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

AMIM-ANG-ZA 10 July 2024

MEMORANDUM FOR United States Army Garrison Ansbach (USAG Ansbach) Community

SUBJECT: Water Quality Consumer Confidence Reports for Fisal Year (FY) 2023 and FY2022, USAG Ansbach

1. The enclosed consumer confidence report (CCR) is provided to you as a transparent overview of our drinking water conditions at USAG Ansbach for FY2022 and FY2023. This CCR is being provided for informational purposes and does not require any action by you.

Monitoring conducted by Public Health Command (PHCE) and Medical Activity - Bavaria (MEDDAC-B) has confirmed that drinking water serving the USAG Ansbach community complies will all applicable standards based on consolidated testing results of FY2023. Oversight of the Department of Defense (DoD) public water systems falls under the purview of the Directorate of Public Works (DPW). The DPW is committed to ensuring proper and effective operation of all USAG Ansbach installation's drinking water systems, conducting regular monitoring to ensure a continuous supply of safe and compliant drinking water at all times.

2. If any contaminant levels require corrective action(s), DPW Environmental Management Division (EMD) notifies all residents in the affected building(s) as soon as possible and in accordance with the Environmental Final Governing Standards – Germany (GFGS).

3. POC for this action is Mr. Stephan Haas, Directorate of Public Works, Environmental Division, DSN 587 1673, or at stephan.k.haas.ln@army.mil

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2 Encls
1. FY22 USAG Ansbach CCR
2. FY23 USAG Ansbach CCR

AARON J. SOUTHARD
COL, PO
Commanding

U.S. ARMY GARRISON ANSBACH
Drinking Water Consumer Confidence Report
Fiscal Year (FY) 2022

What is the purpose of this report?

The consumer confidence report (CCR) provides information about the United States Army Garrison Ansbach (USAG Ansbach) drinking water systems on our U.S. installations. It covers essential aspects such as source water, detected contaminant levels, and compliance with drinking water regulations. This report is based on data that was provided by Public Health Command Europe (PHCE), and Medical Activity - Bavaria (MEDDAC-B). These entities collect a significant majority of our drinking water samples at USAG Ansbach to ensure compliance with Environmental Final Governing Standards – Germany (GFGS) requirements.

Where does our drinking water come from?

USAG Ansbach oversees Community Water Systems (CWS) for all USAG Ansbach installations, with the Directorate of Public Works (DPW) holding responsibility for their operation, maintenance, and monitoring to ensure compliance. Water distribution to the individual installations occurs via pipeline networks operated and maintained by Host Nation suppliers who uphold water quality standards in accordance with the German Drinking Water Ordinance (Trinkwasserverordnung). USAG Ansbach purchases drinking water from two (2) German local suppliers:

1) Ansbach area CWS: The City of Ansbach Public Utilities GmbH (Stadtwerke Ansbach GmbH) provides drinking water for Barton Barracks, Bleidorn Family Housing, Bismarck and Katterbach Kaserne, Urlas Community, and Shipton Kaserne.

2) Illesheim area CWS: Water Supply Franconia (Fernwasserversorgung Franken, FWF) provides potable water to Storck Barracks, Oberdachstetten Training Area and Franken Kaserne.

The majority of supply comes from deep groundwater wells, riverbank 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 on-post chlorination and fluoridation stations to comply with the U.S. Army drinking water requirements.

Why do we conduct testing?

GFGS require that drinking water be periodically analyzed for selected bacteriological, chemical, physical, and radiological water quality parameters. Continual maintenance of the distribution systems and ongoing water testing assures our water remains safe. 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.
- *Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA),* two compounds belonging to the group of Per- and Polyfluoroalkyl Substances (PFAS). PFOS and PFOA are components of firefighting foam also referred to as aqueous film forming foam.

Is our drinking water safe to drink?

USAG Ansbach drinking water is safe to drink. It passed all tests with the exception of slightly elevated chlorine levels in Bleidorn Housing, which was immediately corrected, and which did not constitute a health concern. The DPW oversees the DoD public water systems, ensuring their proper and effective operation on USAG Ansbach installations. DPW also maintains regular monitoring of drinking water quality, to ensure continuous supply of safe and compliant drinking water at all times.

To confirm the safety of our potable water system, MEDDAC-B and PHCE routinely sample the water and analyze over 60 water quality parameters, covering chemical, bacterial, and physical contaminant groups. MEDDAC-B and PHCE consistently assess whether the USAG Ansbach water quality complies with the GFGS, a compilation of the most protective U.S. and German drinking water standards and management practices. The DPW Environmental Management Division (EMD) provides overall management and technical oversight of the Drinking Water Program, ensuring water remains safe and compliant.

All drinking water may contain trace detections of analytes

Drinking water, including bottled water, may detect trace amounts of analytes, depending on instrument sensitivity. The presence of trace amounts does not necessarily indicate that water poses a health risk.

<u>Lead:</u>

Our continuous lead testing in Army Family Housing and facilities like schools and child development centers verifies our water supply is below the regulatory action level. 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. There are 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.

<u>Nitrate:</u>

The level of nitrate is consistently below the health effect level for all USAG Ansbach water systems. Nitrate in drinking water at levels above 10 milligram per Liter (mg/L) is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Nitrate levels

may rise quickly for short periods of time because of rainfall or agricultural activity. If you're caring for an infant, you should ask for advice from your health care provide.

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 FY23, as the sixth 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.

Per- and Polyfluoroalkyl Substances (PFAS):

All PFAS results were consistently well below the EPA health advisory (HA) limit of 70 parts per trillion (ppt). Department of the Army policies require PFAS monitoring for drinking water distributed on Army installations from both Army-owned and operated as well as non-Army-owned and operated drinking water systems. PFAS 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. USAG Ansbach drinking water supplies were tested for PFAS in accordance with the Department of the Army policies since FY17. While PFAS is below detection limit in the Ansbach area CWS, trace amounts of PFAS are detected in the Illesheim CWS supplying Storck Barracks, Frankenkaserne, and Oberdachstetten LTA. From FY20 on, the Illesheim CWS is tested on PFAS every other year (with re-testing in FY22), while the Ansbach CWS is on the standard tri-annual monitoring cycle.

Dalapon:

All results are consistently well below the MCL. Dalapon may cause health problems if present in public or private water supplies in amounts greater than the MCL of 0.2 mg/L. Dalapon was detected in trace amounts in the treated water supplying Katterbach and Bismarck Kaserne. The current assessment is that Dalapon is likely formed during the treatment process based on pre- and post-chlorination testing results. The Katterbach water is monitored quarterly on Dalapon, while the other installations are on the standard annual cycle.

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, 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.
- **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.
- **Clean 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.

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 MCL to protect human health. If a parameter exceeds the MCL, the result is non-compliant, which requires necessary corrective actions. PHCE and MEDDAC-B consistently report 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, 2021 to September 30, 2022 in the Ansbach area CWS. Table 2 lists the contaminants that were detected for the same reporting period for the Illesheim area CWS. Non-detects are typically not listed. 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.

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) 587-1673, commercial +49 (0) 9641 70 587 1673 or DSN (314) 587-1671, commercial +49 (0) 9641 70 587 1671 or visit the DPW EMD website at: https://home.army.mil/ansbach/my-fort/all-services/environmental.

DPW EMD welcomes your ideas and comments to improve this report and our services.

Acronyms and Definitions:

90th Percentile	The 90th percentile is calculated by ranking the analytical results in ascending order from the sample with the lowest concentration to the sample with the highest concentration. The total number is then multiplied by 0.9 to arrive at the sample that represents the 90th percentile. The concentration of this sample determines compliance with the GFGS ALs for lead and copper.
AL	Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. No Final Governing Standard for the point of entry to the distribution system. Action Levels applies only to first-drawn lead and copper samples from consumer taps. MCLs do not apply to lead and copper.
Disinfectant Byproducts	They can form when disinfectants, such as chlorine, react with naturally present compounds in the water.
CCR	Consumer Confidence Report
CFU	Colony forming unit which means live bacteria that are able to multiply.
CWS	Community Water System
DoD	Department of Defense
DPH	Department of Public Health
DPW	Department of Public Works
EH	Environmental Health
EPA	United States Environmental Protection Agency
EPA HA	United States Environmental Protection Agency Health Advisory Level
EMD	Environmental Management Division
FWF	Fernwasserversorgung Franken – The local public water supplier for the Illesheim area
FY	U.S. Government Fiscal Year. FY23 starts on 1 October 2022 and ends on 31 September 2023.
GFGS	Environmental Final Governing Standards - Germany
GmbH	Gesellschaft mit beschränkter Haftung – limited company
MCL	Maximum Contaminant Level. The highest level of a contaminant allowed in drinking water before some type of action is required. If results exceed the MCL, they are marked as violation.
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.
ND	Non-detection. None of the analyzed parameters were at detectable levels
NL	Notification Level. The concentration of a contaminant which, if exceeded, requires the notification of the German local health authority (Gesundheitsamt) and the appropriate DoD medical authority.
Parameter	Substance being tested for
pCi/L	Picocuries per liter. Describes the radiological activity.
PFAS	Per- and polyfluoroalkyl substances
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
ppm	Concentration in parts per million
ppb	Concentration in parts per billion (by a factor of 1000 smaller than ppm)
ppt	Concentration in part per trillion (by a factor of 1000 smaller than ppt)
PHCE	Public Health Command Europe
USAG	United States Army Garrison

Table 1: Ansbach Area CWS Water Quality Summary FY23 (Katterbach/Bismarck Kaserne, Urlas/Shipton Community, Barton Barracks, Bleidorn Family Hsg)

Ansbach Area Community Water System (CWS Katterbach/Bismarck, Urlas/Shipton, Bleidorn, Barton)						
Contaminant	**Sample Frequency**	**Detected Levels**	**MCL**	**Unit**	**Violation**	**Typical Sources**
Disinfectant Residuals and Byproducts						
Chlorine as Free Available Chlorine (FAC)	Monthly[1]	<0.02 - 0.70	MRDL 4.0	ppm	No[1]	Disinfectant water additive used to control microbes
Chlorine Dioxide (ClO2)	Monthly for Bleidorn	0.00 - 1.17	MRDL 0.8	ppm	Yes[2]	Disinfectant water additive used to control microbes
Trihalomethanes, total, (TTHM)	Annual	3.0 - 12.0	80	ppb	No	By-product of drinking water disinfection
Synthetic Organic Chemicals						
Dalapon	Annual, quarterly at Katterbach	0.06 - 0.13	200	ppb	No	Herbicide; suspected by-product of drinking water disinfection
Lead and Copper						
Lead	Sampled: FY22 Due: FY25	90th percentile: 4.9 0 of 26 samples above AL	AL 15	ppb	No	Corrosion of plumbing systems
Copper	Sampled: FY22 Due: FY25	90th percentile: 0.13 0 of 26 samples above AL	AL 1.3	ppm	No	Corrosion of plumbing systems
Inorganic Chemicals						
Barium	Annual	0.19	2	ppm	No	Erosion of natural deposits
Boron	Annual	0.03	NL 1.0	ppm	No	Erosion of natural deposits
Fluoride	Monthly	0.0 - 1.1	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth
Nickel	Annual	1.1	100	ppb	No	Naturally occurring, Chrome plating in plumbing and tap fittings
Nitrate as N	Annual	4.1	10	ppm	No	Run-off from fertilizer, Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	Annual	8.3	NL 200*	ppm	No	Erosion of natural deposits; water additive to lower concentration of Calcium carbonate (water softener), also by-product of drinking water chlorination
Microbiological Contaminants						
Total Coliform Bacteria	Monthly	absent	One ore more positive samples/month[3]	CFU	No	Naturally present in the environment
Escherichia coli	Monthly	absent	1	CFU	No	Naturally present in the environment
Radionuclides						
Gross Alpha Activity, total	Sampled: FY22 Due: FY26	1.1	15	pCi/L	No	Erosion of natural deposits
Gross Beta Activity, total	Sampled: FY22 Due: FY26	5.0	50	pCi/L	No	Decay of natural and man-made deposits
Combined Radium 226/228	Sampled: FY22 Due: FY26	0.46	5	pCi/L	No	Erosion of natural deposits
PFAS						
Combined PFOS/PFOA	Sampled: FY20 Due: FY23 (three-year cycle)	ND	70 (EPA HA)	ppt	No	Aircraft Firefighting foam; Industrial Use; Discharge from manufacturing factories; Improper disposal

[1] In several samples, 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. In cases like this, DPW adjusted the chlorination procedure to re-establish standard chlorination levels.

[2] Chlorine dioxide (ClO_2) levels in some buildings at Bleidorn were found either too low or too high in some of the monthly samples. DPW adjusted the individual chlorination stations accordingly to re-establish standard chlorination levels.

[3] If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.

Table 2: Illesheim Area CWS Water Quality Summary FY23 (Storck Barracks, Frankenkaserne, Oberdachstetten LTA)

Illesheim Area Community Water System (CWS Storck Barracks, Frankenkaserne, Oberdachstetten LTA)						
Contaminant	**Sample Frequency**	**Detected Levels**	**MCL**	**Unit**	**Violation**	**Typical Sources**
Disinfectant Residuals and Byproducts						
Chlorine as Free Available Chlorine (FAC)	Monthly	<0.02 - 0.34	MRDL 4.0	ppm	No[1]	Disinfectant water additive used to control microbes
Trihalomethanes, total, (TTHM)	Annual	<2.0 - 5.2	80	ppb	No	By-product of drinking water disinfection
Lead and Copper						
Lead	Sampled: FY22 Due: FY25	90th percentile: 6.4 0 of 10 samples above AL	AL 15	ppb	No	Corrosion of plumbing systems
Copper	Sampled: FY22 Due: FY25	90th percentile: 0.2 0 of 10 samples above AL	AL 1.3	ppm	No	Corrosion of plumbing systems
Inorganic Chemicals						
Barium	Annual	0.047	2	ppm	No	Erosion of natural deposits
Boron	Annual	0.05	NL 1.0	ppm	No	Erosion of natural deposits
Fluoride	Monthly	0.0 - 0.9	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate as N	Annual	3	2.7	ppm	No	Run-off from fertilizer, Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	Annual	15.9	NL 200*	ppm	No	Erosion of natural deposits; water additive to lower concentration of Calcium carbonate (water softener), also by-product of drinking water chlorination
Microbiological Contaminants						
Total Coliform Bacteria	Monthly	absent	One ore more positive samples/month[2]	CFU	No	Naturally present in the environment
Escherichia coli	Monthly	absent	1	CFU	No	Naturally present in the environment
Radionuclides						
Gross Alpha Activity, total	Sampled: FY22 Due: FY26	0.55	15	pCi/L	No	Erosion of natural deposits
Gross Beta Activity, total	Sampled: FY22 Due: FY26	3.1	50	pCi/L	No	Decay of natural and man-made deposits
Combined Radium 226/228	Sampled: FY22 Due: FY26	0.34	5	pCi/L	No	Erosion of natural deposits
PFAS						
Combined PFOS/PFOA	Sampled: FY21 Due: FY23 (two-year cycle)	<1.8 - 4.1	70 (EPA HA)	ppt	No	Aircraft Firefighting foam; Industrial Use; Discharge from manufacturing factories; Improper disposal

[1] In several samples, 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. In cases like this, DPW adjusted the chlorination procedure to re-establish standard chlorination levels.

[2] If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.