

Substances That Could be in Your Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by the public water systems. U.S. Food and Drug Administration establish limits for contaminants in bottled water. Drinking water, including bottle, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

Where Does Our Water Come From?

In general, the sources of drinking water may include rivers, lakes, streams, ponds, reservoirs, springs, and/or wells. MCAS Yuma's main drinking water source is surface water, which comes from the Colorado River via a canal system. The water flows from the reservoir created by the Imperial Dam through the Gila Gravity Main Canal to the Water Treatment Facility at MCAS Yuma. MCAS Yuma also maintains an inter-tie with the City of Yuma. The inter-tie can be used as a "back-up" supply for both MCAS Yuma and the City of Yuma water systems, if needed. The water system also operates a groundwater well that is used, as needed, to blend with the surface water to improve water quality. MCAS Yuma owns the land around the well and restricts activities that could impact it.

Source Water Assessment

In 2004, the Arizona Department of Environmental Quality completed a source water assessment for the surface water intake and the ground water well used by the MCAS Yuma water treatment plant. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. These risks include, but are not limited to, gas stations, landfills, dry cleaners, agriculture fields, wastewater treatment plants, and mining activities. Once ADEQ identified the adjacent land uses, they were ranked as to their potential to affect the water source. The result of the assessment was with high risk to source water. The complete Assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 W. Washington, Phoenix, Arizona 85007, between the hours of 8:00 a.m. and 5:00 p.m. Electronic copies are available from ADEQ at dml@azdeq.gov or by visiting the ADEQ's Source Water Assessment and Protection Unit website at: www.azdeq.gov/environ/water/dw/swap.html

Are There Contaminants in MCAS Water?

To ensure the continued safety of the drinking water, MCAS Yuma tests your water every day. Last year we performed thousands of water tests, including continuous testing for turbidity and chlorine residual, and bi-weekly test for microbial contaminants, which can show the presence of microorganisms that, could cause illness. We use state-certified laboratories to detect substances in the water in quantities as small as one part per billion (an amount roughly equal to one second in the life of a 32 year old person).

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses;

Organic Chemical Contaminates, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production may also come from gas stations, urban storm water runoff, and septic systems;

Radioactive contaminants, which can be naturally occurring or may be results of oil and gas production and mining activities.

More information about all contaminants of concern and their potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline (800) 429-4791 or by accessing the ADEQ regulations @: http://www.azsos.gov/public_services/Title_18/18-04.htm

Important Health Information

Some people may be more vulnerable than the general population to contaminants in drinking water. Immunocompromised persons such as people with cancer under going 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 their drinking water source from their health care providers. EPA/CDC guidelines on appropriate means to reduce the risk of infection from Cryptosporidium and other microbial sources are available from the Safe Drinking Water Hotline (800-426-4791).

Lead in drinking water

If present lead elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. MCAS Yuma 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 thirty 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, (800) 426-4791, or at www.epa.gov/safewater/lead.



2017 Annual Drinking Water Report

The Water We Drink

The water treatment professionals at MCAS Yuma are very proud to provide you with the 2017 Annual Drinking Water Quality Report. We want to keep you informed about the water and services we delivered to you over the past year. Our primary commitment is, and always will be, to provide you with a safe and dependable supply of tap water to our customers, 24 hours a day, seven days a week. This report is a summary of MCAS Yuma's drinking water quality last year between January and December 2017.

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

MCAS YUMA vigilantly safeguards its water supplies and once again, we are proud to report that our system has never violated a maximum contaminant level.

We staff the Utility Division with water treatment and distribution system operators who have passed certification with the Arizona Department of Environmental Quality. The Utility Division employees remain vigilant in our commitment to you. We tested for more than 100 substances and conducted hundreds of measurements throughout the treatment and distribution systems, to ensure your safety. Even with the best water treatment, it is not always possible to remove all contaminants. To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the amount of certain substances in water provided by public systems.

This report is a snap shot of MCAS Yuma's drinking water quality between January and December 2017. The MCAS Yuma's Public Water System Identification Number is AZ0414082

What If I Have Questions About My Drinking Water?

If you have questions about this report or your drinking water supply please, contact Ronald L Kruse, Installation & Logistics Department, Public Works Director at (928) 269-3523. This report will not be provided by mail or other direct delivery method. Copies of the report will be available at the Water Treatment Plant or your housing Office.

Understanding the Language of Water

AL = ACTION LEVEL - THE CONCENTRATION OF A CONTAMINANT WHICH, IF EXCEEDED, TRIGGERS TREATMENT OR OTHER REQUIREMENTS.	
MCL = MAXIMUM CONTAMINANT LEVEL - THE "MAXIMUM ALLOWED" IS THE HIGHEST LEVEL OF A CONTAMINANT THAT IS ALLOWED IN DRINKING WATER.	
MCLG = MAXIMUM CONTAMINANT LEVEL GOAL - THE "GOAL" IS THE LEVEL OF A CONTAMINANT IN DRINKING WATER BELOW WHICH THERE IS NO KNOWN OR EXPECTED RISK TO HEALTH.	
MFL = MILLION FIBERS PER LITER. MRDL = MAXIMUM RESIDUAL DISINFECTANT LEVEL. MRDLG = MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL.	
MREM = MILLIREMS PER YEAR - A MEASURE OF RADIATION ABSORBED BY THE BODY. NA = NOT APPLICABLE , SAMPLING WAS NOT COMPLETED BY REGULATION OR WAS NOT REQUIRED.	
NTU = NEPHELOMETRIC TURBIDITY UNITS, A MEASURE OF WATER CLARITY. PCI/L = PICOCURIRES PER LITER - PICOCURIRES PER LITER IS A MEASURE OF THE RADIOACTIVITY IN WATER.	
PPM = PARTS PER MILLION OR MILLIGRAMS PER LITER	$\text{ppm} \times 1000 = \text{ppb}$ (MG/L).
PPB = PARTS PER BILLION OR MICROGRAMS PER LITER	$\text{ppb} \times 1000 = \text{ppt}$ ($\mu\text{G/L}$).
PPT = PARTS PER TRILLION OR NANOGRAMS PER LITER	$\text{ppt} \times 1000 = \text{ppq}$ LITER.
PPQ = PARTS PER QUADRILLION OR PICOGRAMS PER LITER	LITER.
TT = TREATMENT TECHNIQUE - A TREATMENT TECHNIQUE IS A REQUIRED PROCESS INTENDED TO REDUCE THE LEVEL OF A CONTAMINANT IN DRINKING WATER.	

Contaminant (units)	Violation Y / N	Running Annual Average (RAA) or Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
Microbiological							
Total Coliform Bacteria (System takes \leq 40 monthly samples) 1 positive monthly sample	No	0	(A)			7 per month	Naturally Present in Environment
Fecal coliform and E. Coli (TC Rule)	No			0	0		Human and animal fecal waste
Turbidity (NTU), surface water only	No	0.147 (RAA)	Range 0.26 to 0.07	Filtration	n/a	Continuous	Soil Runoff
Disinfectants							
Chlorine (ppm)	No	Range 0.048 to 1.25		MRDL = 4	MRDLG = 4	Continuous	Water additive used to control microbes
Disinfection By-Products							
Haloacetic Acids (ppb) (HAA5)	No	(RAA) 0.011	0.013 to 0.0042	0.060	n/a	Quarterly	Byproduct of drinking water disinfection
*Total Trihalomethanes (ppb) (TTHM)	No	(RAA) .0053	0.077 to 0.033	0.080	n/a	Quarterly	Byproduct of drinking water disinfection
Lead & Copper							
Copper (ppm)	No	90 th Percentile =	0.51-0.071	1.3	0	08/2015	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	No	90 th Percentile =	0.0080-<0.0010	15	0	08/2015	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides							
Alpha emitters (pCi/L)	No	0.6 \pm 1.2	P	15	0	03/2015	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	No	<0.7	A	5	0	03/2015	Erosion of natural deposits
Uranium (pCi/L)	No	3.5 \pm 0.8	P	30	0	03/2015	Erosion of natural deposits
Inorganics							
Barium (mg/L)	No	0.079	P	2.0	0	6/28/17	Erosion of Natural deposits
Arsenic (mg/L)	No	0.0014	P	0.010	0	6/28/17	Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes
Nitrate (mg/L)	No	1.8	P	5	0	6/2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride (mg/L)	NO	0.62	P	4	0	6/28/17	Erosion of Natural deposits
Unregulated Contaminants							
Sodium	No	220	P	No MCL		6/28/17	Erosion of Natural deposits
Nickel	No	Non detect	A	No MCL		6/28 17	Erosion of Natural deposits

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

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IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for PWS ID 14082

On November 2017 we became aware that our system recently failed to collect the correct number of drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Inadvertently, during November 2017 three routine samples were not collected, but all other samples were negative for the presence of total coliforms. **What should I do?**

There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for Total Coliform Bacteria and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up Samples were taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were taken
Total Coliform Bacteria	7 samples every month	4 samples	November 2017	December 2017

The additional requirements for plant operators are being incorporated in daily duties for sampling, providing clear lines of responsibly, mitigating a further non-sampling event.