



Water Quality Report – Calendar Year 2019 U.S. Army Garrison Humphreys



What is a water quality report?

A water quality report (WQR) is also known as a consumer confidence report (CCR). This 2019 WQR summarizes information regarding where your water comes from, what it contains, and how it compares to the standards set by USFK Regulation 201-1, Environmental Governing Standards (EGS). This report is a snapshot of the last year's water quality.

Is our drinking water safe to drink?

According to the 2019 water quality information, Camp Humphreys met all the standards set by USFK Regulation 201-1. Directorate of Public Works (DPW) monitors the drinking water quality regularly and ensures the water treatment and distribution systems are operated properly and effectively.

What are our drinking water sources?

Camp Humphreys has two drinking water sources. The primary drinking water source is city water purchased from Pyeongtaek City and covers 70 percent of current drinking water demand. Pyeongtaek City water comes from the Han River and is treated by Seongnam and Suji water treatment plants. Those two (2) water treatment plants provide drinking water to the southern part of Gyeonggi Province including Pyeongtaek City. The other drinking water source is groundwater from on-post deep wells and covers 30 percent of current drinking water demand.

How is our drinking water treated?

There are two (2) drinking water treatment plants at Camp Humphreys. One is the city water treatment plant, bldg 12301, where chlorination is processed as a treatment method. The other is the groundwater treatment plant, bldg 424, where aeration, filtration, and chlorination are processed as treatment methods. After treatment, both purchased city water and groundwater are tested independently to ensure that EGS standards are met and water is safe to drink.



How is water quality monitored?

In accordance with USFK Regulation 201-1, USAG Humphreys collects and tests our drinking water for various contaminants. Some samples are tested at the DPW Water Laboratory, while others are sent to Public Health Command Region-Pacific (PHCR-P) at Camp Zama. Water quality testing is conducted based on the contaminant group and specified frequency as shown in Table 1.

Table 1. Contaminant Group and Monitoring Frequencies

Contaminant Group	# of Contaminants	Contaminants	Monitoring Frequency
Physicochemical contaminants	3	Turbidity, pH, chlorine	Every 4 hours
Biological contaminants	2	Total coliform, fecal coliform	Weekly
Inorganic metals	14	Primary metals, nitrates, etc.	Annually
Asbestos	1	Asbestos	Every 9 years
Volatile organic compounds (VOCs)	21	Benzene, TCE, PCE, etc	Quarterly
Synthetic organic compounds (SOCs)	34	Pesticides, PCB, etc	Every 3 years
Sum of five haloacetic acids (HAA5)	5	Monochloroacetic acid, dichloroacetic acid, etc	Quarterly
Total trihalomethanes (TTHMs)	4	Bromoform, chloroform, etc	Quarterly
Bromate	1	Bromate	Monthly
Lead and copper	2	Lead, copper	Semi-annually
Radionuclide compounds	4	Gross alpha, Radium 226, Radium 228, Uranium	Every 4 years

Water Quality Data Table

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.

In order to ensure that tap water is safe to drink, USFK Regulation 201-1 sets standards which limit the amount of contaminants in water provided by public water systems. Although many more contaminants were tested, only those contaminants listed in Table 2 were detected during 2019.

Table 2. Detected Contaminants

Contaminants	MCL ¹ or AL ²	Detected Level		Violation	Typical Sources
		Ground Water	City Water		
Nitrate (ppm)	10	1.1 - 3.1	1.1 - 2.4	N	Runoff from fertilizer use; leaching from sewage; erosion of natural deposits
TTHMs (ppb)	80	10.7 to 55.7		N	By-product of drinking water disinfection
HAA5 (ppb)	60	8.4 to 13.1		N	By-product of drinking water disinfection
Toluene (ppb)	1,000	1.1 - 2	2.4	N	Discharge from industrial and agricultural chemical factories
Trichloroethylene (ppb)	5	1.5	< 0.5	N	Discharge from industrial and agricultural chemical factories
Copper (ppm)	1.3 ³	< 0.001 - 2.0		N	Corrosion of plumbing systems
Lead (ppb)	15 ³	< 1.0 – 9.5		N	Corrosion of plumbing systems
1. Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. 2. Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment. 3. These are not MCLs but ALs.					

Additional Information for OPORD Lead in Drinking Water

IAW IMCOM OPORD, in 2016 USAG Humphreys developed a 5-year plan to test lead in drinking water at Army Family Housing (AFH) and child occupied facilities. Since 2016, lead in drinking water has been tested based on the 5-year plan. In 2019, a total of 369 AFH units, one Youth Center (Bldg. 570) and one Child Development Center (CDC) (Bldg. 693) were tested. All AFH units, Youth Center and CDC test results showed below the lead action level, 15 ppb.

Additional Information for Per- and polyfluoroalkyl substances (PFAS)

In an effort to ensure the safest water possible, HQ IMCOM required the IMCOM garrisons to monitor PFAS. PFAS are manmade fluorinated chemicals that are not currently regulated by state or federal authorities in your drinking water. The most common military use of PFAS was the aqueous film forming foam (AFFF) used for firefighting and in training to extinguish petroleum fires. The Army now has a newer AFFF which doesn't contain PFAS. Based on the initial testing conducted in 2017, PFAS testing for groundwater is required quarterly for one year and then once every 2 years thereafter, whereas PFAS testing for city water is required once every 3 years. In 2018, the groundwater was tested for PFAS quarterly, and all the test results were below the EPA health advisory level, 70 ppt. There was PFAS sampling in Dec 2019 and received the test results for city water and groundwater in Jan 2020. All test results showed less than EPA life health advisory, 70 ppt.

What about Brown or Milky Water?

Facility managers can minimize rusty water by flushing affected pipes (running the water for 30-60 seconds) first thing in the morning, especially on long holiday weekends. Consumers also can minimize brown or milky water by flushing their taps until the water appears clear (usually 30-60 seconds) before use especially on long holiday weekends or after long vacancy periods. Facility managers must maintain cleanliness of the outer surfaces of all water coolers and ensure the water cooler drains are not clogged. You can manage good quality of water through routine maintenance practices. Also please work with your facility manager to conduct routine preventive maintenance on the plumbing in your building before contacting the water quality program manager.

Where can we get more information?

If you have any questions regarding this water quality report or would like additional information on your drinking water, please contact the Garrison Water Quality Program Manager, Mr. Yi, Yong Hun at 756-1058, yonghun.yi2.ln@mail.mil.