

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 public water systems. For water bottles, the U.S. Food and Drug Administration establishes limits for contaminants. 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.

Where Does Our Water Come From?

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 system, 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

Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

Are There Contaminants in MCAS Water?

To ensure the continued safety of the drinking water, MCAS Yuma tests your water weekly, monthly and annually. Last year we performed thousands of water tests, including continuous testing for turbidity, chlorine residual, and microbial contaminants, which can show the presence of microorganisms that, could cause illness. We use state-certified laboratories to detect substances in the water.

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 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 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. 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

Elevated levels of lead can cause serious health problems, especially for pregnant women and children. Lead in drinking water is primarily from materials 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. 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

The Water We Drink

The water treatment professionals at Marine Corps Air Station Yuma and Environmental Department are very proud to provide you with the 2018 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, 24



2018 Annual Drinking Water Report

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 2018.

MCAS Yuma vigilantly safeguards its water supplies and proud to report that our system never exceeded maximum contaminant levels. Last year, as in years past, your tap water met all EPA and state drinking water health standards.

We staff the MCAS Utility Division with water treatment and distribution system operators who have passed certification with the Arizona Department of Environmental Quality. We tested for more than 100 substances throughout the treatment and distribution systems to ensure your safety. However, removing all contaminants from your water is not feasible. 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. 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 Mr. Ronald L Kruse, Installation & Logistics Department, Public Works Director at (928) 269-3523. Copies of this report will be available at the Water Treatment Plant, housing Office or at <https://www.mcas-yuma.marines.mil/>.

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. | | | | | | | | | |
| MRM = 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. PCl/L = PICOCURIES PER LITER - PICOCURIES PER LITER IS A MEASURE OF THE RADIOACTIVITY IN WATER. | | | | | | | | | |
| PPM = PARTS PER MILLION OR MILLIGRAMS PER LITER | <table border="1"> <tr> <td>ppm x 1000 = ppb</td> <td>(MG/L).</td> </tr> <tr> <td>ppb x 1000 = ppt</td> <td>(µG/L).</td> </tr> <tr> <td>ppt x 1000 = ppq</td> <td>LITER.</td> </tr> <tr> <td></td> <td>LITER.</td> </tr> </table> | ppm x 1000 = ppb | (MG/L). | ppb x 1000 = ppt | (µG/L). | ppt x 1000 = ppq | LITER. | | LITER. |
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| | LITER. | | | | | | | | |
| PPB = PARTS PER BILLION OR MICROGRAMS PER LITER | | | | | | | | | |
| PPT = PARTS PER TRILLION OR NANOGRAMS PER | | | | | | | | | |
| PPQ = PARTS PER QUADRILLION OR PICOGRAMS PER | | | | | | | | | |
| NG/L = NANOGRAM PER LITER | | | | | | | | | |
| TT = TREATMENT TECHNIQUE - A TREATMENT TECHNIQUE IS A REQUIRED PROCESS INTENDED TO REDUCE THE LEVEL OF A CONTAMINANT IN DRINKING WATER. | | | | | | | | | |
| NON-DETECT - A NON-DETECT MEANS THAT THE LAB DID NOT SEE THE ANALYTE OR THAT THE QUANTITATIVE RESULT WAS LESS THAN THE LABORATORY'S LIMIT OF DETECTION | | | | | | | | | |

| 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 ≤ 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 | 0.60 to 1.19 | | MRDL = 4 | MRDLG = 4 | Continuous | Water additive used to control microbes |
| Disinfection By-Products | | | | | | | |
| Haloacetic Acids (ppb) (HAA5) | No | 16 ppb | 10 to 24 ppb | 0.060 | n/a | Quarterly | Byproduct of drinking water disinfection |
| Total Trihalomethanes (ppb) (TTHM) | No | 71 ppb | 53-86 ppb | 0.080 | n/a | Quarterly | Byproduct of drinking water disinfection |
| Lead & Copper | | | | | | | |
| Copper (ppm) | No | 90 th Percentile = .28 | 0.28 - .010 | 1.3 | 0 | 08/2018 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) | No | 90 th Percentile = 4.1 | ND - 4.3 ppb | 15 | 0 | 08/2018 | Corrosion of household plumbing systems; erosion of natural deposits |
| Radionuclides | | | | | | | |
| Alpha emitters (pCi/L) | No | .6 | P | 15 | 0 | 05/2018 | Erosion of natural deposits |
| Combined Radium 226 & 228 (pCi/L) | No | <1 | A | 5 | 0 | 05/2018 | Erosion of natural deposits |
| Uranium (pCi/L) | No | 2.3 | P | 30 | 0 | 05/2018 | Erosion of natural deposits |
| Inorganics | | | | | | | |
| Barium (mg/L) | No | .010 | P | 2.0 | 0 | 2/2018 | Erosion of Natural deposits |
| Arsenic (mg/L) | No | 0.0064 | P | 0.010 | 0 | 2/2018 | Erosion of natural deposits, runoff from orchards, runoff from glass & electronics production wastes |
| Nitrate (mg/L) | No | 3 | P | 5 | 0 | 2/2018 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Fluoride (mg/L) | NO | 0.78 | P | 4 | 0 | 2/2018 | Erosion of Natural deposits |
| Unregulated Contaminants | | | | | | | |
| Sodium | No | 270 | P | No MCL | | 2/2018 | Erosion of Natural deposits |
| Nickel | No | Non detect | A | No MCL | | 2/2018 | Erosion of Natural deposits |

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for PWS ID 14082

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, in 2018 some routine samples were not collected in a timely manner. At no time was the base drinking water at risk of contamination.

What should I do?

There is nothing you need to do at this time.

The table below lists the untimely reports, samples which were improperly tested during 2018 with explanations for each error, timeframes in which they occurred, and the corrective actions taken to remedy the error.

| Violation Type | Explanation, Health Effects | Time Period | Corrective Actions |
|-------------------|--|-------------------------|--|
| Reporting Failure | 2018 No Nitrate sample taken, No adverse health effects. | 01/01/2018 - 03/31/2018 | Created database to track required reports and submittal dates. |
| Reporting failure | Late Submittal of Stage 2 DBP report, no health effects. | 01/01/2018 - 03/31/2018 | Created database to track required reports and submittal dates. |
| Reporting Failure | No 2018 VOC sample taken, no adverse health effects. | 01/01/2018 - 12/31/2018 | Sample collected and Tier 3 Public Notification was placed on MCAS Yuma's Website. |
| Reporting Failure | Lead Consumer Notification Letters (LCN) not distributed | 01/01/2018 - 12/31/2018 | Letters were distributed in January 2019. |
| Reporting Failure | Late Submittal of RTCR report, no health effects. | 03/01/2018 - 03/31/2018 | Created database to track required reports and submittal dates. |
| Reporting Failure | Late Submittal of RTCR report, no health effects. | 09/01/2018 - 09/30/2018 | Created database to track required reports and submittal dates. |
| Reporting Failure | Late Submittal of RTCR report, no health effects. | 05/01/2018 - 05/31/2018 | Created database to track required reports and submittal dates. |
| Reporting Failure | Late Submittal of RTCR report, no health effects. | 10/01/2018 - 10/31/2018 | Created database to track required reports and submittal dates. |