.01	2023	No	Erosion of natural deposits	
Odor	TON	3	NA	1.0	< 1.0 - 1.0	2023	No	Naturally occurring organic materials	
Total Dissolved Solids	mg/L	1000	500	113	63 - 180	2023	No	Erosion of natural deposits	
Turbidity	NTU	5	NA	0.17	< 0.10 - 2.4	2023	No	Erosion of natural deposits	
Detection of Lead and Copper									
Copper 90th Percentile	μg/L	1300	170	48	< 5.0 - 240	2023	No	Plumbing corrosion	
Lead 90th Percentile	μg/L	15	2	5	ND - 6.5	2023	No	Plumbing corrosion	

Table 3. 2023 Water Quality Results

Table Definitions

 $\mu g/L$: Microgram(s) per liter.

CU: Color unit.

MCL (maximum contaminant level): 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.

MCLG (maximum contaminant level goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by USEPA.

mg/L: Milligram(s) per liter.

MRL: Minimum reporting level.

NA: Not applicable.

ND (not detected): Indicates that the substance was not found by laboratory analysis.

NTU: Nephelometric turbidity unit.

PDWS (primary drinking water standards): MCLs and maximum residual disinfectant levels for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (public health goal): 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.

SDWS (secondary drinking water standards): A secondary standard affects the color and taste of the water delivered to customers.

TON: Threshold odor number.

Total coliform bacteria: Coliforms are bacteria that are naturally present in the environment and are used as indicators that other potentially harmful bacteria may be present.

UCMR5: The fifth round of Unregulated Contaminant Monitoring Rule (UCMR). Every 5 years, USEPA issues a list of unregulated contaminants to be monitored by public water systems.

Unit: Standard unit of measurement for this constituent.

UCMR 5									
Substance	Unit of Measure	MCL	PHG (MCLG)	MCAGCC Water	Range of Detection	Sample Date	Violation Yes/No	Requirement	
11-chloroeicosafluoro-3-oxaundecane-1- sulfonic acid (11Cl-PF30UdS)	μg/L	NA	NA	ND	< MRL	2023	No	The Safe Drinking Water Act (SDWA), as amended in 1996, requires the U.S. Environmental Agency	
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	μg/L	NA	NA	ND	< MRL	2023	No		
9-chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9CI-PF30NS)	μg/L	NA	NA	ND	< MRL	2023	No		
hexafluoropropylene oxide dimer acid (HFPO-DA)(GenX)	μg/L	NA	NA	ND	< MRL	2023	No	(USEPA) to establish criteria for a program to monitor unregulated	
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	μg/L	NA	NA	ND	< MRL	2023	No	contaminants and to identify no more than	
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	μg/L	NA	NA	ND	< MRL	2023	No	30 contaminants to be monitored every five years.	
perfluoro-3-methoxypropanoic acid (PFMPA)	μg/L	NA	NA	ND	< MRL	2023	No		
11-chloroeicosafluoro-3-oxaundecane-1- sulfonic acid (11Cl-PF30UdS)	μg/L	NA	NA	ND	< MRL	2023	No		
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	μg/L	NA	NA	ND	< MRL	2023	No		
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	μg/L	NA	NA	ND	< MRL	2023	No		
9-chlorohexadecafluoro-3-oxanonane-1- sulfonic acid (9CI-PF3ONS)	μg/L	NA	NA	ND	< MRL	2023	No		
hexafluoropropylene oxide dimer acid (HFPO-DA)(GenX)	μg/L	NA	NA	ND	< MRL	2023	No	The purpose of monitoring for unregulated contaminants in drinking water is to provide data to support the USEPA Administrator's decisions concerning weather or not to regulate these contaminants in the future for the protection of public health.	
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluoro-3-methoxypropanoic acid (PFMPA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluorooctanesulfonic acid (PFOS)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluorooctanoic acid (PFOA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluoropentanesulfonic acid (PFPeS)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluoropentanoic acid (PFPeA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluoroundecanoic acid (PFUnA)	μg/L	NA	NA	ND	< MRL	2023	No		
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	µg/L	NA	NA	ND	< MRL	2023	No		
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	µg/L	NA	NA	ND	< MRL	2023	No		
perfluorotetradecanoic acid (PFTA)	μg/L	NA	NA	ND	< MRL	2023	No		
perfluorotridecanoic acid (PFTrDA)	μg/L	NA	NA	ND	< MRL	2023	No		
lithium	μg/L	NA	NA	ND	< MRL	2023	No		

Per– and Polyfluoroalkyl Substances (PFAS) Information

What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of human-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) currently used for fighting petroleum fires at airfields and in industrial fire suppression processes. PFAS chemicals are persistent in the environment, and some are persistent in the human body—meaning they do not break down and they can accumulate over time.

Is there a regulation for PFAS in drinking water?

On April 10, 2024, the USEPA established MCLs for a subset of PFAS chemicals. USEPA requires implementation of sampling in accordance with the new MCLs within 3 years of the publication date and implementation of any required treatment within 5 years.

These limits did not apply for the 2023 calendar year because they had not been published. However, the DoD proactively promulgated policies to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every 2 years. The DoD policy states that if water sampling results confirm that drinking water contains perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) at individual or combined concentrations greater than the 2016 EPA health advisory level of 70 parts per trillion (ppt), water systems must take immediate action to reduce exposure to PFOS or PFAS. For levels less than 70 ppt but above the 4 ppt level (draft at the time of policy publication), DoD committed to planning for implementation of the levels once USEPA's published MCLs take effect.

Has MCAGCC tested its water for PFAS in 2023?

Yes. We are pleased to report that drinking water testing results conducted in December were below the MRL for all 29 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every 2 years for your continued protection.

