DEPARTMENT OF THE ARMY
UNITED STATES ARMY GARRISON ANSBACH
UNIT 28614
APO AE 09177

AMIM-ANG-ZA

MEMORANDUM FOR United States Army Garrison (USAG) Ansbach Community

SUBJECT: Consumer Confidence Water Quality Report Fiscal Year 2021, USAG Ansbach

1. United States Army Garrison Ansbach drinking water system testing conducted from October 1, 2020 to September 30, 2021 found United States Army Garrison Ansbach DRINKING WATER QUALITY SAMPLES PASS ALL TESTS.

2. Monitoring conducted by Public Health Command Europe (PHCE) confirmed that drinking water serving the USAG Ansbach community remains in compliance with the Environmental Final Governing Standards, Germany (GFGS).

3. A copy of the Consumer Confidence Report FY21 is enclosed.

4. Point of Contact is Mr. Daniel Woernlein, Environmental Division, DSN 467-3424, or commercial 09802-83-3424, email: daniel.woernlein.ln@army.mil.

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COL, MI
Commanding

U.S. ARMY GARRISON ANSBACH
Drinking Water Consumer Confidence Report
Fiscal Year (FY) 2021

Why you've received this report?

This report is produced to provide information about the USAG Ansbach drinking water system including source water, the levels of detected contaminants and compliance with drinking water rules. This report is also produced in order to answer your water quality questions. If you need more information, please see contact information on the last page.

Where does our drinking water come from?

USAG Ansbach installations receive their drinking water from two (2) local German suppliers who ensure water quality is in strict compliance with the German Drinking Water Ordinance (Trinkwasserverordnung). The Public Utilities Ansbach GmbH (Stadtwerke Ansbach GmbH) provides drinking water for Barton Barracks, Bleidorn Family Housing, Bismarck and Katterbach Kasernes, Urlas and Shipton. In Illesheim the Distant Water Supply Franconia (Fernwasserversorgung Franken (FWF)) provides potable water to Storck Barracks, Oberdachstetten Training Area and Franken Kaserne. The majority of our supply comes from deep groundwater wells, river bank filtrate and one spring from which the water travels through purifying sand and activated carbon filtration to remove impurities prior to distribution. Once the potable water arrives at the USAG Ansbach installations, it is treated to US standards at the on-post chlorination and fluoridation stations to comply with the US Army drinking water requirements.

Why do we conduct testing?

The sources of drinking water in general include rivers, lakes, dams, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can pick up and dissolve various natural and synthetic substances to include:

- *Microbes,* such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganics*, 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 agriculture, urban stormwater runoff, and residential uses.
- *Organic chemicals*, including synthetic and volatile organics from industrial processes, petroleum production, gas stations, urban stormwater runoff, and septic systems.
- *Radioactive materials*, which can be naturally occurring or the result of oil or gas production and mining activities.

Is our drinking water safe to drink?

The Directorate of Public Works (DPW) operates and maintains each installation's water distribution system, regularly monitors and tests the drinking water quality and ensures the water treatment and distribution systems are operated properly and effectively to sustain a continuous supply of safe and

compliant drinking water at all times.

To verify our potable water remains safe, Medical Activity - Bavaria (MEDDAC-B) and Public Health Command-Europe (PHCE) routinely sample the water and send it to a laboratory for analysis of over 60 water quality parameters. The parameters include chemical, bacterial, and physical contaminant groups. MEDDAC-B and PHCE consistently report if the USAG Ansbach water quality complies with the German Final Governing Standards (GFGS), a compilation of the most protective US and German drinking water standards and management practice. The DPW Environmental Management Division (EMD) provides overall management and technical oversight of the Drinking Water Program to ensure water remains safe and compliant.

Unusual events during the year

Due to flooding events in Northern Bavaria in July 2021, the water purveyor FWF in conjunction with the local host nation health department (Gesundheitsamt Ansbach and Landkreis Neustadt/ Aisch) announced a boiled water advisory for off-post communities surrounding the Ansbach installations and specifically for the USAG installations Storck Barracks, Frankenkaserne and LTA Oberdachstetten from 16JUL2021 to 04AUG2021. MEDDAC-B performed increased water monitoring due to potential contamination caused by flooding. No total coliforms or E.coli were detected during that time.
Additionally, USAG Ansbach identified and repaired four (4) water line breaks including after action water testing during the reporting year. No violations have been detected.

All drinking water may contain contaminants

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Lead and Copper:

If present, elevated levels of lead can cause serious health problems, especially for expectant or nursing mothers and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. USAG Ansbach is responsible for providing high quality drinking water and the control of plumbing materials. Therefore we have no lead water pipes at USAG Ansbach. Some pipes and fittings may have lead soldering, which can cause lead in drinking water. USAG Ansbach cannot control the stagnation time of the water in the building service lines, all customers should flush the service lines in their building/facility every 72 hours if lines were not used. Our continuous lead testing verifies our water supply is well below the regulatory action level.

Legionella:

Legionella is not considered a drinking water quality parameter. Rather it is an inhalation health risk if *Legionella* contaminated water is aerosolized. Although not required stateside, the GFGS requires annual monitoring of hot water for *Legionella* bacteria in multi-family and community facilities having showers with large hot water heaters. In FY21, as the fourth year in a row, a certified German laboratory conducted garrison-wide *Legionella* sampling in occupied multi-apartment buildings with hot water boilers >400

Liters volume and where hot water is aerosolized. Any buildings that tested above the detectable level of *Legionella* prompted immediate corrective actions including the notification of building occupants, thermal disinfection, technical inspection of boilers, replacement of hot water circulation pumps and aerators, and flushing lines.

Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS):

USAG Ansbach drinking water supplies were tested for PFOA and PFOS in FY21 per Department of Defense (DoD) direction after the Environmental Protection Agency (EPA) established health advisory levels. PFOA/PFOS are compounds found in everyday life products, such as carpets, clothing, fabrics for furniture, food packaging, cookware, aircraft firefighting foams and other materials needing resistance to water, grease, and stains. No violation detected since all results for USAG Ansbach water supplies were all well below the EPA Health Advisory (HA) level.

Dalapon:

Dalapon was detected in trace amounts in the treated water supplied to the Ansbach Community Water System (CWS) - Katterbach. It is suspected that this detection of Dalapon may be the result of a disinfection byproduct (DBP) reaction, rather than from local pesticide use. Results are all well below the respective maximum contaminant levels.

What are our water quality testing results?

Per the GFGS and the German Drinking Water Ordinance, our water is tested for a wide variety of parameters that must remain below the GFGS maximum contaminant limits (MCL) to protect human health. If a parameter exceeds the MCL, the result is non-compliance, which requires necessary corrective actions. PHCE consistently reports if our water complies with the GFGS water quality criteria for the drinking water parameters evaluated each fiscal year. Table 1 lists the contaminants that were detected for the reporting period of October 1, 2020 to September 30, 2021. As not all parameters require annual monitoring per the GFGS the table lists the results and dates of the most recent testing. DPW EMD notifies all residents of any contaminant levels that require corrective actions in their buildings within 14 days of receiving the laboratory analytical results.

Table 1. The table lists the regulated contaminants required to be monitored by the GFGS that were detected in your water in Fiscal Year 2021

Contaminants (Unit of Measure)	MCL	Detected Levels	Date	Violation	Location	Typical Sources
Disinfection Residuals and Byproducts						
Chlorine (ppm) as Free Available Chlorine (FAC)	MRDL 4.0	<0.02 – 1.10	FY21	No[1]	Garrison-wide	Disinfectant water additive used to control microbes
Chlorine Dioxide (ClO_2)(ppm)	MRDL 0.8	<0.04 - 0.26	FY21	No[2]	Bleidorn	Disinfectant water additive used to control microbes
Total Trihalomethanes (ppm)	0.080	0.006 - 0.0092	FY20	No	Garrison-wide	By-product of drinking water disinfection
Haloacetic Acids – Five (ppm)	0.060	<0.060	FY20	No	Storck	By-product of drinking water chlorination
Synthetic Organic Chemicals						
Dalapon (mg/L)	0.2	0.00008	FY21	No	Katterbach	Herbicide; suspected by-product of drinking water disinfection
Inorganic Chemicals						
Copper (ppm)	1.3 (Action Level)	90^{th} percentile <0.48	2020	No	Garrison-wide	Corrosion of plumbing systems
Lead (ppm)	0.015 (Action Level)	90^{th} percentile <0.0053	2020	No	Garrison-wide	Corrosion of plumbing systems
Fluoride (ppm)	4.0	<0.02 - 1.0	FY21	No	Katterbach, Urlas, Barton, Storck	Erosion of natural deposits; Water additive which promotes strong teeth
Total PFOS & PFOA (ppt)	70 (Health Advisory)	<1.8 – 4.3[3]	FY21	No	Storck Barracks, Oberdachstetten	Aircraft Firefighting foam; Industrial Use; Discharge from manufacturing factories; Improper disposal
Nitrate (ppm)	10	3.1-4.3	FY21	No	Garrison-wide	Runoff from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
Biological Contaminants						
Total Coliforms	<5%	absent	FY21	No	Garrison-wide	Naturally present in the environment
Escherichia coli	1	0	FY21	No	Garrison-wide	Naturally occur in the environment

Contaminants (Unit of Measure)	MCL	Detected Levels	Date	Violation	Location	Typical Sources

[1] In several samples in FY21, Chlorine as Free Available Chlorine (FAC) wasn't detectable due to the design of the drinking water network and low consumption in various building complexes. DPW adjusted the chlorination procedure and flushed tapping points at the end of the water line. Recurring sampling showed no elevated level one month later.

[2]In FY21, the chlorine dioxide (ClO_2) level in different buildings at Bleidorn was found below the MCL. DPW adjusted the individual chlorination stations accordingly. Recurring sampling showed no elevated level one month later.

[3] Samples were analyzed with EPA standard method 537 to detect unregulated contaminants. All samples taken in FY20 in the Ansbach area were below the detection limit.

What can we do to improve our drinking water quality at home?

- **Flush cold water before initial daily use.** At the start of each day or after extended periods of non-use, flush all cold-water taps by running the water for about 30 seconds or until it becomes noticeably colder. Use the stagnant flush water for watering plants or cleaning purposes.
- **Use only cold water, not hot water** to prepare food, drinks and especially baby formula. Hot water is more aggressive at leaching metals from plumbing so be sure to use only cold water for drinking water purposes and heat it when hot water is needed.
- C**lean the aerator screens** at the end of your faucets twice per year. Sediment and mineral deposits accumulate on faucet aerators degrading water quality. Removing and soaking the aerators in vinegar overnight dissolves these deposits, improving flow and water quality. As needed, replacement aerators are available at the on-post Self-Help Stores (Katterbach Kaserne, Bldg. 5516/ Storck Barracks, Bldg. 6555). Make sure to bring the old aerators along, as there are several different types.
- **Consider using a pitcher with a water filter** which may reduce the hardness, remove chlorine, and improve taste. Be sure to replace the filter at proper intervals to prevent bacteria from developing.

DPW EMD recommends residents use their kitchen cold-water taps as the primary source of drinking water as these are the taps tested for lead and are likely used more often.

Terms and Abbreviations Used:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water provider must follow.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment measured at the consumer's tap that may not be exceeded without the unacceptable possibility of adverse health effects.

ppm: concentration in parts per million (or 1 drop in 1 million gallons).

ppb: is smaller and stands for parts per billion (or 1 drop in 1 billion gallons).

ppt: is even smaller and stands for parts per trillion (or 1 drop in 1 trillion gallons)

pCi/L: picocurie per liter and describes the radiological activity

CFU: Colony forming Unit which means live bacteria that are able to multiply

Where can we get more information?

Information on drinking water, testing methods and steps you can take to minimize exposure is available at https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information.

For more information on this report or specific information on the drinking water available in your on-post household, contact DPW EMD during business hours at DSN (314) 467-3422, commercial 09802-83-3422 or DSN (314) 467-3424, commercial 09802-83-3424 or visit the DPW EMD website at: https://home.army.mil/ansbach/index.php/about/Garrison/public-works/environmental-1. DPW EMD welcomes your ideas and comments to improve this report and our services.