

WHITEMAN AIR FORCE BASE
2011 Annual Water Quality Report
(Consumer Confidence Report)
MO1079501

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This is an annual report on the quality of water delivered by Whiteman AFB. This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water. Users will not be mailed individual copies of this report.

Under the Consumer Confidence Reporting Rule of the federal Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents, and the health risks associated with any contaminants.

We continually monitor the drinking water for contaminants. Our water is safe to drink.

Your drinking water comes from the Whiteman AFB Water Treatment Plant operated by 509th Civil Engineering Squadron. Our system has been assigned the identification number MO 1079501 for the purposes of tracking our test results. The plant treats water from the Ozark Aquifer pumped from groundwater wells located on base. Your water is filtered and treated with chlorine to disinfect the water. These wells have been tested and the results are available from the 509th Medical Operations Squadron, Bioenvironmental Engineering Flight (660-687-4324). If you would like to observe the decision-making process that affects your drinking water quality or if you have any further questions, the water plant can be reached at 660-687-1984.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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. Whiteman AFB 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 (800-426-4791) or at <http://water.epa.gov/drink/info/lead/index.cfm>.

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, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water 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.

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, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants Report

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Regulated Contaminants

| Regulated Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Typical Source |
|------------------------|-----------------|---------------|--------|------|-----|------|--|
| Barium | 5/16/2011 | 0.0596 | 0.0596 | ppm | 2 | 2 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Fluoride | 5/16/2011 | 0.66 | 0.66 | ppm | 4 | 4 | Natural deposits; Water additive which promotes strong teeth |
| Chromium | 5/16/2011 | 1.36 | 1.36 | ppb | 100 | 100 | Discharge from steel and pulp mills |

| Disinfection Byproducts | Monitoring Period | RAA | Range | Unit | MCL | MCLG | Typical Source |
|------------------------------|-------------------|-----|-------|------|-----|------|--|
| Total Trihalomethanes (TTHM) | 2008 - 2010 | 10 | 9.57 | ppb | 80 | 0 | Byproduct of drinking water chlorination |

| Lead and Copper | Date | 90th Percentile | Range | Unit | AL | Sites Over AL | Typical Source |
|-----------------|-----------|-----------------|----------------|------|-----|---------------|---|
| Copper | 2011-2013 | 0.77 | 0.0679 - 0.853 | ppm | 1.3 | 0 | Corrosion of household plumbing systems |

| Microbiological | Result | MCL | MCLG | Typical Source |
|---|--------|-----|------|----------------|
| No Detected Results were Found in the Calendar Year of 2011 | | | | |

| Radionuclides | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Typical Source |
|--------------------|-----------------|---------------|---------|-------|-----|------|-----------------------------|
| Radium-226 | 1/24/2007 | 0.6 | 0 - 0.6 | pCi/l | 5 | 0 | |
| Gross Alpha, Total | 1/24/2007 | 1.0 | 1.0 | pCi/l | 15 | 0 | Erosion of natural deposits |

Optional Monitoring (not required by EPA)

Optional Contaminants

Monitoring is not required for optional contaminants.

| Secondary Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG |
|---|-----------------|---------------|---------|------|-----|------|
| Alkalinity, CaCO ₃ Stability | 5/16/2011 | 265 | 265 | MG/L | | |
| Calcium | 5/16/2011 | 52.7 | 52.7 | MG/L | | |
| Chloride | 5/16/2011 | 29.5 | 29.5 | MG/L | 250 | |
| Hardness, Carbonate | 5/16/2011 | 232 | 232 | MG/L | | |
| Iron | 5/16/2011 | 0.00978 | 0.00978 | MG/L | 0.3 | |
| Magnesium | 5/16/2011 | 24.3 | 24.3 | MG/L | | |
| pH | 5/16/2011 | 8.02 | 8.02 | PH | 8.5 | |
| Potassium | 5/16/2011 | 3.89 | 3.89 | MG/L | | |
| Sodium | 5/16/2011 | 32.3 | 32.3 | MG/L | | 20 |
| Sulfate | 5/16/2011 | 40.4 | 40.4 | MG/L | 250 | |
| Total Dissolved Solids | 5/16/2011 | 336 | 336 | MG/L | 500 | |
| Zinc | 5/16/2011 | 0.0108 | 0.0108 | MG/L | 5 | |

The state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

For more information please contact Lt Young at the 509th Medical Operations Squadron, Bioenvironmental Engineering Flight (660-687-4324).

Definitions:

MCLG: Maximum Contaminant Level Goal, or 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.

MCL: Maximum Contaminant Level, or 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.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

90th percentile: For Lead and Copper testing, 10% of test results are above this level and 90% are below this level.

Level Found: is the average of all test results for a particular contaminant.

Range of Detections: Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.

RAA: Running Annual Average, or the average of sample analytical results for samples taken during the previous four calendar quarters.

Abbreviations:

ppb: parts per billion or micrograms per liter.

ppm: parts per million or milligrams per liter.

n/a: not applicable.