City of El Mirage
Public Water System: AZ04-07-091

GRAND HERITAGE, BRIGHT FUTURE

DRINKING WATER SOURCE
The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, EPA enforces regulations which 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. Our water source is groundwater from our nine wells located throughout the City.

DRINKING WATER CONTAMINANTS

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: Such as agricultural chemicals, used to protect plants from insects, diseases, or weeds.

Organic Chemical Contaminants: Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants: That can be naturally occurring or be the result of oil and gas production and mining activities.

VULNERABLE POPULATION
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. 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants called the EPA Safe Drinking Water Hotline at 1-800-426-4791.

SOURCE WATER ASSESSMENT SUMMARY
In 2004, the Arizona Department of Environmental Quality (ADEQ) evaluated the hydrology and surveyed the types of land uses occurring near the source water (groundwater) for El Mirage. The El Mirage wells and source water were rated with a low risk designation that signifies the groundwater and wells are protected and there is no threat of contamination to El Mirage drinking water. You can be confident that the groundwater pumped from the City wells for drinking water is safe and secure.

Source Water Assessments are on file with ADEQ and are available for public review. Copies are available by contacting the Source Water Protection Coordinator at recordcenter@azdeq.gov.

SPECIAL HEALTH INFORMATION

Arsenic
El Mirage drinking water meets EPA’s standard for arsenic. However, if it does contain low levels of arsenic, EPA’s standard considers 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.

Nitrates
Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome.

Nitrates levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should seek advice about drinking water from your health care provider.

Lead
Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. El Mirage Water System 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791.

DEFINITIONS
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present.
Level 2 Assessment: A more detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria was present.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements.
Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.
Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer’s tap.
Maximum Residual Disinfectant Level Goal (MRLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur.

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method.
Milligrams per year (MREM): A measure of ionizing radiation absorbed by the body.
Not Applicable (NA): Sampling was not completed by regulation or was not required.
Not Detected (ND): Not detectable at reporting limit.
Nephelometric Turbidity Units (NTU): A measure of water clarity.
Million fibers per liter (MFL): Million fibers per liter (MFL)
Picoicures per liter (pCi/L): Measure of radioactivity in water.
ppm: Parts per million or Milligrams per liter (mg/L).
ppb: Parts per billion or Micromgrogen per liter (µg/L).
ppt: Parts per trillion or Nanograms per liter (ng/L).
ppq: Parts per quadrillion or Picograms per liter (pg/L).

The data table in this report presents analytical testing results from a contracted commercial laboratory certified in drinking water testing by the state of Arizona Department of Health Services. For your information, there is a compiled list showing substances detected in El Mirage drinking water during 2018 or the last sampling cycle. The City of El Mirage conducts extensive monitoring to guard against contaminants in the drinking water according to federal and state laws. The state of Arizona requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. All detected contaminants were below the maximum contaminant level in the drinking water. There were no violations. This ensures that the quality of the drinking water for El Mirage is safe and poses no health risks.
Why is my water cloudy or milky? 
Drinking water delivered through the municipal system can sometimes look “milky” or “cloudy.” The cloudiness often occurs when air becomes trapped in the water. While this may impact the water’s appearance, it does not affect the water’s safety and will not harm household plumbing systems. Air can be introduced in many ways, including the groundwater pumping process, water pipeline maintenance, or the process of bringing cold groundwater to the warmer surface. Because water pipelines are pressurized, air remains trapped in the water until you open the faucet and release the pressure.

Why does my water smell like rotten eggs or sewer? 
These odors are often caused by gases forming in the household drain. These gases are formed by bacteria which live on food, soap, hair and other organic matter in the drain trap. These gases are heavier than air and remain in the drain until the water is turned on. As the water runs down the drain, the gases are expelled into the atmosphere around the sink. It is natural to associate these odors with the water because they are observed only when the water is turned on. In this case, the odor is not in the water, it is simply the water pushing the gas out of the drain. This can be verified by taking a glass of water from the tap and walking away for another area to smell the glass of water.

Run the cold water for about 15 seconds into the drain to another area to smell the glass of water. The event was not an emergency and the City followed correct procedures in addressing the situation.

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