2022 ANNUAL

CONSUMER CONFIDENCE REPORT

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

January–December 2022

PWS ID#3610703

CCR and You!

Marine Air Ground Task Force Training Command (MAGTFTC), Marine Corps Air Ground Combat Center (MCAGCC) is proud to present the 2022 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.

The 2022 annual CCR covers all drinking water testing completed from January 1, 2022 through December 31, 2022 (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 the sustainment and protection of 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:

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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 **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.

In order to ensure that tap water is safe to drink, the USEPA and State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

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.

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 http://www.epa.gov/safewater/lead.

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. The 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.

Where Does My Water Come From?

MAGTFTC, MCAGCC domestic water is supplied by ground water from the Surprise Springs and Deadman subaquifers 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 Twentynine Palms.

Water extracted 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.

Per- and Polyfluoroalkyl Substances (PFAS) Information

Has MCAGCC tested its water for PFAS?

Yes, MCAGCC conducted sampling in March 2020, and we are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 29 PFAS compounds covered by the sampling method, including perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). This means that PFAS were not detected in your water system. In accordance with U.S. Department of Defense (DoD) policy, the water system will be resampled every three years for your continued protection.

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

PFAS are a group of thousands of man-made chemicals. PFAS have been used in a variety of industrial and consumer products around the globe, including in the U.S., for decades. Due to the widespread use of these chemicals and their environmental persistence, most people in the United States have been exposed to PFAS compounds. 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) used for fighting petroleum fires.

Is there a federal or California regulation for PFAS in drinking water?

There is currently no federal drinking water standard for any PFAS compounds. In May 2016, the USEPA established a lifetime drinking water health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of PFOA and PFOS. Both chemicals are types of PFAS.

In California, there is no PFAS drinking water maximum contaminant level (MCL) regulation.

The DoD issued a policy in 2020 to monitor drinking water for PFAS at all DoD owned and operated water systems at a minimum of every three years. The DoD policy states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than the 2016 USEPA HA level of 70 ppt, water systems would 1) take immediate action to reduce exposure to PFOS or PFOA, to include providing alternative drinking water; and 2) undertake additional sampling to assess the level, scope, and localized source of contamination.

What about the USEPA's 2022 interim Health Advisories or proposed regulations?

USEPA issued interim Health Advisories for PFOS and PFOA in 2022. However, these newer levels are below quantifiable limits (i.e., below detection levels). USEPA is expected to issue a proposed regulation on PFAS drinking water standards for public comment in the next few months. DoD looks forward to the clarity that a nationwide regulatory standard for PFOS and PFOA in drinking water will provide.

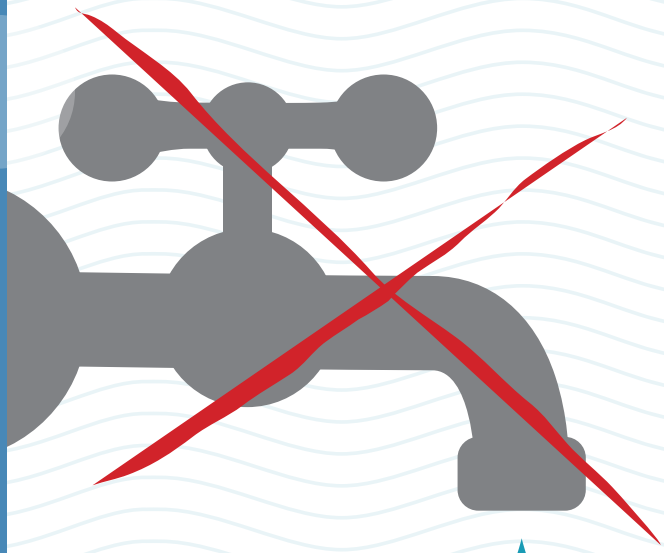
In anticipation of this USEPA drinking water regulation and to account for emerging science that shows potential health effects of PFOS and PFOA at levels lower than 70 ppt, DoD is evaluating its efforts to address PFAS in drinking water, and what actions we can take to be prepared to incorporate this standard, such as reviewing our current data and collecting additional sampling where necessary. DoD remains committed to communicating and engaging with our communities throughout this process.

Program Spotlight - Air Resources

The EA, Air Resources Program provides air quality management for MAGTFTC, MCAGCC (Combat Center). The Air Resources Program is responsible for the oversight of all activities that have the potential to emit air contaminants and for ensuring that air quality goals and standards are fulfilled. The Combat Center is continually taking steps to lower our emissions and improve our air quality, which allows the Combat Center to fulfill its mission of training Marines without interruption.

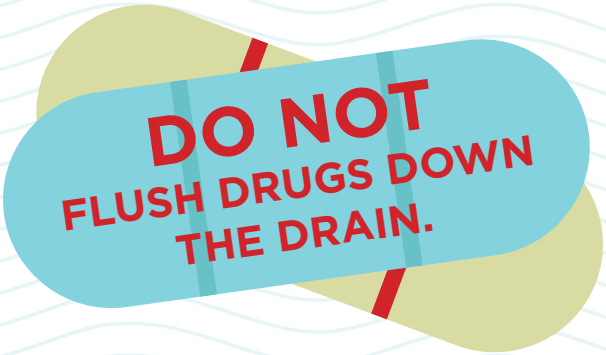
One of the biggest contributors of air pollution is power plants that utilize fossil fuels to generate heat or electricity. While the cogeneration plant at MCAGCC falls into this category, it utilizes a high-efficiency process that maximizes the energy generated while minimizing the impact on the environment. The cogeneration facility not only provides electricity, but it utilizes remaining energy to heat and cool the buildings on base. In addition, the Combat Center takes advantage of the sunny, desert climate by harnessing the sun and converting it into electricity. Home to one of the largest federally owned solar arrays, the Combat Center produces approximately 5 percent of the total electricity for the installation. It may not sound like much, but it produces enough power to support over 550 homes.

Despite the fact that MCAGCC currently leads the Marine Corps in green energy production, it continuously strives to improve processes, utilize alternative fuel sources, and invest in renewable energy sources. This continuous effort reduces our emissions and improves air quality. The Air Monitoring Stations, managed by the Air Resources Program, can attest to this fact. Even though the cogeneration facility is one of the installation's biggest air emission sources, the air quality on base is consistently clean.



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.



Old medicines can be taken to:

San Bernardino County Community Household Waste Collection Center

62499 29 Palms Highway, Joshua Tree

Hours of Operation:
Third Saturday of Every Month from 9 a.m. to 1 p.m.

For more information on proper disposal of unwanted medicines, please visit

www.nodrugsdownthedrain.org.

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 several 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 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)**.

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 (2022) 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 MCL 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								
Antimony	mg/L	0.006	0.006	0.0024	< 0.0024 - 0.0024	2022	No	Discharge from petroleum refineries
Arsenic	mg/L	0.01	0	0.0028	0.0012 - 0.0089	2022	No	Erosion of natural deposits
Barium	mg/L	1	1	0.0272	< 0.00097 - 0.11	2022	No	Erosion of natural deposits
Beryllium	mg/L	0.004	0.004	0.0002	< 0.00023 - 0.00023	2022	No	Discharge from metal refineries
Cadmium	mg/L	0.005	0.005	0.0001	ND - < 0.000062	2022	No	Erosion of natural deposits
Chromium VI	µg/L	NA	0.02	7.26	< 0.021 - 17	2022	No	Erosion of natural deposits or industrial discharges
Chromium	mg/L	0.05	0.05	0.0090	0.0025 - 0.019	2022	No	Erosion of natural deposits
Cyanide	mg/L	0.15	0.15	0.0043	< 0.0043 - 0.0043	2022	No	Wastewater discharges or industrial emissions
Flouride	mg/L	2	1	0.47	0.33 - .71	2022	No	Erosion of natural deposits
Haloacetic Acids (HAA5)	mg/L	0.006	NA	0.0020	< 0.0020 - 0.0020	2022	No	By-product of system disinfection
Mercury	mg/L	0.002	0.002	0.0001	< 0.000099 - 0.000099	2022	No	Erosion of natural deposits or industrial discharges
Nickel	mg/L	0.1	0.1	0.0008	< 0.00078 - 0.00078	2022	No	Erosion of natural deposits or industrial discharges
Nitrate (NO3)	mg/L	45	45	0.9300	< 0.16 - 1.3	2022	No	Natural deposits or agricultural runoff
Nitrite (NO2)	mg/L	1	1	0.090	< 0.090 - 0.090	2022	No	Natural deposits or agricultural runoff
Perchlorate	µg/L	6	NA	1.0	< 1.0 - 1.0	2022	No	May be found naturally or manufactured for industrial use
Total Coliform Bacteria		1	ND	ND	ND	2022	No	Naturally present in the environment
Total Trihalomethanes (TTHM)	mg/L	0.08	NA	0.017	< 0.017 - 0.017	2022	No	By-product of system disinfection
Secondary Drinking Water Standard								
Aluminum	mg/L	1	0.2	0.016	< 0.016 - 0.016	2022	No	Erosion of natural deposits
Chloride	mg/L	250	250	20.200	9.4 - 35	2021	No	Erosion of natural deposits
Colour	CU	15	15	3.000	< 3.0 - 3.0	2022	No	Naturally occurring organic materials
Copper	mg/L	1		0.0040	< 0.0028 - < 0.0056	2021	No	Plumbing corrosion
Foaming Agents (MBAS)	mg/L	0.5	NA	< 0.03	ND - < 0.03	2021	No	Municipal and industrial waste discharges
Iron	mg/L	0.3	0.3	0.172	< 0.026 - 0.3	2022	No	Erosion of natural deposits
Manganese	mg/L	0.5	0.05	0.0196	< 0.0014 - 0.073	2021	No	Erosion of natural deposits
Methyl-tert-butylether	mg/L	0.013	0.013	0.002	< 0.0019 - 0.0019	2022	No	Leaking underground storage tanks
Odor	TON	3	NA	1.000	< 1.0 - 1.0	2022	No	Naturally occurring organic materials
Silver	mg/L	0.1	NA	0.001	< 0.00054 - < 0.0011	2021	No	Industrial discharges
Sulfate	mg/L	500	250	31.0	18 - 45	2021	No	Naturally present in the environment
Total Dissolved Solids	mg/L	1000	500	167	82 - 210	2022	No	Erosion of natural deposits
Turbidity	NTU	5	NA	0.20	< 0.07 - 1.9	2022	No	Erosion of natural deposits
Zinc	mg/L	5	NA	0.003	< 0.0022 - < 0.0044	2021	No	Naturally present in the environment
Detection of Lead and Copper								
Copper 90th Percentile	µg/L	1300	170	36	ND - 41	2022	No	Plumbing corrosion
Lead 90th Percentile	µg/L	15	2	4.6	ND - 14	2022	No	Plumbing corrosion

UCMR 4								
Substance	Unit of Measure	MCL	PHG (MCLG)	MCAGCC Water	Range of Detection	Sample Date	Violation Yes/No	Requirement
Germanium	µg/L	NA	NA	0.37	0.36 - 0.37	2018	No	The Safe Drinking Water Act (SDWA), as amended in 1996, requires the U.S. Environmental Agency (USEPA) to establish criteria for a program to monitor unregulated contaminants and to identify no more than 30 contaminants to be monitored every five years.
Manganese	µg/L	NA	NA	0.50	ND - 0.50	2018	No	
a-BHC	µg/L	NA	NA	ND	ND	2018	No	
Chlorpyrifos	µg/L	NA	NA	ND	ND	2018	No	
Dimethipin	µg/L	NA	NA	ND	ND	2018	No	
Ethoprop	µg/L	NA	NA	ND	ND	2018	No	
Oxyfluorfen	µg/L	NA	NA	ND	ND	2018	No	
Profenofos	µg/L	NA	NA	ND	ND	2018	No	
Permethrin	µg/L	NA	NA	ND	ND	2018	No	
Tebuconazole	µg/L	NA	NA	ND	ND	2018	No	
Tribufos	µg/L	NA	NA	ND	ND	2018	No	
o-Toluidine	µg/L	NA	NA	ND	ND	2018	No	
Quinoline	µg/L	NA	NA	ND	ND	2018	No	
1-Butanol	µg/L	NA	NA	ND	ND	2018	No	The purpose of monitoring for unregulated contaminants in drinking water is to provide data to support the EPA Administrator's decisions concerning whether to regulate these contaminants in the future for the protection of public health.
2-Methoxyethanol	µg/L	NA	NA	ND	ND	2018	No	
2-Propen-1-ol	µg/L	NA	NA	ND	ND	2018	No	
Bromochloroacetic Acid	µg/L	NA	NA	0.35	ND - 0.35	2018	No	
Bromodichloroacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Chlorodibromoacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Tribromoacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Monobromoacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Dibromoacetic Acid	µg/L	NA	NA	0.63	0.40 - 0.63	2018	No	
Dichloroacetic Acid	µg/L	NA	NA	0.36	ND - 0.36	2018	No	
Monochloroacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Trichloroacetic Acid	µg/L	NA	NA	ND	ND	2018	No	
Total Organic Carbon	µg/L	NA	NA	ND	ND	2018	No	
Bromide	µg/L	NA	NA	86	46 - 86	2018	No	

Table Definitions

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 the USEPA.

NA: Not applicable.

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

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.

UCMR4: The fourth round of Unregulated Contaminant Monitoring Rule (UCMR). Every five years, the USEPA issues a list of unregulated contaminants to be monitored by public water systems.

Unit: Standard unit of measurement for this constituent.

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