

ANNUAL
**WATER
QUALITY
REPORT**

Water testing performed in 2007



City of YUMA
"Making Yuma Better!"

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2007. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

In 2004, the Arizona Department of Environmental Quality (ADEQ) completed a source water assessment for the Yuma Main Canal, "A" Main Canal, and groundwater wells used by the City of Yuma. 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 adjacent land use with a low risk to all source water.

The complete assessment is available for inspection at the Arizona Department of Environmental Quality, 1110 West 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. For more information, call Susanna Hitchcock, Water Quality Assurance Supervisor with the City of Yuma at (928) 373-4536 or visit the ADEQ's Source Water Assessment and Protection Unit Web site at: www.azdeq.gov/environ/water/dw/swap.html.

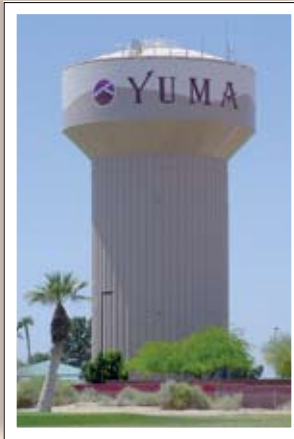
THE WATER WE DRINK

The Utility Division employees at the City of Yuma are very proud to provide you with the 2007 Annual 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 more than 103,000 customers, 24 hours a day, seven days a week.

We staff our water system with Arizona Department of Environmental Quality examination certified Grade 3 and 4 water treatment and distribution system operators. Throughout 2007, the tap water met or surpassed all federal and state drinking water standards.

The Utility Division employees remain vigilant in our commitment to you, as we tested for more than 100 substances, and conducted thousands of measurements and tests 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 EPA prescribes regulations that limit the amount of certain substances in water provided by public water systems.

The City of Yuma tests your tap water every day. In addition to continuous monitoring for turbidity and chlorine residual, 1518 samples were collected, and 4038 analyses were performed for 240 parameters. Our state certified laboratories use equipment to detect substances in the water in quantities as small as one part per billion (an equivalent comparison would be one second in the life of a 32 year old person.) This report is a snapshot of Yuma's drinking water quality between January and December 2007. The City of Yuma's Public Water System Identification Number is 14024.



Community Participation

Our Water and Sewer Commission meets on-call at 5:00 p.m. in the Department of Public Works Administrative Conference Room. The public is invited. You can contact the Department of Public Works at (928) 373-4500 for more information regarding meeting dates.

Questions?

If you have any questions about this report or the quality of our drinking water, please contact Betsy Bowman, Laboratory Director, at the Utility Treatment Laboratory, (928) 329-2893.

E-mail address: Betsy.Bowman@yumaaz.gov

City of Yuma Home Page: www.yumaaz.gov

Environmental Protection Agency: (800) 426-4791

Arizona Department of Environmental Quality: (800) 234-5677

Where Does My Water Come From?

The main source of Yuma's drinking water is surface water from the Colorado River and is delivered to the Main Street Treatment Facility via the canal system. The Agua Viva Water Treatment Facility presently uses well water. Three wells supply water to the facility. The well water is treated for iron and manganese and chlorinated prior to distribution in our system. Water drawn from a well is groundwater. The City of Yuma owns the land around the well and restricts activities that could contaminate it. The Agua Viva Water Treatment Facility will be expanded to produce 24 million gallons per day of surface water.

Substances That Might be in Drinking 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 public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, 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.

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

Pesticides and Herbicides, which 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, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants in tap water and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791 or visit online at www.epa.gov/safewater/hotline. Information on bottled water can be obtained from the U.S. Food and Drug Administration.



Lead and Drinking Water

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. The City of 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 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 Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.



Variance and Exemptions (ADEQ or EPA permission not to meet an MCL or a treatment technique under certain conditions)

The City of Yuma was granted a waiver from the Enhanced Coagulation and Enhanced Softening rules on July 2, 2002, by the Arizona Department of Environmental Quality. The waiver was based on two years of research performed on City of Yuma water. The data confirmed that the Colorado River water at Yuma is not amenable to the requirements of the rule. The waiver remains in effect as long as the running annual average for Total Trihalomethanes (TTHM) remains below 0.064mg/L, and Haloacetic Acids(HAA5) remains below 0.048 mg/L .

Test Results

The data in this report are from the most recent testing that was done within the last five years on the required contaminants. Depending on the contaminant, required testing may be performed daily, monthly, quarterly, annually, or every five years. This report lists only the substances that were detected in the water.

REGULATED SUBSTANCES				Main Street Treatment Facility		Agua Viva Treatment Facility			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2005	15	0	<1.0	<0.6–<1.0	0.9	0.2–1.0	No	Erosion of natural deposits
Arsenic (ppb)	2007	10	0	2	NA	2	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2007	2	2	0.13	NA	0.069	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Combined Radium (pCi/L)	2005	5	0	0.5	ND–0.5	<0.4	<0.3–<0.4	No	Erosion of natural deposits
Fluoride (ppm)	2007	4	4	0.44	NA	0.64	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Turbidity ¹ (NTU)	2007	TT	NA	0.167	0.051–0.167	0.105	0.039–0.105	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2007	TT	NA	100	NA	100	NA	No	Soil runoff
Uranium (pCi/L)	2005	30	0	6.6	5.2–6.6	8.8	5.7–8.8	No	Erosion of natural deposits

City of Yuma Distribution System

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2007	MRDL=4	MRDLG=4	1.1	0.01–1.10	No	Water additive used to control microbes
HAAs [Haloacetic Acids] (ppb)	2007	60	NA	9	1.8–9	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2007	80	NA	56	17–56	No	By-product of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2007	5% of positive monthly samples are positive	0	0.46	NA	No	Naturally present in the environment

Tap water samples were collected from the community²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2006	1.3	1.3	0.055	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2006	15	0	0.75	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

² Tap water samples were collected for lead and copper analyses from 59 homes in the Main Street Treatment Facility service area.

Definitions

AL (Action level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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 allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.