

Consumer Confidence Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) for Keesler Air Force Base (KAFB) and the Biloxi Veterans Administration Medical Center (BVAMC) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Where does my water come from?

Drinking water from KAFB/BVAMC, which will be referred to as Keesler throughout the document, is pumped from the Lower Graham Ferry Aquifer, a groundwater source. All water provided to Keesler is pumped from wells located on base property. The water from the wells is mixed, treated, stored, and distributed.

Is my water safe?

Yes, drinking water at Keesler is safe. Bioenvironmental Engineering follows all regulatory compliance regarding drinking water testing directed by the Environmental Protection Agency (EPA). The purpose of this assessment is to determine the quality of the raw water used for drinking water. At Keesler, the only treatment performed on source water is the addition of chlorine and fluoride. Because of the limited chemical treatment, the analytical results for Keesler's drinking water are representative of its source water.

Do I need to take special precautions?

Most people do not need to take special precautions. However, some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 healthcare providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on 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).

How is the water treated?

Your water is treated by chlorine disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

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's 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. Those substances includes microbial contaminants, inorganic contaminants, and organic Chemical Contaminants. More information regarding these substances can be found at <https://www.epa.gov/ccl/types-drinking-water-contaminants>. 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?

Education is key to getting involved and understanding your drinking water. Additional information from the EPA is located/available at <http://www.epa.gov/safewater/>.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving to save up to 500 gallons a month.
- Use a water-efficient shower head. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue and, if needed, survey your connection and assist in isolating if necessary.

- Boiler/Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people to "Dump No Waste - Drains to River" or "Protect Your Water". Produce and distribute a flyer for households to remind residents that storm drains dump directly into the local water body.

Other Information

To comply with the “Regulation Governing Fluoridation of Community Water Supplies”, KEESLER AIR FORCE BASE is required to report certain results pertaining to fluoridation of the water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6 – 1.2 parts per million (ppm) was 12. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6 – 1.2 ppm was 94%.

Additional Information for Lead

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. Keesler is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When 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 <http://www.epa.gov/safewater/lead>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive and, in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. 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 vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than 1 year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| Contaminants | MCLG or MRDLG | MCL, TT, or MRDL | Detect In Your Water | Range | | Sample Date | Violation | Typical Source |
|---|---------------------|------------------------|-------------------------------|-------------|------------------------|----------------|--|---|
| | | | | Low | High | | | |
| Disinfectants & Disinfection By-Products | | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | | |
| Chlorine (as Cl ₂) (ppm) | 4 | 4 | 2.25 | .51 | 2.25 | 2021 | No | Water additive used to control microbes |
| Haloacetic Acids (HAA5) (ppb) | NA | 60 | 6.66 | NA | NA | 2021 | No | By-product of drinking water chlorination |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 13.4 | NA | NA | 2021 | No | By-product of drinking water disinfection |
| Inorganic Contaminants | | | | | | | | |
| Barium (ppm) | 2 | 2 | .0052 | .0014 | .0052 | 2021 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Chromium (ppb) | 100 | 100 | 1 | NA | 1 | 2021 | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | 1 | .671 | 1 | 2021 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Sodium (optional) (ppm) | NA | | 84.5 | 47.1 | 84.5 | 2021 | No | Erosion of natural deposits; Leaching |
| Volatile Organic Contaminants | | | | | | | | |
| Ethylbenzene (ppb) | 700 | 700 | .63 | NA | .63 | 2021 | No | Discharge from petroleum refineries |
| Xylenes (ppm) | 10 | 10 | .00968 | NA | .00968 | 2021 | No | Discharge from petroleum factories; Discharge from chemical factories |
| Contaminants | MCLG | AL | Your Water | Sample Date | # Samples Exceeding AL | Exceeds AL | Typical Source | |
| Inorganic Contaminants | | | | | | | | |
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | 0 | 2020 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits | |
| Lead - action level at consumer taps (ppb) | 0 | 15 | 1 | 2020 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits | |

| Unit Descriptions | |
|--------------------------|---|
| Term | Definition |
| ppm | ppm: parts per million or milligrams per liter (mg/L) |
| ppb | ppb: parts per billion or micrograms per liter (µg/L) |
| NA | NA: Not applicable |
| ND | ND: Not detected |
| NR | NR: Monitoring not required but recommended |

| Important Drinking Water Definitions | |
|---|--|
| Term | Definition |
| 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. |
| 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. |
| TT | Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. |
| AL | Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| Variances and Exemptions | Variances 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. MRDLGs 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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