



# **2019 Annual Drinking Water Quality Report** (Consumer Confidence Report)

## **RAMSTEIN AIR BASE, GERMANY**

### ***Introduction***

We are pleased to present this year's Annual Drinking Water Quality Report (Consumer Confidence Report – CCR) as required by Air Force Instruction 48-144, Drinking Water Surveillance Program, and the Final Governing Standards for Germany (FGS-G). 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. Our goal is to provide you with a safe, quality and reliable drinking water supply. We are committed to providing you with this information because informed customers are the best allies.

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### ***Water Sources***

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.

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 waste water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## ***Where Do We Get Our Drinking Water?***

The Kaiserslautern Military Community (KMC) draws all its drinking water from deep wells several hundred feet below ground. Our water is pumped from these wells, treated, and then distributed to our communities. Within the KMC, there are many water distribution systems. Ramstein Air Base has one system, being fed by four water treatment facilities, and the Cold Storage Area has one system. Beginning in 2019, the two Construction Training Squadron systems are being supplied with potable water by the City of Ramstein drinking water provider. Since November 2007, Vogelweh, including Kapaun AS, is supplied by the City of Kaiserslautern water provider Stadtwerke Kaiserslautern – SWK.

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## ***Drinking Water and Your Health***

All 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 the water poses a health risk. More information on contaminants and potential health effects can be obtained by calling BE at DSN 479-2220 (0049-6371-46-2220). According to the Environmental Protection Agency, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants are at a higher risk of waterborne illness. These people should seek advice about drinking water from their health care providers.

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## ***A Final Word on Water Quality***

Your water quality team at Ramstein AB works around the clock to provide safe, dependable water at every tap. But they can only ensure the success of today's mission if everyone contributes. Tomorrow's success will depend on all of us, working together, to protect our vital water resources.

Remember, the water we use does not quickly return to the aquifer, but is, for the most part, "consumed" by our actions. The military installation (Ramstein AB) and many nearby villages draw water from the same aquifer. Conservation is therefore essential to protect our water supply.

You should also consider ways you can reduce your water consumption, i.e., don't let the water run while brushing your teeth, take a shower vs. a bath. There are numerous ways to save our most valuable natural resource for us and the future of our children. If you have ideas to reduce usage and contamination of this valuable resource submit it to the Ramstein AB Drinking Water Quality Working Group (POC – 86<sup>th</sup> Medical Group BE Flight). These efforts will help protect the future water supply by reducing the overall consumptive use.

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## ***Customer Views Welcome***

We are available to address any questions or concerns you may have. Housing residents should contact the Housing Office with any water concerns. Dorm residents should contact their building manager.

For more information on this report or base drinking water quality, please call the 86 MDG BE Flight at DSN 479-2220 (0049-6371-462220) or the 86 CES Environmental Management Flight at DSN 480-7712.

## ***Definitions and Abbreviations***

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

**Average:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Maximum Contaminant Level (MCL):** 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.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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 contamination.

**ppb:** micrograms per liter (ug/L) or parts per billion – or one ounce in 7,350,000 gallons of water.

**ppm:** milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

## ***About the Following Pages***

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although more than **90 contaminants** were tested, only those substances listed below were detected in our water. All sources of drinking water contain some naturally occurring contaminants. The FGS 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.

### ***Coliform Bacteria***

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contaminant
0	1 positive monthly sample.	0	0	0	N	Naturally present in the environment.

### ***Lead and Copper***

Lead and Copper	MCLG	Action Level	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contaminant
Copper	1.3	1.3	0.11	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	0	15	2.7	0	ppb	N	Corrosion of household plumbing systems; rrosion of natural deposits.

### ***Required Additional Health 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. Ramstein AB 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 or at

<http://www.epa.gov/safewater/lead>.

### ***Regulated Contaminants***

<b>Disinfectant Residual</b>	<b>Average Level</b>	<b>Minimum Level</b>	<b>Maximum Level</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>Unit of Measure</b>	<b>Source of Contamination</b>
Chlorine (Free)	0.21	0.01	0.65	4.0	<4.0	ppm	Water additive used to control microbes.

<b>Disinfection By-Products</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Total Trihalomethanes (TTHM)	13	0 - 13	No goal for the total	80	ppb	N	By-products of drinking water chlorination.

\*The Value in the Highest Level or Average Detected column is the highest average of all sample results collected at a location over a year

<b>Inorganic Contaminants</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Barium	0.30	0.02 - 0.30	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	0.91	0.28-0.91	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Thallium	0.021	1.74 - 1.78	0.5	2	ppm	N	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories