Substances That Could be in 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 contaminates 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 necessary indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come a variety of sources, such as agriculture, urban stormwater 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 stormwater 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 contaminates 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).

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 7650 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).

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 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.

2009 Annual Drinking Water Report

The Water We Drink

The water treatment professionals at MCAS Yuma are very proud to provide you with the 2009 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 well 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 2009.

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 2009. The MCAS Yuma's Public Water System Identification Number is 14082

Understanding the Language of Water

The following are definitions of terms used to describe units of measure for substances that may be found in drinking water.

Action Level, (AL)- the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant level, (MCL)- The " Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the "MCLG" as feasible using the best available treatment technology.

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 allow for a margin of safety.

Non-Detectable (ND)- Laboratory analysis indicates that the constituent is not present.

Non-Applicable (N/A)-Information not applicable

Parts per billion (ppb)- a unit of measure equivalent to a single penny in $10,000,000

Nephelometric Turbidity units- the cloudiness of water. Turbidity it is a good indicator of water quality.

Milligrams per liter (mg/l)- a unit of measure equivalent to a single penny in $10,000

Picocuries per liter (PCi/L)- a measure of radioactivity.

Microbiological Contaminant based on system wide results

Substance and (Unit of measurement)	Violation Yes/No	Level Detected	MCLG	MCL	Likely Source of contamination
Total Coliform Bacteria	No	0	0	*	Naturally present in the environment

Substance	Treatment Technique applies instead of MCL	Violation	Maximum	Range	Major Source in Drinking Water
Turbidity (NTU)	No value can exceed 1 NTU at any time and at least 95% of monthly measurements must be less than or equal to 0.5 NTU	No	0.34	.01-.34	Soil runoff

Inorganics

	Results	MCL	MCLG	Major Source in Drinking Water
Arsenic (mg/l	< 0.0030	0.05	N/A	Erosion of natural deposits
Barium (mg/l)	< 0.02	2.0	2.0	Erosion of natural deposits
Fluoride (mg/l)	0.63	4.0	4.0	Erosion of natural deposits
Cyanide (mg/L	< 0.020	0.2	0.2	Discharge from plastic and fertilizer factories
Nitrate (mg/L)	1.7	10	0	Runoff from fertilizer use.

Synthetic Organics Chemicals

	Results	MCL	MCLG	Major Source in Drinking Water
Benzo(a)pyrene (mg/l	< 0.000036	0.0020	N/A	Leaching from lining of water storage tanks and distribution tanks

Radioactive Chemicals

2009	Results	MCL	MCLG	Major Source in Drinking Water
Alpha emitters (pCi/L)	<-1.0	15	0	Erosion of natural deposits
Combined Radium (pCi/L)	<0.4	5	0	Erosion of natural deposits
Uranium (ug/L)	16.8	30	0	Erosion of natural deposits

Disinfectant and Disinfection Byproduct Monitoring

Substance and units	Range	Running Annual Average	MCL	MCLG	Major Source in Drinking Water
Chlorine (MGL) Quarterly average in Distribution system	0.46- 0.75	0.59	MRDL=4.0	MRDLG=4.0	Water additive used to control Microbes
Total Trihalomethanes (TTHM) (mg/L)	0 .0585 - 0.798	0.0682	0.80	N/A	Byproduct of drinking water disinfection
Haloacetic Acids	0.0153-.00175	0.0162	0.060	N/A	Byproduct of drinking water disinfection

What are Trihalomethanes?

Trihalomethanes are a group of volatile organic compounds that are formed when chlorine reacts with the naturally-occurring organic matter in water. Chlorine is a common disinfectant used to treat, or clean, drinking water. Because of this, trihalomethanes are present in virtually all chlorinated drinking water. Some people who drink water containing trihalomethanes in excess of the MCL for many years may experience problems with their liver, kidney or central nervous systems, and may have an increased risked of getting cancer.

Lead and Copper in standing water samples-2007

Contaminant	Violation	# of samples Above the AL	90th Percentile Value mg/L	Action Level	MCLG	Major Source for Lead and Copper
Copper	No	0	0.28	1.3	0	Corrosion of household Plumbing
Lead	No	0	<0.002	0.015	0	systems; erosion of natural deposits

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

What If I Have Questions About My Drinking Water?

If you have questions about this report or your drinking water supply please, contact the Base Services Department Water Plant Lead Operator at (928) 269-2344. 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.

Additional Information

Water Conservation: Adjust your watering schedule to the season. Water your lawn every third day and your winter lawn every fifth day. Minimize evaporation by watering during early morning hours, when temperatures are cooler and winds are lighter.