

City of El Mirage Water Quality Report 2006

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo o hable con alguien que lo entienda bien.

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water standards. Throughout the year, the City of El Mirage Water System vigilantly safeguards its water supply by conducting water quality tests. The City of El Mirage Water System did not exceed a maximum contaminant level (MCL) or any other water quality standard for the calendar year 2006.

Do I need to take special precautions?

Some people may be more sensitive to contaminants in drinking water than the general population. Individuals with weak immune systems 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 at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA and Centers for Disease Control (CDC) guidelines on the appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The City of El Mirage Water System is supplied by groundwater. There are seven gravel packed wells that recover water from the Agua Fria Aquifer. In October of 2006, one of the wells was taken out of service and refurbished. Because of this regular maintenance, the City was unable to perform fourth quarterly sampling for volatile organic, synthetic organic, and radioactive chemicals. The sampling will occur in early 2007 when the maintenance has been completed.

Source water assessment and its availability

Based on a mandate set forth in the 1996 amendments to the Safe Drinking Water Act, ADEQ evaluated each water source used by public water systems in Arizona. The quality of ground water being drawn was assessed along with land use activities and hydrogeology. ADEQ gave the City of El Mirage Water System wells a low risk designation. Additional information can be obtained from the ADEQ website at: <http://www.azdeq.gov/environ/water/dw/swap.html>. The City of El Mirage Water System is a member of the Phoenix Active Management Area (AMA) and is a 100 Year Assured Water Provider.

Why are there 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 EPA Safe Drinking Water Hotline (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. Examples of these substances are: 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, which 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, 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 can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

You are invited to participate at City of El Mirage Council Meetings and voice your opinions or concerns about your drinking water. The City Council meets at 6:00 pm on the second and fourth Thursday of each month at the El Mirage Elementary School located at 13500 N. El Mirage Road.

Stormwater Can Affect Your Drinking Water

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces such as driveways, sidewalks, and streets prevent stormwater from naturally soaking in the ground. Stormwater can pick up debris, chemicals, dirt and other pollutants and flow into a storm sewer system. Anything that enters a storm sewer system is discharged untreated in the water bodies we use for swimming, fishing, and providing water. That is why it is important to recycle or properly dispose of household products that contain chemicals such as insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids. The City of El Mirage has an annual Household Hazardous Waste Collection Day where household products can be properly disposed by citizens of El Mirage.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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. Effective January 23, 2006, EPA revised the arsenic MCL to 10 ppb.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u> <u>Low</u> <u>High</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Haloacetic Acids (HAA5) (ppm)	NA	0.06	0.0016	0.001	0.002	2006	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppm)	NA	0.08	0.0028	0.001	0.004	2006	No	By-product of drinking water disinfection
Inorganic Contaminants								
Arsenic (ppb)	0	10	6.7	4.5	8	2006	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.022	0.01	0.04	2006	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppm)	0.10	0.10	0.0087	0.004	0.016	2006	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.44	ND	0.59	2006	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	2.77	1.4	4.5	2006	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Microbiological Contaminants								
Total Coliform (% positive samples/month)	0	5	0	NA	NA	2006	No	Naturally present in the environment

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.19	2004	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppm)	0	0.015	0.0013	2004	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL or MRDL</u>	<u>Your Water</u>	<u>Violation</u>	<u>Typical Source</u>
Inorganic Contaminants					
Antimony (ppb)	6	6	ND	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Cadmium (ppb)	5	5	ND	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Nitrite [measured as Nitrogen] (ppm)	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	ND	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppb)	0.5	2	ND	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories

Unit Descriptions	
<u>Term</u>	<u>Definition</u>
ppm	Parts per million, or milligrams per liter (mg/L)
ppb	Parts per billion, or micrograms per liter (µg/L)
% positive samples/month	Percent of samples taken monthly that were positive
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended

Important Drinking Water Definitions	
<u>Term</u>	<u>Definition</u>
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variations and Exemptions	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level

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